Circular models Leveraging Investments in Cultural heritage adaptive reuse

D4.1

Overview of Hybrid Financial Instruments and Investment Leverage Enablers for Cultural Heritage Adaptive Reuse

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Author list:	Dr. Tracy Pickerill, TU Dublin

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Abstract

Cultural heritage adaptive reuse investment strategies involve long-term, sometimes perpetual, investment horizons, which necessitate the integration of sustainable funding mechanisms. In order to achieve participatory circular human prosperity, the sustainable finance movement must re-evaluate investment leverage approaches including value creation models, the design of hybrid financial instruments, analytical decision-making frameworks, collaborative social enterprise structures, impact performance metrics and evolving mindsets. In the context of this overview of financial and non-financial instruments, cultural heritage adaptive reuse activities include:

- Adaptive reuse of cultural built heritage structures
- Energy retrofit of cultural built heritage structures
- Protection and management of natural eco-systems;
- Socio-cultural community enterprise activities.

Cultural heritage adaptive reuse activities embody circular economy dimensions, that engender social, cultural, environmental and economic regeneration, within the global value chain. Consideration of the financial landscape, with regard to capital investment leverage is as much about understanding the motivations of social enterprise stakeholders (including local communities) to engage with the capital markets, as about innovations in financial instruments to safeguard cultural heritage values. Tangible built heritage is a finite resource. Many underutilized and abandoned built heritage assets are impacted by market failure and persistent investment barriers which in turn negatively impact human well-being. In all but prime locations, the cost of adapting obsolete heritage resources is often prohibitive if the funding burden falls solely on public or private owners and custodians. Similarly, grassroots communities, undertaking cultural heritage activities in deprived urban neighborhoods and isolated rural communities, often lack the financial track record, entrepreneurial capacity and network infrastructure to overcome exclusion from traditional capital markets. This report presents a systemic panoptic toolkit of complementary financial (grant & endowment, tax, debt & equity) and non-financial (regulation, real estate, risk mitigation, risk performance, capacity building, impact metric and digital network) instruments designed to leverage capital investment and engender collaborative partnerships to encourage private investment capital to flow to cultural heritage activities. Individual financial instruments, within the toolkit, such as debt and equity tools, are not new and some have a long association within traditional capital markets. What is new, is a framework for the engagement of blended complementary instruments, pooled within diverse multidisciplinary collaborative fund structures, to achieve intentional and measurable impact investment returns. Risk adjusted investment return metrics include the analysis of socio-cultural and environmental impact returns in unison with market based financial returns (including in some cases, below market returns such as capital preservation). Built heritage adaptive reuse projects necessitate the inclusion of additional real estate and construction impact metrics. The ultimate choice and design of hybrid 'blended' and 'pooled' financial Instrument combinations, from the toolkit, will change from building to building (and neighborhood to neighborhood) but must always take account of the need to protect local communities and ecosystems in parallel with saving vulnerable cultural heritage resources. Illustrative case studies are provided to demonstrate the potential mutual

benefits for stakeholders of blending and pooling capital leverage instruments to achieve positive adaptive outcomes. The case studies demonstrate that obsolete cultural heritage has the potential to become a vector for circular economy transitionary ambitions with the capacity to make a contribution to socio-technical systems change by aligning mainstream financial markets with real economy climate resilient, just and inclusive activities. The key change in mindset, central to cultural heritage financial toolkit design is the enablement of capital leverage investment strategies that prioritizes people and the ecosystem over pure profit motivation.

The report is structured as follows:

Additional patterns of use are available on the Horizon 2020 CLIC Knowledge and Information Hub incorporating heritage search fields for Religious, Military Civil, Industrial, Residential, UNESCO, Circularity performance and Public/Private funding.

Link: http://www.clicplatform.eu

Keywords: Cultural heritage, Adaptive reuse, Financial Instruments, Leverage, Circular finance, Sustainable finance, Social enterprise, Transformation Capital, Regenerative Capital, Virtuous Investment Circles, Taxonomy, Risk adjusted market return, Impact Measurement & Management (IMM).

Partners involved in the document

Participant No	Participant organisation name	Short Name	Check if involved
1 Coordinator	CONSIGLIO NAZIONALE DELLE RICERCHE	IRISS CNR	X
2	UPPSALA UNIVERSITET	UU	
3	HAUTE ÉCOLE ICHEC - ECAM – ISFS	ICHEC	
5	TECHNISCHE UNIVERSITEIT EINDHOVEN	TU/e	
6	UNIVERSITY OF PORTSMOUTH HIGHER EDUCATION CORPORATION	UOP	
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11	FACILITYLIVE OPCO SRL	FacilityLive	
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16	INIZIATIVA FINANZA E INNOVAZIONE	INI	
17	TECHNOLOGICAL UNIVERSITY DUBLIN	TU Dublin	X

Section 1: Description of the Project

The overarching goal of CLIC trans-disciplinary research project is to identify evaluation tools to test, implement, validate and share innovative "circular" financing, business and governance models for systemic adaptive reuse of cultural heritage and landscape, demonstrating the economic, social, environmental convenience, in terms of long lasting economic, cultural and environmental wealth.

The characteristics of cultural heritage and landscape pose significant challenges for its governance. Cultural heritage is a “common good”, which enjoyment cannot be denied to citizens, although many buildings and landscape structures are privately owned. Furthermore, the large economic resources needed for recovery and maintenance of heritage goods are rarely available to the private owner, often charged of the additional cost of non-use due to limited degree of transformation allowed. The existing governance arrangements currently involve limited stakeholders concerning for the historic, aesthetic or religious sociocultural values, severely restricting the use of the heritage properties, and charge the central government of conservation costs. The approach of regulatory and planning tools throughout European countries has been to preserve cultural heritage by preventing transformation of buildings or areas having historic-cultural significance.

“The current monument-based, full protection, and government-financed approach that restricts the use of protected properties and relies almost entirely on public funds is incapable of tackling the vast urban heritage of most communities and of sustaining conservation efforts in the long term” (Rojas 2016). To turn culturalh heritage and landscape into a resource, instead of a cost for the community, the structures of authority, institutions and financial arrangements should be adjusted to ensure larger stakeholders’ involvement in decision-making, attract private investments and facilitate cooperation between community actors, public institutions, property owners, informal users and producers (Rojas, 2016). The risk is that without financing channels the decay of European heritage and landscape will increase, until its irreversible loss.

Flexible, transparent and inclusive tools to manage change are required to leverage the potential of cultural heritage for Europe, fostering adaptive reuse of cultural heritage / landscape. Tools for management of change should consider costs and benefits at the local level and for all stakeholders, including future generations, and should take into account the cultural, social, environmental and economic costs of disrepair through neglect, compared to the benefits obtained through diverse scenarios of transformation / integrated conservation.

Costs and values of cultural heritage adaptive reuse have to be compared in a multidimensional space: the relationship between costs and “complex values” influences the willingness to invest in the functional recovery of cultural heritage and landscape. Therefore, it is necessary to clarify what is intended for the value of cultural heritage. The higher the perceived value for potential actors, the higher the willingness to take the risk of investment. This “complex value” of cultural heritage depends on the intrinsic characteristics, but also from extrinsic (context) characters.

Investment costs are related to the materials, technologies and techniques to be used to preserve the cultural value of the heritage / landscape, and to maintenance / management / operating costs. The willingness to invest, the same value done, increases with the reduction of costs. Then, the social cost of abandonment – and eventual irreversible loss of heritage – must be included in the investment choice.

The investment gap in cultural heritage and landscape regeneration can be addressed through careful evaluation of costs, complex values and impacts of adaptive reuse, providing critical evidence of the wealth of jobs, social, cultural, environmental and economic returns on the investment in cultural heritage.

CLIC Specific objectives

The scopes of CLIC project will be achieved through a set of specific, measurable, achievable, realistic and time-constrained (SMART) specific objectives:

Objective 1 - To synthesize existing knowledge on best practices of cultural heritage adaptive reuse making it accessible to researchers, policy makers, entrepreneurs and civil society organizations, also with direct dialogue with their promoters;

Objective 2 - To provide a holistic ex-post evaluation of the economic, social, cultural and environmental impacts of cultural heritage adaptive reuse, stressing on the importance of appropriate conservation and maintenance approaches able to highlight the integrity and authenticity of heritage;

Objective 3 - To provide EU-wide participated policy guidelines to overcome existing cultural, social, economic, institutional, legal, regulatory and administrative barriers and bottlenecks for cultural heritage systemic adaptive reuse;

Objective 4 - To develop and test innovative governance models and a set of evidence-based, participative, usable, scalable and replicable decision support evaluation tools to improve policy and management options/choices on cultural heritage systemic adaptive reuse, in the perspective of the circular economy;

Objective 5 - To analyse hybrid financing and business models that promote circularity through shared value creation, and assess their feasibility, bankability and robustness for cultural heritage adaptive reuse;

Objective 6 - To validate the CLIC circular financing, business and governance practical tools in 4 European cities / territories representative of different geographic, historic, cultural and political contexts;

Objective 7 - To contribute to operationalise the management change of the cultural landscape also in implementing the UNESCO Recommendation on Historic Urban Landscape;

Objective 8 - To re-connect fragmented landscapes, through functions, infrastructures, visual relations at macro and micro scale;

Objective 9 - To design and implement a stakeholders-oriented Knowledge and Information Hub to make tools and information accessible, useful and usable and test them with policy-makers, entrepreneurs, investment funds and civil society organizations;

Objective 10 - To contribute to the creation of new jobs and skills in the circular economy through cultural heritage adaptive reuse, boosting startups and sustainable hybrid businesses and empowering local communities and stakeholders through public-private-social cooperation models.

Objective 11 - To contribute to the monitoring and implementation of SDGs (especially Target 11.4) and the New Urban Agenda, creating operational synergies with global initiatives of UN-Habitat, UNESCO/ICOMOS and the World Urban Campaign.

All partners have wide experience in developing and testing CLIC proposed tools, ensuring the effective and time-constrained achievement of all the above-mentioned specific goals. The integration of sectorial knowledge, tools and methods will be achieved through a trans-disciplinary approach promoting partners and stakeholders' cooperation, co-creation of knowledge and co-delivery of outcomes.

The expected impacts of the project are the following:

- Validation of integrated approaches and strategies for cultural heritage adaptive re-use, comprising innovative finance with high leverage capacity, business models and institutional and governance arrangements that foster multi-stakeholder involvement, citizens' and communities' engagement and empowerment;

- New investments and market opportunities in adaptive re-use of cultural heritage, also stimulating the creation of start-ups;

- An enabling context for the development and wide deployment of new technologies, techniques and expertise enhancing industrial competitiveness and contributing to economic growth, new skills and jobs;

- Innovative adaptive re-use models that are culturally, socially and economically inclusive;

- Contribution to implementing the Sustainable Development Goals (SDGs) (Goals 1, 15, 11 particularly) and the United Nations New Urban Agenda.

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Section 2: Circular Transformation Aligning Human and Financial Capital

"To safeguard human civilization …. we must fundamentally change the way our societies and economies operate. Our task is to move from an extractive, exclusive and fragile status quo to a regenerative, equitable and resilient model that respects the natural boundaries of our planet and honors the social needs of our communities" Dominic Hofstetter, EIT Climate-KIC[1]

2.0 Transformation Capital for Adaptive Reuse of Cultural Heritage

Humans live within a sphere of economic activity where human wellbeing hinges on an individual's identity with a community in space and in time (Boulding 1966). The investment needs of urban, peri urban and rural areas to achieve sustainable growth varies depending on the size of urban conurbations and rural clusters, demographic trends, geographic location, political and economic stability and the quality of existing assets, including cultural heritage assets. The reticence of traditional capital markets to quantifying intangible socio-cultural, environmental, aesthetic, and spiritual values in the adaptive re-use decision making process, can lead to market failure, investment barriers and a consequent trade-off between value judgments relating to the value preferences of diverse stakeholders and decision makers. For the purpose of this overview of hybrid financial and non-financial instruments, cultural heritage adaptive reuse activities include:

- Adaptive reuse of cultural built heritage structures;
- Energy retrofit of cultural built heritage structures;
- Protection and management of natural eco-systems;
- Community-based social enterprise activities.

Altered financial markets stemming from political and economic turbulence over the last decade, and more recently the economic turbulence caused by the pandemic, has negatively impacted on the financial viability of cultural heritage activities, leaving the fate of many cultural assets to profit driven capital markets and political whim. Financial capital is a powerful lever for influencing the transformation of place-based systems such as urban and rural land use, social infrastructure, energy and marine systems. Sustainable and circular investment strategies are central to leveraging transformational systems change. In the context of financial systems change[2], Hofstetter (2020) defines 'transformation capital' as a systemic investment logic designed to accelerate mission-driven sustainable transitions in the real economy. This research will examine the design of funding mechanisms, incorporating hybrid combinations of financial and non-financial instruments for adaptive reuse of cultural heritage

1 European Institute of Innovation & Technology (EIT) Climate- Knowledge and Innovation Community (KIC) launched the Transformation Capital Initiative (TCI) in 2020. This is an open call to reimagine how value is generated and captured; to redefine how risks and rewards are shared and to reconceptualize the meaning and measurement of impact https://www.climate-kic.org/programmes/transformation-capital/
2 Theory of Change is defined as 'an expression of the sequence of cause-and-effect actions or occurrences by which organizational and financial resources are assumed to be converted into the desired results. It provides a conceptual road map for how an organization expects to achieve its intended impact' (GIIN 2021).

(ARCH). At project, fund or portfolio level, decisions regarding the blending of hybrid financial instruments and pooling of stakeholder investment streams can be tailored to the specific needs of final recipients, bearing in mind the need to monitor and benchmark social and ecological impact in addition to investors' return expectations, return timeframe and appetite for risk.

2.0.1 Cultural Heritage and Cultural Capital

Kobalt provides a broad definition of 'cultural heritage' as "works of art, architecture, cultural achievements and understanding the environment that has passed from earlier generations" (Kobalt 1997). The intangible dimension of cultural heritage is difficult to define (Vecco 2010). and 'nomadic' due to ever changing values and social norms through time and across groups (Hutter and Rizzo 1997). The term 'cultural capital' remains central to understanding cultural heritage value creation in the financial landscape. Cultural Capital is the "capital value that can be attributed to a building, a collection of buildings, a monument or more generally a place, which is additional to the value of the land and buildings purely as physical entities or structures, and which embodies the community's valuation of the asset in terms of its social, historical or cultural dimension" (Throsby 1997). Throsby reasons that pure economic value is not capable of expressing the full range and complexity of cultural worth where multi-dimensional attributes, such as architectural style, aesthetic quality, spiritual meaning, social function, symbolic significance, historical importance and uniqueness, cannot be quantified into financial terms necessary for clear decision making (Throsby 2012).

2.0.2 Adaptive Reuse and Circular Economy

As a sustainability concept, circular economy promotes human wellbeing within the biophysical limits of the planet earth. Adaptive reuse projects and related socio-cultural and environmental activities, provides a circular strategy aimed at preserving social, cultural, environmental and economic values, while at the same time adapting obsolete built heritage for new, extended and/or shared uses. This research builds on the framework 'Circular economy strategies for adaptive reuse of cultural heritage buildings to reduce environmental impacts' developed by Foster (2020). In this regard, all discussion concerning financial instruments will relate to circular cultural heritage activities as defined by Foster "the retrofit, rehabilitation and redevelopment of one or more buildings that reflects the changing needs of communities" (Foster 2020).

Ellen MacArthur Foundation (EMF) defines Circular Economy (CE) as a systemic approach to economic development designed to benefit businesses, society and the environment[3]. In contrast to the 'take-make-waste' linear model, a circular economy is regenerative by design and aims to gradually decouple growth from the consumption of finite resources[4]. The useful life of materials is extended through transformation into new products,

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[3] Ellen MacArthur Foundation Definition of Circular Economy: https://www.ellenmacarthurfoundation.org/explore/the-circular-economy-in-detail
[4] EMF: https://www.ellenmacarthurfoundation.org/circular-economy/what-is-the-circular-economy (accessed 4th February 2021)

design for longevity, waste minimalization, reuse and rethinking consumption to include sharing and services provision instead of individual ownership (Foster 2020).

2.1 Aligning Human and Financial Capital for Socio-technical Systems Change

The complex interplay between ideologies of capitalism, democracy and sustainability has historically created exponential challenges to fragile ecosystems (Taleb 2010). Boulding (1966) refers to the world economy as an 'Econo-sphere' warning of the entropic process polluting non-economic reservoirs of earth, atmosphere and water, with little regard for the limitations of the planet to safeguard future generations within the 'Socio-sphere' of space and time. Prahalad (2009) identifies value creation and co-creation opportunities stemming from 'democratization of commence' by enabling the inclusion of millions of socio-economic poor at the Bottom of the Pyramid (BoP) into the global marketplace. Raworth (2017), creator of the Doughnut economic model, visualizes a safe and just space for humanity within two outlying thresholds including a social foundation of wellbeing and an ecological ceiling of planetary pressure. Roberts and Elkington (2021) suggest that sustainability is a 'natural bridge' forming the relationship between capitalism and democracy by focusing on intergenerational equity and inclusive value creation and distribution over extended timescales.

The Intergovernmental Panel on Climate Change (IPCC) call for rapid and unprecedented transformation of socio-technical systems[5] that constitute the bedrock of society (IPCC 2019). In the context of socio-technical systems change, Hofstetter (2020) identifies a mismatch between mainstream financial markets and real economy capital, despite the fact that capital has the potential to leverage market behavior and stimulate a 'low carbon, climate resilient, just and inclusive future'. This is evidenced by:

Paris Agreement (Art. 2.1c), within the UN Framework Convention on Climate Change UN FCCC), which identifies the realignment of financial capital flows as one of three essential strategies in the response to climate mitigation, along with reducing greenhouse gas (GHG) emissions and strengthening climate resilience (UN FCCC 2016).

OECD & UN Development Programme 'Framework for SDG aligned Finance' which highlights the need to mobilize and enhance the development impact of private finance through SDG alignment. The framework conveys the necessity to create a positive environment to encourage private investors (asset managers, pension funds, credit rating agencies, commercial and investment banks) to contribute to SDG alignment, in parallel with public agencies (governments, central banks, development finance institutions (OECD & UNPD 2020).

Paradoxically, capital investment markets are both part of the problem (destructive profiteering) and part of the solution (sustainable investment). The role of public sector

5 Socio-technical systems can be articulated as human engineered artifacts embedded in society, linked to economies and connected with nature (IPCC 2019). Examples of socio-technical systems include national economies, cities, land use, infrastructure and maritime systems.

investment often entails risk mitigation instruments to crowd in private sector investment. The cost of public sector investment is borne by individual citizens, via tax revenues and national bond debt (essentially a form of equity and risk sharing) highlighting the rationale for financial markets to support the preservation of an equitable, inclusive and prosperous society.

Hofstetter stipulates that purely increasing the volume of investments in ‘Paris aligned’ and ‘SDG aligned’ assets will not be enough to create systemic transformational change. In order to achieve participatory sustainable human prosperity, the sustainable finance movement must re-evaluate ‘Transformational Capital’ investment approaches including ‘value models, performance metrics, methods, tools, analytical frameworks, partnership structures, mindsets and sensemaking protocol’ (Hofstetter *2020).*

2.2 Systemic Temporal Shift in the Financial Ecosystem

Financial analysis tools used in mainstream market asset valuation, such as Discounted Cash Flow (DCF) appraisal and portfolio theory, fall short in their analytical ability to internalize the long-term costs of mitigating climate risk and preserving natural ecosystems, resulting in flawed asset pricing. On the basis that the global economy is facing a transition to net zero carbon and carbon negative business models, technologies, and market mechanisms, Roberts and Elkington anticipate exponential societal and technological systems transformation. Two initial indicators of this systemic shift on the investment horizon include:

- Amplified perspective on the regenerative process (and by association revolving funds and circular economy practices);
- Infiltration of impact investment metrics into mainstream financial market analysis (Roberts and Elkington 2021).

The inevitable result of disruptive innovation in the financial ecosystem will be exposure to both value creation and value destruction in different sectors of the economy. It is difficult to ascertain potential net aggregate financial gain (or loss) in transitioning financial markets due to flawed asset pricing and the fact that future financial market innovations may as yet be unimagined. Fusco Girard (2019) highlights the capacity of cultural heritage circular economy strategies to create synergies to tackle combined human poverty and ecological climate challenges within a symbiotic vision of the landscape.

2.3 Regenerative Capitalism Redefining Capital Leverage Thinking

The capital markets are designed to prioritize capital preservation and maximize profit for wealth creation, with little regard to regenerative social, cultural and environmental value creation. The ongoing work of traditional philanthropic endowment foundations and evolving global corporate metrics, of ESG compliance and intentional measured and managed impact (IMM), provide a point of mediation between the harsh realities of the marketplace and the need for inclusive people-led and place-led gap funding mechanisms. In 1963, Martin Luther King Jr. referred to the inescapable network of mutuality and challenged the motives of charitable endeavor writing “Philanthropy is commendable, but it must not cause the philanthropist to overlook the circumstances of economic injustice which make philanthropy necessary” (Luther King 1963). Fifty-eight years later, these words still resonate in the quest for intentional and regenerative investment leverage strategies to engender long-term sustainable renewal of the ecosystem, including safeguarding cultural heritage assets. This ties in with the philosophy of Zeleny (2021) that in order to solve societal disruption and disequilibrium, one has to identify and understand the causes of human suffering and natural resource extraction, not simply mitigate the symptoms. In periods of rapid transition, solutions to degenerative ecosystems, must remain multidisciplinary and evolutionary to create resilient investment environments[6]. With regard to cultural philanthropic impact investment markets, Fram (2018) suggests that those who influence the allocation of capital have an obligation to consider whether current practices solve or perpetuate the challenges impact investments aim to address and poses the conundrum: 'How can capital serve people and not the other way around? In the context of this research query, the question has been reformulated:

Can circular financial instruments be designed and tailored to protect people and ecosystems in parallel with adaptive reuse of vulnerable cultural heritage resources?

In circular perspective, Fullerton (2015) and Elkington (2020) examine the concept of Regenerative Capitalism. Fullerton (2015) defines 'Regenerative Economics' as the application of nature's laws and patterns of systemic health, self-organization, self-renewal and regenerative vitality two socio economic systems.

Elkington (2020) visualizes systems change in the form of a Green Swan defined as 'exponential progress in the form of economic, social and environmental wealth creation, catalyzed by changing paradigms, values mindsets, politics, policies, technologies and business models' (Elkington 2020). This is an antonym to Taleb's Black Swan epitomized by unpredictable future events driven by negative exponentials (Taleb 2010). Elkington describes innovative social enterprise as 'Ugly Ducklings' defined as 'early-stage concept, mindset, technology or ventures with the potential to become a future Green Swan driven by good exponentials (or a Black Swan driven by bad exponentials).

[6] For example, the recipients of pension fund and life insurance dividends could be impacted by financial losses if their contributions have been invested in unsustainable financial products, thereby exposing them to value destruction in the course of the transition.

Section 3: Designing a Financial Toolkit for Adaptive Reuse of Cultural Heritage

3.0 Toolkit Design Considerations

Four bodies of knowledge are critical to the choice of hybrid financial instruments (combinations of complementary financial and non-financial tools) designed to leverage investment flows for cultural heritage adaptive reuse, while remaining mindful of the physical, humanistic and ecological synergies that exist within complex cultural landscapes:

(i) Tool Knowledge: to identify type and operational characteristics of financial tools;
(ii) Design Knowledge: to facilitate targeted and tailored blending of financial tools to leverage circular investment streams, mitigate risk and avoid displacement;
(iii) Stakeholder knowledge: to understand the motivations and behaviour traits of investors to participate in collaborative investment ventures;
(iv) Impact knowledge: to pre-define strategic impact goals at the design stage[7].

Limited public resources need to be strategically targeted to ensure value for money by maximising the leverage of complementary private sector investment. Combining stimulative investment leverage instruments with restrictive regulatory tools (carrot and stick approach) can enhance the effectiveness of hybrid tool design. The ultimate choice and design of blended regulatory, financial and non-financial instruments is not just a technical decision, based on the most efficient way to solve a particular public funding gap, it is influenced by political and economic context, pre-existing institutional structures, the inclusion (or exclusion) of diverse communities and finally ideological pre-dispositions regarding socio-cultural and environmental goals.

3.1 Spheres of Socio-economic Activity

Collaborative funding strategies, involving formal or informal partnership structures, both within and between market spheres, requires the design of complex funding mechanisms that align the financial and impact goals of diverse stakeholders. The main economic market spheres include:

1st Market Sphere: Government Sphere: Direct & indirect public action for the common good, funded by tax collection and borrowing. Many local governments face multiple financial constraints including insufficient and unpredictable monetary support from central government, weak fiscal structures, poor revenue generation from civic assets and legal constraints. Public financial and non-financial instruments initiated at local government level are backed by national and regional government administrative, regulatory and financial resources, which in turn are backed by European Union financial and technical support structures. Supra-national innovative EU financial instruments have created a strong

7 Strategic Goals are goals deployed to achieve specific social or environmental impact objectives within generally accepted impact categories and theme (GIIN 2021).

framework to inform private market innovations[8]. Apart from capacity building support provision, finance is allocated in the form of loan, guarantee, quasi equity that is repaid and thus recycled to enable ongoing financial support. While revolving funds increase the effectiveness of public spending, they also ensure that financial instruments are financially viable with the potential for a reasonable investment return. EU funds must avoid displacement and the true 'added value' is reflected in benefits such as poverty reduction, fund recycling, network connections, knowledge sharing, job creation, social inclusion, skills training, reduced homelessness, lower carbon emissions, lower energy consumption, increased private investor and funder confidence (EIB 2015a, 2015b).

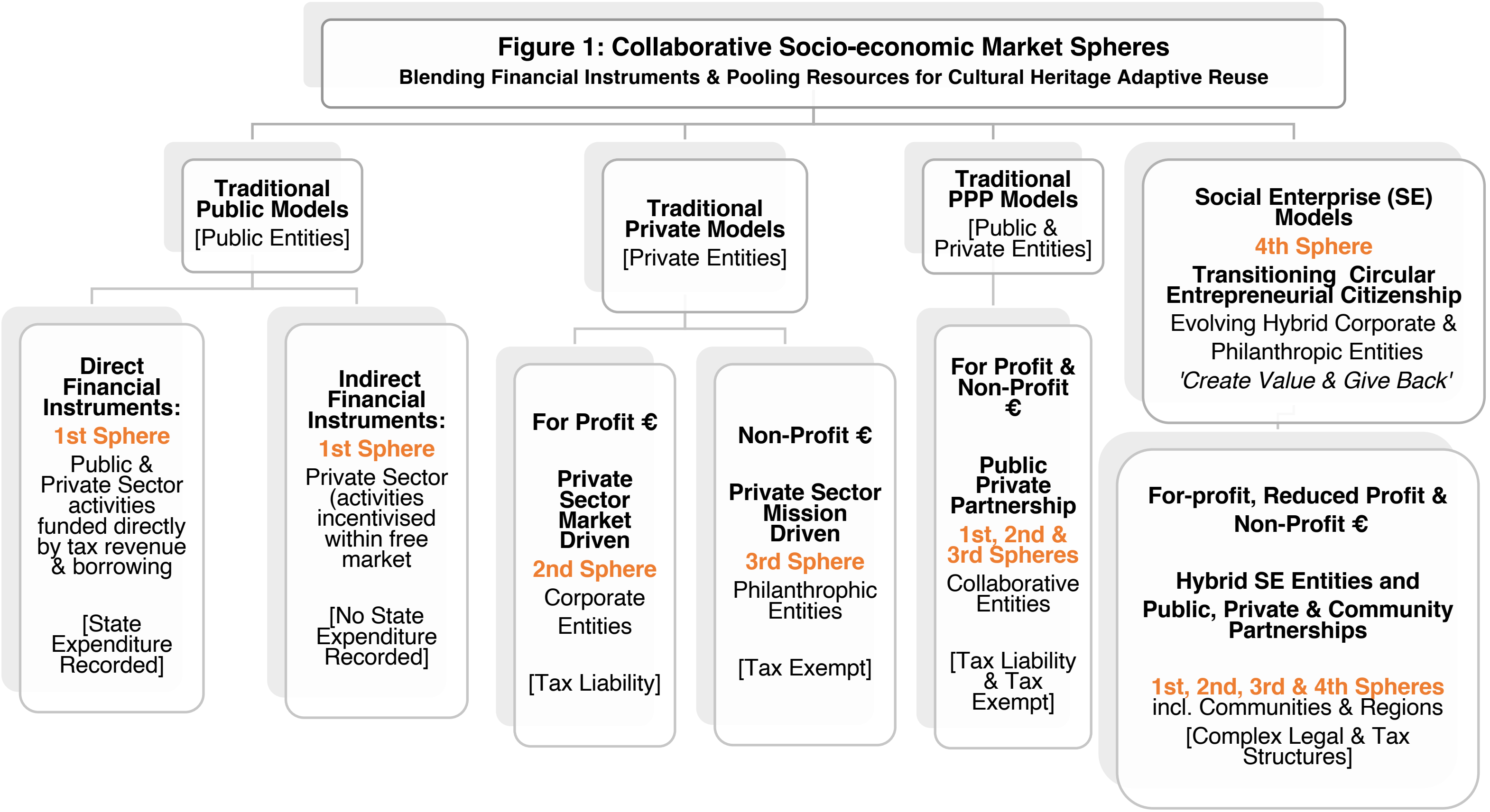
2nd Market Sphere: For-profit Market Sphere: Profit motivated corporate entities with tax liability. Corporate structures can vary across a broad spectrum of risk adjusted profit motivation ranging from socially agnostic corporations that prioritizing financial returns to Environmental, Social and Governance (ESG) compliant corporations and certified Benefit Corporations.

3rd Market Sphere: Non-profit Market Sphere: Mission motivated community organizations, philanthropic cultural foundations and charitable trusts with tax exempt status. Many informal local community groups and formal non-profit grassroots community organizations, in deprived urban neighborhoods and isolated rural communities, often lack the financial track record, entrepreneurial capacity and network infrastructure to overcome exclusion from traditional capital markets. Community-led cultural heritage activates traditionally rely heavily on philanthropic cultural foundations and charitable trusts to bridge the financial and entrepreneurial gap between local community action and access to capital market finance.

4th Market Sphere: Hybrid Social Enterprise Market Sphere: Philanthropic and market savvy 'hybrid' entities motivated by patient profit generation (or at least capital preservation) in addition to intentional Impact Measurement and Management (IMM). Entrepreneurial citizenship models involves complex legal and tax structures due to combined hybrid for-profit, reduced-profit and non-profit structures. Social enterprise structures provide an innovative way to address the issue of access to finance by attracting combinations of grant-aid, endowments and donations in addition to market oriented social investment streams, thereby increasing the potential to pool resources (Salamon 2014) (Gianoncelli & Boiardi 2017). Figure 1 provides a visualization of traditional and evolving collaborative socio-economic market spheres enabling investment in cultural heritage adaptive reuse.

8 Including inter alia, InvestEU, European Fund for Strategic Investments (EFSI), Connecting Europe Facility (CEF), Innovfin, COSME, EaSI.

Figure 1 Collaborative Socio-economic Market Spheres Enabling Investment



3.2 Financial Instruments

Recent innovations in understanding the sustainable global value chain and its relationship to the capital markets stem from the forward thinking vision of the Council of Europe Resolution No. R(91)6 on the Measures Likely to Promote the Funding of the Conservation of the Architectural Heritage (COE 1991)[9]. More recently, the Europe Court of Auditors encourage the use of private funds to safeguard Europe's cultural heritage and recommends that the European Commission:

- Improve the strategic framework for culture within member state treaties;
- Encourage the use of private funds to safeguard Europe's cultural heritage;
- Strengthen the financial sustainability of cultural sites funded by European Regional Development Fund (ERDF);
- Take more direct action to preserve heritage sites (ECA 2020).

Financial instruments (FIs) entail the provision of finance to an organization, enterprise or individual with the expectation of both social and financial returns (OECD 2015). FIs leverage private investment by channelling funds to final recipients via multi-layer structures involving public &/or private co-financing modalities of beneficiaries such as member state authorities, investors, intermediaries and Fund of Funds (FoF). Specific advantages of creating FIs include:

- Leverage capacity to attract combined public and private resources;
- Revolving capacity to generate recycled flows of money via loan repayments (debt) or the realisation of investments (equity);
- Circular revenue generation and regeneration;
- Access to private sector financial tools and expertise to support public policy goals within collaborative public private fund structures.

Financial instruments include debt, equity, grants and guarantees, all of which are applied regularly by development and philanthropic users (WEF/OECD 2015). FIs provide financial discipline for resource-efficient and sustainable revenue generating flows of capital to maximize private investment and relieve the financial burden of government authorities by providing 'financial citizenship' to disadvantaged people (EIB 2016a).

In the context of European Structural and Investment Funds (ESIF), EC (2015) defines financial instrument(s) as "Union measures of financial support provided on a complementary basis … to address one or more specific policy objectives of the Union. Such instruments may take the form of equity or quasi-equity investments, loans or guarantees, or other risk-sharing instruments, and may, where appropriate, be combined with grants"[10].

[9] By creating favorable conditions to make private investments more profitable, promote sponsorship, diminishing risk and use public funds more effectively to generate private investment (COE 1991).
[10] Article 2(p) FR; Article 37(7)(8)(9) CPR.

3.3 Hybrid Blended & Pooled Financial Instruments

EIB (2016a) categorises the main financial instruments as loans (debt), guarantees, equity and quasi equity, as defined by the EC Glossary of FIs (EC 2015)[11], however recognises additional mixed forms of financial instrument, termed 'Blended Finance' or hybrid capital blending combinations of grant, equity & debt capital. The World Economic Forum defines 'Blended Finance' as the strategic use of development finance and philanthropic funds to mobilize private capital flows to emerging and frontier markets. Blended finance deliberately channels private investment to sectors of high-development impact while at the same time delivering risk-adjusted returns. Blended finance has three key characteristics:

- Leverage: Use of development finance and philanthropic funds to attract private capital into deals;
- Impact: Investments that drive measured social, environmental and economic progress;
- Returns: Financial returns for private investors in line with market expectations, based on real and perceived risks (WEF/OECD 2015).

Gianoncelli & Boiardi (2017) make a distinction between the terms 'Hybrid Financial Instruments' and 'Tailored Financing' in the context of venture philanthropy or social investment organizations. Hybrid Financial Instruments (HFI) are monetary contracts that combine features of traditional financial instruments (grant debt and equity instruments) to achieve the best possible alignment of risk and impact/financial return for particular investments. A Hybrid Structure is a combination of a for-profit entity and a non-profit entity. Tailored Financing is the process whereby investors choose from a range of available financial instruments (grant, debt, equity and hybrid financial instruments) where the choice is dependent on the risk, return and impact profile of the investor.

Blended Finance Principles, developed by the OECD, state that blended finance should be anchored to a development rationale, designed to increase commercial finance, tailored to a local context, designed to ensure efficient partnering and monitored for transparency and results (OECD 2020). In recent years, blended finance has emerged as a key approach to financing SDGs. For example, UN Habitats Participatory Slum Upgrading Program (PSUP) where the European Commission is utilising blended finance, including EU grants with loans and equity from public and private financiers, to fund slum upgrading in cities in Africa, the Caribbean and the Pacific (UN Habitat 2020).

Pooled financial instruments entail collaborative partnerships to solve the parallel needs of local authorities and local communities by raising combined funding on the capital markets via various financial instruments such as debt and equity instruments. Pooled finance can take different forms depending on the country context and stakeholder requirements. Apart from knowledge sharing, the pooling of assets to raise finance allows for mitigation and diversification of risk for investors, creates economies of scale and enables less experienced partners to improve their credit rating. Pooled

[11] See Glossary of Terms – Annex 1.

financial instruments can take the form of special purpose investment vehicles. For example, public and private bond issues (debt instrument) aggregate funds from the capital markets to finance onwards investment (via grant, tax or equity instruments) or loans (debt instruments). A public bond can be initiated at EU level (Eurobonds) or member State level by government finance agencies such as Kommuninvest (Sweden) and Bank Nederlandse Gemeenten (Netherlands). Private corporate bonds markets, allow corporations to pool debt finance on the private placement bond market. Typically, bonds are rated for risk on the capital markets ranging from 'AAA' (low risk) to junk (high risk).

3.4 Structuring Financial Instruments within Circular Business Models

Financial Instruments (FIs) for the adaptive reuse of cultural heritage can be optimally designed, within Circular Business Models, to address the needs of final recipients, and take account of the capabilities and structures of investors & financial intermediaries within complex social investment financial ecosystems. EIB (2016a) outlines the phased life cycle of financial instruments as:

- Design including ex-ante assessment to identify appropriate financial tools to address market gaps and risk management;
- Set-up of governance and management structure including reporting/accounting;
- Implementation disbursing funds to final recipients;
- Winding-up repayment of resources on closure of financial instrument.

Elkington (2020) states that the success of a business model is reflected in its ability to create returns that are greater than the Opportunity Cost of Capital (OCC) invested by its shareholders and bondholders. Operational dimensions within sustainable business models include 'Social, Lean, Integrated and Circular' elements, including the delivery of:

- Positive social impact;
- Augmented Regenerative Capital (including financial, human, cultural, intellectual, social, natural etc.)
- Integrated value creation across social, economic and environmental socio-technical systems;
- Circular potential in both technical and biological cycles (Elkington 2020).

The European Venture Philanthropy Association (EVPA) highlights the importance of a developing a planned exit strategy and post investment evaluation stage for social impact funding models. Their five-step approach to impact measurement and management (IMM) can be applied at investor (Financial intermediary and co-investors/beneficiaries) and investee (final recipient) level, once financial and institutional capacity investment barriers for final recipients have been clearly identified, including:

- Set objectives
- Analyzing stakeholders in relation to the above objectives
- Measuring results
- Verifying and valuing impact
- Monitoring and reporting (Gianoncelli & Picon Martinez 2020).

According to ARUP & EMF (2020) the application of circular economy to the construction industry requires an understanding of the broader context in which development takes place, including the whole building lifecycle and the construction value chain. It follows that the value chain must be fully understood before the opportunities of circular economy can be realized. This theoretical standpoint holds true for the adaptive reuse of cultural heritage. As outlined in Section 2.2, understanding the motivations and ability of each stakeholder within the value chain to create value, as opposed to waste, is a necessary prerequisite to encouraging transitionary innovations in procurement and stakeholder collaboration within the design of circular financial instruments and business models.

Bocken et al. (2014) asserts that most sustainability impacts are experienced in the 'use' phase leading to the observation that several approaches need to be combined to enhance sustainability. In the context of built environment, Arup & Bam (2016) subscribe to this view on the basis that stakeholders in the 'use' phase, (and by association, the 'reuse' phase in the case of adaptive reuse) including owners, occupiers, investors, developers, facility managers, and financiers are fundamental to driving a 'circular' built environment by deciding to adopt alternative strategies, structures and operation models to capture broader global socio-cultural, environmental and financial benefits. Sustainable and/or circular transitions in business model innovations is an evolving process which needs to remain flexible as new innovations emerge within complex diverse multi stakeholder process networks. Recent innovations in the practical application of circular business models for cultural heritage adaptive reuse are detailed in CLIC deliverable 4.5 Circular Business Model Workshops for cultural heritage adaptive reuse, in addition to publications (Ost & Saleh 2020, 2021) (Saleh & Ost 2021).

3.5 The CLIC Circular Financial Toolkit for ARCH

The CLIC 'Circular Financial Toolkit' is designed to aid decision making by providing a blueprint of complementary financial (grant and endowment, tax, debt, equity) and non-financial (regulation, real estate, risk mitigation, risk performance, capacity building, impact metric and digital network) instruments. Creating value, within the cultural heritage financial landscape, is as much about understanding existing and opportunistic relationships between collaborative capital leverage enablers, as about blending complementary financial instruments.

In choosing, designing and implementing financial instruments, it helps to think systematically about how to create an enabling environment with regard to identified drivers and barriers to investment. The aid this process, the CLIC Toolkit incorporates 'umbrella' classifications, of both financial and non-financial instruments, designed to leverage capital investment and encourage collaborative partnerships incorporating community participation. Table 1 identifies the umbrella categories of investment leverage enablers and financial and non-financial instruments within the toolkit.

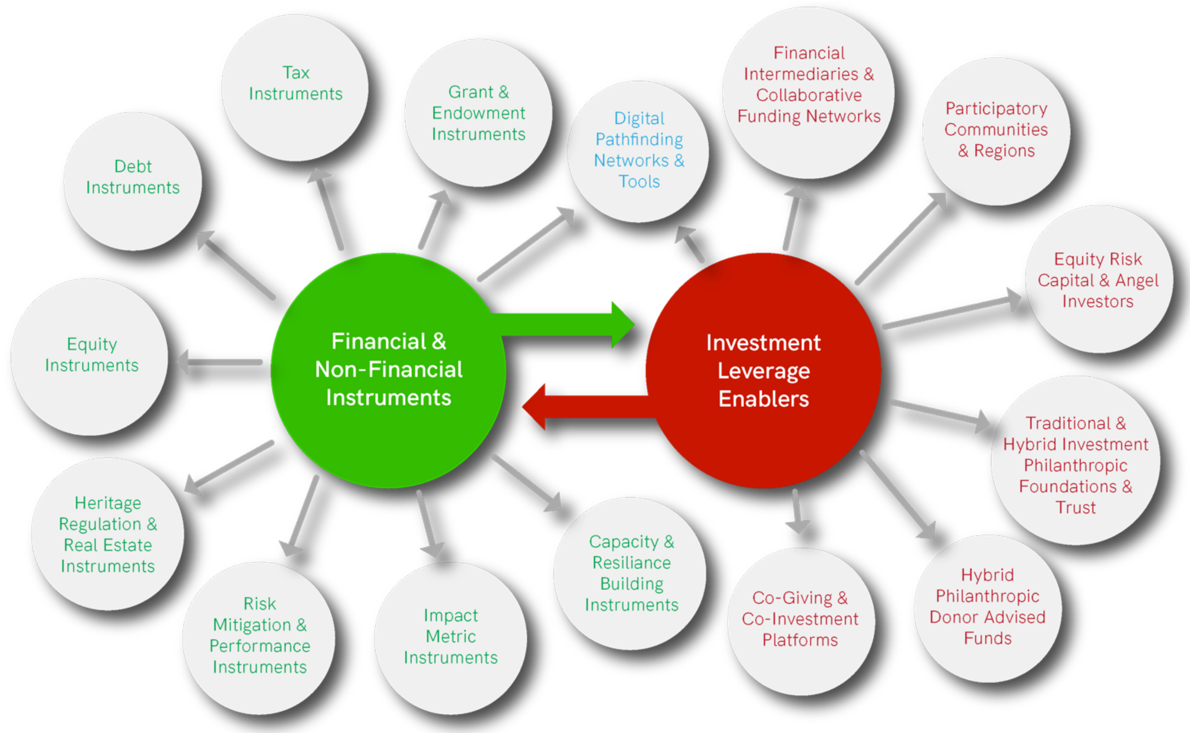
Table 1 Umbrella Categories within the CLIC Financial Toolkit

Collaborative Investment Leverage Enablers	**Financial & Non-financial Instruments**
i. Financial Intermediaries & Collaborative Funding Networks ii. Participatory Communities & Regions iii. Equity Risk Capital & Angel Investors iv. Traditional & Hybrid Investment Philanthropic Foundations & Trusts v. Hybrid Philanthropic Donor Advised Funds vi. Co-Giving & Co-Investment Platforms: Lottery Funds & Crowd Funding vii. Digital Pathfinding Networks	i. Grant & Endowment Instruments ii. Tax Instruments iii. Debt Instruments iv. Equity Instruments v. Heritage Regulation & Real Estate Instruments vi. Risk Mitigation & Performance Instruments vii. Impact Metric Instruments viii. Capacity and Resiliance Building Instruments ix. Digital Pathfinding Tools

Due to the diversified nature and motivations of both public (1st market sphere) and private investment enablers (2nd, 3rd & 4th market sphere), within the cultural heritage arena, the categorization of financial and non-financial instruments within a limited set of umbrella categories offers a structured basis for more informed trans-national knowledge sharing and comparison of capital investment leverage strategies. The final choice and design of suitable combinations of blended and/or pooled capital investment leverage mechanisms directly relates to the tailored needs of the identified market spere beneficiaries and final recipients (1st, 2nd, 3rd & 4th sphere) on a case-by-case or community-by-community basis.

For example, tax incentives can only be initiated by the 1st market sphere for the benefit of the 2nd & possibly the for-profit element of 4th market sphere due to their tax liability. Peer to peer crowd lending and equity share options can only be initiated by the 3rd market sphere for the benefit of other 3rd market spheres entities that cannot gain access to traditional 2nd sphere debt or equity finance. Potential hybrid funding structures (tool combinations) are limitless. In line with circular economy transitionally goals, the ethos of the CLIC toolkit is human centric, with the ultimate goal to protect and enhance socio-cultural, environmental and economic values, in addition to saving finite heritage resources. Figure 1 Provides a panoptic visualization of the CLIC Financial Toolkit highlighting the relationships between 'Blended' complementary Financial and Non-financial Instruments and 'Pooled' Investment Leverage Enablers.

Figure 2 Panoptic Visualisation of CLIC Hybrid Financial Toolkit



Source: Author

Flexible financial & non-financial instruments can be:

(i) initiated by individual capital leverage enablers or pooled within multilateral partnership collaborations initiated by financial intermediaries, including participatory communities;

(ii) utilized individually or blended with complementary instruments within tailored mission focused typology[12] or place-led project, fund or portfolio structures;

(iii) structured to ensure alignment with 'human centric' just, inclusive and climate resilient outcomes.

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12 'Typology based' can refer to building type (such as: Civic, Spiritual, Industrial, Residential, Commercial) or vintage architectural style (such as: inter alia, Ancient, Islamic, Classical, Byzantine, Romanesque, Gothic, Renaissance, Baroque, Rococo, Neo-classical, Art Nouveau, Neo-Gothic, Art Deco, Modernist, Bauhaus…..)

Section 4: European Union Recycling Capital by Design

4.0 The Cultural Heritage Investment Enigma

A growing body of research highlights the enigma of cultural heritage economics, holistic management of urban and rural cultural landscapes, the dangers of making investment & re-development decisions based on raw quantification of 'tangible' real estate market values and profit driven investment returns; and finally the quest for a universal valuation methodology that has the ability to embody the elusive 'intangible' complex socio-cultural values of cultural heritage (Peacock 1997; Bluestone 2000; De La Torre 2002; Mason 2005; COE 2005; Pickerill & Armitage 2009; Nijkamp 2012; Dumcke & Gnedovsky 2013; CHCfE 2015; Girard, Nocca & Gravagnuolo 2019; Foster 2020). The intergenerational nature of heritage assets adds further complexity to investment decisions as heritage resources (inherited from past generations) will depreciate if not maintained and repaired by current generations for the benefit of future generations. Throsby (2012, p.47) reasons that pure economic value is not capable of expressing the "full range and complexity of cultural worth" where multi-dimensional attributes such as architectural style, aesthetic quality, spiritual meaning, social function, symbolic significance, historical importance and uniqueness cannot be quantified into financial terms necessary for clear decision making. In relation to tangible 'immovable' heritage resources, Throsby (1997 & 2002) invokes the notion of 'Cultural Capital' as the *"capital value that can be attributed to a building, a collection of buildings, a monument or more generally a place, which is additional to the value of the land and buildings purely as physical entities or structures, and which embodies the community's valuation of the asset in terms of its social, historical or cultural dimension*". Hutter and Rizzo (1997) refer to cultural heritage as 'nomadic 'due to ever changing values and social norms through time and across cultures. Pignataro and Rizzo (1997) assert that the strength of regulatory control directly impacts the investment costs associated with adaptation, maintenance and ongoing restricted use. As private sector investors and developers seek to maximise profit levels there is an inevitable danger that socio-cultural values will be sacrificed to minimise costs in order to enhance commercial values.

The Hangzhou Declaration places culture on par with economic, social and environmental considerations within sustainable development policies relating to cultural heritage activities (UNESCO 2013). The shared global vision of Sustainable Development Goals (SDGs) within the Urban Agenda (UN 2015) aligns with the New Urban Agenda NUA (UN 2016), the Paris Agreement (EU 2015) and the European Green Deal (EU 2019a), providing a holistic framework of sustainable development emphasizing the interplay of economic, social and environmental ecosystems. Development of effective investment leverage instruments for the adaptive reuse of cultural heritage entails understanding the interlinkages of a number of SDGs[13]. The need to reach 'net zero carbon' in real estate and construction activity, involving cultural heritage, is well

13 Particularly, SDG 7 'efficient sustainable energy projects'; SDG 11 'inclusive, safe, resilient and sustainable cities; SDG 12 'responsible production and consumption; SDG 16 'capacity building of government bodies and institu Co-Giving & Co-Investment Platforms: Lottery Funds & Crowd Funding.

documented and adaptive reuse activity has a key role to play within this framework (Foster 2020) (ARUP & EMF 2016, 2020).

The New Urban Agenda recognizes the need for integrated approaches to urban sustainability as 'culture and cultural diversity are sources of enrichment for humankind' (UN 2016 Pt.10) and respectful adaptation of architectural monuments provides an opportunity for 'value creation' (UN 2016 Pt.125). The Pact of Amsterdam promotes 'place led 'strategies within a circular economy framework (EU 2016). Cultural heritage policies align well with the Europe 2020 Strategy for 'smart, sustainable and inclusive growth'. The European Commission actively supports 'human centred' research and innovation to enhance the lives of citizens (EU 2019b). The Davos Declaration asserts that the initiation of adaptive approaches to elicit new life into neglected and abandoned cultural heritage provides an opportunity to contribute towards high quality 'Baukultur' (Swiss Confederation 2018). The attributes of Baukultur, such as building social cohesion, supporting the health and well-being of humans and contributing to environmental sustainability provide an important link between the Green Deal & cultural community dimension.

The European Commission implemented the European Framework for Action on Cultural Heritage, as a follow up to the European Year of Cultural Heritage (EYCH) in 2018, expressly acknowledging the contribution of the European Heritage Alliance and the 'inclusive' Berlin Call to Action (Europa Nostra 2018). The Paris Manifesto builds further momentum for a vision of safeguarding shared irreplaceable European cultural heritage through strategic investment in Europe's human and cultural capital (Europa Nostra 2019). To support these actions, the Commission formed the Cultural Heritage Forum[14] and Cultural Heritage Expert Group (CHEG) in 2019. In 2021 The Cultural Heritage Forum prepared a workshop and publication on 'Complementary Funding for Cultural Heritage' with selected good practices (EC 2021). This combined visionary call to investment action cannot be implemented without sufficient financial resource to realize these goals (UN 2019). UN Habitat estimate the total investments needed for the urban dimension of the Sustainable Development Goals and the development of infrastructure at US $38 trillion for the years 2020 to 2030 (UN Habitat 2020).

4.1 European Socio-technical Systems Change

Government revenues are still the primary source of funding for urban development in many European regions. As private investors and financial institutions take a more risk averse stance on investment across European, a number of recent policy and financial innovative actions have emerged to stimulate sustainable investment in Europe's human and cultural capital.

European Investment Bank makes the case for a 'New Heritage Deal for Europe' to encourage heritage-led transformation of Europe's society, economy and environment, with the process powered by civil society and supported by local, regional, national and European organizations and

14 Cultural Heritage Forum (E03650): Cultural Heritage Expert Group (CHEG) Lead EAC DG Education & Culture

institutions (EIB 2020). This case is supported by the President of the European Commission[15] stating "*If we manage to use our ever changing and vibrant European culture and heritage as a powerful catalyst for change, and as a vital component of a new European Bauhaus, the return on investment will be substantial*".

The Cultural Deal for Europe acknowledges the potential role cultural, creative, heritage and philanthropic sectors can play in healing the cultural ecosystem post pandemic (CAE, ECF, EHA 2020). The European Union identifies the need for innovative action to enhance the capacity of cities to address global urban challenges, within holistic perspective by 'creating climate neutral and smart, citizen-centric, sustainable, inclusive, resilient and safe systems' (EU 2020a). The European Parliament recognize the value of cultural heritage, education and skills, digital cultural heritage, economic potential and sustainability and finally the need for a strategic approach to cultural heritage (EP 2021). Europe Nostra[16] highlights the 'multiple value of shared cultural heritage and an integrated EU strategy towards cultural heritage, with stronger synergies between stakeholder, policies and funding programmes, to fully unlock social, economic and environmental benefits'. To address the exclusion of the cultural heritage agenda within the European Green Deal, a recent expert consultation, coordinated by ICOMOS and Europa Nostra, explores the opportunities and capacity for cultural heritage to contribute towards the implementation of the European Green Deal (Potts 2021).

In practical economic terms, the 'Circular Economy Action Plan for Europe' highlights the development of a strategy for a sustainable built environment and the potential of the 'Renovation Wave' initiative, announced by the European Green Deal (EC 2019a), to align with circular economy principles (EC 2020a, s.3.6). Within the CE Action Plan, crosscutting actions refer to the integration of circular economy goals within the development of EU Taxonomy Regulations by: (i) providing the circular economy finance support platform (ii) developing an Ecolabel criteria for financial products (EC 2020a, s.6.2). To address the exclusion of the cultural heritage agenda within the European Green Deal, a recent expert consultation, coordinated by ICOMOS and Europa Nostra, explores the capacity of cultural heritage to contribute towards the implementation of the European Green Deal and identifies potential conflicts (Potts 2021).

4.2 European Investment Stimulus

The design of EU financial instruments, such as European Structural and Investment Funds (ESIF)[17] and European Fund for Strategic Investment (EFIS), are based on leveraging private investment cashflows in parallel with achieving financial returns for reinvestment, via revolving fund structures. Debt, equity and risk sharing instruments are specifically designed to ensure that funded

15 Speech by Ursula von der Leyen: https://ec.europa.eu/commission/presscorner/detail/en/AC_20_1916 (16th September 2020)
16 Speech by Sneska Quaedvlieg-Mihailovic: https://www.europanostra.org/ep-plenary-adopts-ambitious-report-on-the-legacy-of-the-european-year-of-cultural-heritage/
17 ESIF includes five funds: European Regional Development Fund (ERDF), European Social Fund (ESF), Cohesion Fund (CF), European Agricultural Fund for Rural Development (EAFRD), European Maritime and Fisheries Fund (EMFF)

projects generate revenue, take a lean approach to cost savings and enable both financial and social impact value creation. The power of EU investment funds is magnified when implementing partners and financial intermediaries use capacity building advisory and support tools, risk mitigation guarantee tools and collaborative partnership risk sharing tools to onward channel leverage opportunities into collaborative funding networks. This opens up exponential funding opportunities by supporting financial intermediaries to engage with strategic mission focused participatory communities, community equity-share schemes, impact investors, institutional co-lenders, equity-share social enterprise, venture (risk) capital investors, lottery funds, co-giving and co-investment entities (such as crowd funding and peer-to-peer equity share platforms).

In addition to recycling of the initial injection of EU funds, via loan repayments, the 'snowball effect' will create momentum to catalyze further private investment streams by negating risk in previously undeveloped market sectors, propelling successful social enterprise ventures into the realm of previously unattainable mainstream finance, building knowledge on circular economy practices and building human and institutional capacity among stakeholders. In short, EU funds are strategically targeted to engender resilient prosperous societies, within three strategic investment pillars: inclusion, sustainability and smart growth, as highlighted in the examples below.

4.2.1 InvestEU and the Just Transition

The launch of the €750 billion pandemic Recovery and Resilience Facility 'NextGenerationEU' incorporates a number of sub-funds[18]. The European Green Deal Investment plan, incorporating InvestEU and the allied Just Transition Mechanism, is expected to mobilize at least €1 trillion in sustainable investment over the next decade to support citizens (EC 2020c).

The market-based and demand-driven InvestEU risk mitigation guarantee instrument of €26.2 billion is expected to leverage €372bn in additional public and private investment via collaborate partnerships by targeting final recipients, across four policy windows[19]:

- Sustainable infrastructure €9.9bn;
- Research, innovation and digitalization €6.6bn;
- Small and medium sized businesses (SMEs) €6.9bn;
- Social enterprise investments and skills €2.8bn.

The guarantee instrument leverages investment by channeling funds through a range of Implementing Partners (IPs) including the European Investment Bank (EIB), Council of Europe Bank (CEB), European Bank for Reconstruction and Development (EBRD), National Promotional Banks and International Financial Institutions (NPBIs)[20]. Backed by the guarantee, implementing partners

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18 Recovery & Resilience Facility; Recovery Assistance for Cohesion & the Territories (REACT-EU); Horizon Europe; InvestEU; Rural development; Just Transition Fund (JTF); RescEU (EU 2020c).
19 Consolidating the European Fund for Strategic Investments (EFSI) and 13 centrally managed funds (CEF, COSME, Innovfin, EaSi, CCS, energy natural and student finance)
20 NPBIs are legal entities that carry out financial, development and promotional activities commissioned by national, regional and local authorities. They act as financial intermediaries for EIB group focusing on high-risk catalytic investments.

may channel funds directly to final recipients or indirectly via financial intermediaries with specific geographic or sectoral expertise to leverage additional private investment flows. Financial intermediaries include banks and mission-driven impact funds such as philanthropic venture funds providing investment readiness and capacity building finance in the social enterprise space. Final recipients include private sector entities such as for-profit SMEs, public sector entities, non-profit entities and public-private partnership structures. Both implementing partners and financial intermediaries can utilize debt, equity and hybrid instruments additional to the InvestEU guarantee. The Just Transition Mechanism includes a Just Transition Fund (grant aid with technical support[21] additional to the EUInvest scheme and EIB public sector loan facility to leverage public and private investment.

4.2.2 Joint Initiative on Circular Economy (JICE)

The Joint Initiative on Circular Economy (JICE) was launched in 2019 by the EIB in conjunction with the EU's five largest NPBIs[22]. This initiative provides €10 billion to accelerate the transition to a sustainable and circular economy via loans, equity investments and guarantees to eligible projects in all sectors over the period 2019-2023. A number of additional NPBIs have now enabled CE projects. Although a generic sectoral financial instrument, the JICE initiative will leverage investment in cultural heritage activities. For example, Cassa Depositi e Prestiti invested €40 million in the adaptative reuse of a 90,000 square meter 1920s former tobacco warehouse 'Manifattura Tabacchi' in Milan to mixed residential and commercial uses (EIB JICE 2019).

4.2.3 Renovation Wave

Similarly, the launch of the 'Renovation Wave Strategy' directly mobilizes generic regenerative investment in the built environment. The Renovation Wave enabled by targeted funding strategies within the NextGenerationEU 'Renovate' and 'Power Up' funding initiatives of the European 'Recovery and Resilience Facility' incorporates combined grants and loans (EU 2020b) (EC 2020b). This strategy entails breaking down barriers within the renovation chain, via a local community neighbourhood approach, to integrate renewable and digital solutions to improve energy performance, achieve zero energy districts and reduce energy poverty (EU 2020b) (EC 2020b). The Renovation Wave will stimulate investment in local supply chains, such as job creation and energy efficiency products, in addition to adapting and upgrading the built environment for the benefit of citizens and communities.

21 Technical Support Instrument (TSI): https://ec.europa.eu/info/funding-tenders/funding-opportunities/funding-programmes/overview-funding-programmes/technical-support-instrument-tsi_en
22 Bank Gospodarstwa Krajowego (BGK) PL, Groupe Caisse des Depots (CDC) & Bpifrance FR, Cassa Depositi e Prestiti (CDP) IT, Institutu de Credito Oficial (ICO) ES, Kreditanstait fur Wiederaufbau KfW) DE.

4.2.4 Advisory Capacity and Resilience Building Support

In partnership with the European Investment Bank, the European Commission provides capacity building support structures for managing authorities and stakeholders working with European financial instruments and investment platforms, including:

- Fi Compass for ESIF financial instruments (https://www.fi-compass.eu/);
- European Investment Advisory Hub (EIAH) for combined ESIF and EFSI funds, including the advisory platform for social outcomes contracting, as part of the Investment Plan for Europe (https://eiah.eib.org/).

Section 5: Impact Investment Metrics and Regenerative Capitalism

5.0 Investment Horizons for Cultural Heritage Adaptive Reuse

Cultural heritage investment and enterprise activities, by their nature, involve long term, (sometimes perpetual) investment horizons which require integration of sustainable and circular investment principles. The design of cultural heritage adaptive reuse 'blended' and 'pooled' financial Instruments, allied with state regulation, have the potential to make a contribution towards the transition to systemic sustainability and circular economy practices within the built and natural environment. Roberts and Elkington (2021) suggest there is no shortage of capital to finance the innovations needed to achieve a just transition although innovation social enterprise activities are often deemed to be high risk with limited profit potential, compared with more liquid secondary investment markets. Until the capital markets begin to systematically internalize social and environmental costs with corporate asset valuation, a barrier for transitioning social enterprise to raise capital will remain. Financial mechanisms enabling cultural heritage adaptive reuse 'activity Inputs' and 'impacts outputs' can be further articulated within the 'Triple Circular Model' by generating self-sustaining Regenerative (capacity to renew), Generative (capacity to generate positive impacts) and Symbiotic (capacity to relate heritage assets to external contexts & impacts) reactions leading to further innovation (Fusco Girard 2019) (CLIC Deliverable 1.3 Survey of Best Practice for CHAR).

Financing sustainable development ambitions requires governments and multi stakeholders, including citizens, to mobilize financial resources in a coordinated manner in pursuit of economic growth that enhances public well-being and preserves the environment (OECD 2020). Moore (2020) suggests that fostering a sense of common purpose, connectedness, human dignity and identity in people (Human Capital) 'makes the intangible, tangible'. Financing SDGs is dependent on public policies that strengthen national and international fiscal environments, in addition to financial flows (UNDESA 2015) (UN Habitat 2020). The Circular Economy Finance Guidelines seek to stimulate a common understanding of circular economy finance by developing voluntary process guidelines to promote integrity in the debt and equity market for transition to circular economy (ABN AMRO, ING & Rabobank 2018). As of 2020, the design and implementation of financial instruments and investment strategies must take the EU Taxonomy performance thresholds (EU TEG 2020a) and recovery and resilience principles (EU TEG 2020b) into consideration, as set out by the EU Technical Expert Group (TEG) on Sustainable Finance.

5.1 Rethinking the 'Triple Bottom Line' Investment Approach

Investments that drive combined social, environmental and economic progress are referred to as 'triple bottom line' investments, creating a better future for the planet, people, peace, partnership and prosperity (WEF & OECD 2015). The concept of 'triple bottom line' (TBL) was devised by Elkington (1994) to encourage the corporate world to alter their perception of capitalism, by extending their focus beyond pure profit maximisation to encompass social and environmental value creation. The construct is alternately articulated as 'People, Planet and Profit' or 'People, Planet and Prosperity' relating to the positive and negative impact an organization has on its stakeholders, natural environment and economy.

Since inception, the triple bottom line concept has inspired an array of financial reporting frameworks, informing capital market investment allocation. Such frameworks include, inter alia, Global Reporting Initiative (GRI), Social Return on Investment (SROI), Environmental, Social and Governance (ESG) metrics, Dow Jones Sustainability Index (DJSI) and Morgan Stanley Capital International (MSCI). Despite this, many corporate entities continue to prioritize the profit dimension, while maintaining a 'Do No Harm' approach with people and planet dimensions. On this premise, Elkington recalled the TBL performance tool stating that 'zero sum' trade-off accounting metrics had failed to move towards the original vision of systemic change creating a just transformation of capital (Elkington 2018).

In 2020, Elkington re-envisions systemic solutions to global challenges via 'Regenerative Capitalism', stating that the triple bottom line is still relevant as long as it enables global systems change and is set in the context of achieving Responsibility, Resilience and Regeneration [3 Rs] (Elkington 2020).

5.2 Combining Risk, Return and Impact Metrics

Risk adjusted market return is defined as financial returns for private investors in line with market expectations, based on real and perceived risk (WEF & OECD 2015). The conception of risk as a metric is subjective as it is impossible to quantify the level of complex systemic risk such as the impact of climate change or seismic events on vulnerable communities.

While socio-cultural enterprises, including cultural heritage activities, by their nature can create additional economic risk, particularly in deprived communities and locations, their ethical mission focused socio-cultural and environmental practices have the potential to create added value (Brand & Kohler 2014). The use of financial instruments designed to achieve socio-cultural and environmental impacts, in addition to a risk adjusted financial return, carry an additional duty of care or 'impact liability', as failure of a financial instrument could negatively impact vulnerable people or communities. This creates a two-tiered risk spectrum of:

- Risk adjusted Market (financial) Return or Below Market Return
- Risk adjusted Impact Return

The choice of financial instruments (individual, blended or pooled) to fund socio-cultural and environmental activities carries a degree of risk, dependent on the political, economic and geographical context of its use. Individual investors within capital leverage pools have different risk and return motivations to engage. An investors' Rate of Return is the net gain, or loss, from an investment over a specified time period, expressed as a percentage of the investments initial cost. 'Return <u>on</u> Capital' focuses on the return investors earn while their invested capital remains at risk. 'Return <u>of</u> Capital' focuses on when investors receive their actual invested capital back.

EIB (2016a) acknowledges the inevitable trade-off between financial sustainability and social mission. Schwab Foundation (2011) emphasize the increasing role of social entrepreneurs within the social investment landscape to allocate capital more efficiently. Impact return can be measured through various output metrics such as 'sustainable agriculture, renewable energy, conservation, microfinance, and affordable and accessible basic services including housing, healthcare, and education' (GIIN 2020a). Chiappini (2017) makes an important distinction that social return is the purpose (intention) of a mission focused impact investment, rather than a consequence or unplanned externality.

5.3 The Impact Risk Spectrum

The traditional philanthropic landscape has changed in recent years with regard to intentional impact driven grantmaking and investment strategies. Gianoncelli & Boiardi (2018) make a distinction between the two extremes of 'investing for impact' and 'investing with impact', along a spectrum of impact capital investment strategies, but acknowledge that capital providers mix and match strategies within these two extremes to achieve required levels of social impact, financial return and risk mitigation.

- Investors for impact (Impact 1st) prioritize the achievement of intentional long term social impact with or without financial return, ranging from financial loss, to capital preservation, below market return. At the extreme level, investors for impact are willing to except higher operational risks to achieve their impact goals, but will utilize ex-post impact evidence to evolve strategies to mitigate future risks.
- Investors with impact (Finance 1st) prioritize the achievement of positive financial returns, with the achievement of social impact as a secondary goal. At the extreme, investors with impact will focus on de-risking the financial component of an investment before considering impact risk and may limit their risk mitigation to minimum screening criteria of 'Do No Harm' (Gianoncelli & Boiardi 2018).

Within these two extremes, a range of financial return, risk mitigation and environmental, social and governance (ESG) impact generation strategies exist to support social innovations at different stages of the development (ex-ante, seed, start-up, scale-up and ex-post evaluation) within different levels of market sector maturity. The two strategies may also overlap and complement each other in the central scale-up stage, where some investees begin to build their capacity and achieve financial independence and sustainability.

Gianoncelli and Boiadi (2018) make reference to the 'Lockstep Model' where investors in the 'invest for impact' arena, provide risk capital for new innovative ventures in order to test problem solving solutions that could potentially be scaled (if successful) to encourage greater capital flows to the 'investing with impact' arena. Essentially, the Lockstep Model builds financial capacity within the sustainable finance marketplace where both positive financial return and social impact return fortify each other.

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This investment strategy has important implications for the evolution of Circular Business Models (CBM) within the cultural heritage sector, where self-sustaining socio-cultural and environmental impact strategies are embedded in the value chain in parallel with financial return and risk mitigation. By improving the regenerative operational and financial capacity of investees, the generative capacity (and by association the symbiotic capacity) is also scaled up.

The GIIN Annual Survey findings indicate that Market Returns and Impact Returns do not necessarily correlate relating to the level of risk undertaken by the investor. As a result of the global pandemic, 46% expect their portfolios to underperform relative to their financial expectations, while only 16% expect underperformance in terms of impact (GIIN 2020b). This suggests that investors' interpretation of the relationship between 'Market Return (financial) relative to Risk' may differ from their interpretation of 'Impact Return relative to Risk'. In other words, because some impact investors prioritize impact goals over financial goals, they may be prepared to accept a higher level of risk on the financial return element, as long as they perceive the impact return element is still achievable (less risky). Investor perspectives on the main challenges facing the impact investment arena include:

- Lack of appropriate capital across the risk/return spectrum;
- Difficulty in demonstrating and comparing impact results via IMM techniques to negate impact washing.
- Poor investment exit options (GIIN 2020b).

The impact measurement process may entail a combination of both internal institutional analysis and external independent analysis in order to measure and benchmark both positive and negative impact within the investment leverage process (GIIN 2021). Despite the fact that asset allocation specific to cultural heritage activities cannot be clearly determined within the sector categories used by GIIN[23], interesting observations are apparent regarding the relationship between asset class (debt, equity, quasi equity, real assets and cash deposits) and risk adjusted market returns in the 2020 Survey:

- Sources of capital for impact investing asset managers originated from pension funds, companies, commercial investors, financial institutions, development financial institutions, HNWIs, foundations, fund of funds, sovereign wealth funds, endowments, spiritual institutions;
- Private equity focused investors are more lightly to seek risk adjusted market rate returns, while private debt focused investors are more likely to employ capital preservations investment strategies;
- Returns from private equity investments, as an asset class, are more volatile, with greater return ranges than private debt and real assets (GIIN 2020a, 2020b).

Section 7.7 deals with Impact Metric Instruments for adaptive reuse of cultural heritage.

[23] GIIN sectoral investment category of 'other' relating to 'real estate, tourism, community development, retail and agnostic investors' could potentially relate to adaptive reuse of cultural heritage activities, but may overlap with other GIIN categories including, inter alia, infrastructure, energy, housing, microfinance, forestry and arts/culture investments.

5.4 Discounted Cash Flow (DCF) Metrics

Any capital-intensive investment leverage decision at market, or below market, return regarding the allocation of capital investment funds to a cultural heritage enterprise or adaptive reuse real estate project is influenced by investors' real, or perceived, perception of likely investment returns, cost of capital, opportunity cost of capital and risk assessment over a specific investment time horizon. Capital allocation investment decisions are based on quantitative appraisal techniques, such as the Discounted Cash Flow (DCF), to determine and benchmark investment returns of different investment opportunities by asset class (Cash Deposits, Government Bonds, Equity Stocks, Real Estate).

Constructive or destructive social and environmental externalities cannot be captured within a Discounted Cash Flow (DCF) appraisal, solving for Net Present Value (NPV) or Internal Rate of Return (IRR). This creates a situation where long-term financial sustainability, human prosperity and wealth preservation are not fully considered in the decision-making process (Hoffstetter 2020). Financial reporting cycles are short-term, usually quarterly or annually, and ignore inter-generational equity and planetary boundaries as articulated by Raworth (2017). Krznaric describes 'discounting' as a weapon of intergenerational oppression disguised as a rational economic methodology (Krznaric 2021).

Internal Rate of Return (IRR) is one of the most common metrics used in financial analysis to estimate the performance and profitability of potential investments, in parallel with the interpretation of risk relating to specific projects or activities. This financial measurement metric is classically defined as the annual rate of return (annual growth expectation) that generates a Net Present Value (NPV) of zero for a stream of expected (or actual) cashflows. That is, the present value of the future expected net cashflows would exactly equal the initial cash investment, where the cash flows are discounted at a risk equivalent rate - termed the 'discount rate' (Linneman & Kirsch 2020)[24].

IRR analysis provides a tool to benchmark a potential investment across the spectrum of asset classes (such as Equity, Debt & Real Assets). However, the IRR measurement metric is limited in its analytic insight as it does not explicitly measure the risk elements of investments, such as: the size and length of the investment, timing and stability of expected cash flows, investment management capacity, liquidity/exit risk. In the specific case of comparative investment decisions, relating to adaptation or retrofit of built heritage property assets, IRR does not distinguish between location, quality of adaptation, cost overrun risk, tenant credit risk, leasing risk, or exit liquidity. Although sensitivity and scenario analysis of subjective investment appraisal inputs are standard practice, the final risk return decision ultimately lies with the investor.

Investors also reference the 'Cost of Capital' metric to determine whether an investment is worth the risk compared to the return. Cost of Capital is derived from the cost of blended debt and equity, weighted according to an individual or firm's capital structure, known as the Weighted Average Cost

24 Discount Rate = Risk Free Rate + Market Risk. Interpretation of the an investor's discount rate is subjective, as investors have different levels of risk tolerance and perception.

of Capital (WACC). 'Opportunity Cost of Capital' (OCC) relates to the foregone benefit when choosing one investment strategy over another. For this reason, savvy investors will benchmark potential investment returns with alternative investment asset classes, when developing an investment strategy.

In the context of intentional impact investment, GIIN (2021) specifies that investors can estimate the opportunity cost of capital (OCC) deployment by taking several investment facets into account alongside risk and return, such as liquidity, resource capacity, impact performance expectations and impact risk tolerance, thus providing a multifaceted approach to decision making. Financial performance varies significantly, based on investment asset class (debt, equity or real assets such as real estate, infrastructure and natural resources), in both 'impact' and 'impact agnostic' investment markets. GIIN (2021) analysis on the performance of impact investments finds that market rate returns (or near market returns) can be achieved through strategic investment strategies, although impact investors need deeper insights on the relationship between impact and financial returns to enable transparent benchmarking and informed decision making about capital allocation. Table 2 provides an illustrative comparison of impact and agnostic private equity funds.

Table 2 Private Equity Fund Benchmark

Private Equity Fund Benchmark	
Illustrative Impact & Agnostic Equity Comparison: Based on 159 Private Equity VC & growth impact funds (Impact USD$27.1 million / Agnostic Equity USD$22.2 million)	IRR
Social Impact IRR	3.7%
Agnostic Impact IRR	11.6%

Source: University of California Barber Morse Yasuda (2019) (GIIN 2021)

Cultural heritage corporate / community enterprise activities and real estate investment and development appraisal project activities differ in relation to finance appraisal methodologies[25].

5.5 Mission Focused Portfolio Investment Theory

In traditional financial markets, fund managers diversify risk within investment portfolios by spreading risk across different asset classes and risk profiles. This strategy pursues profit at a single company or asset level, thereby ignoring the potential of collaborative sustainability activities to enhance citizen and community interests. Hoffstetter (2020) points to an increasing recognition amongst sustainable finance practitioners that the single asset approach, as opposed to the portfolio approach, is an inhibitor to systemic change. For example, a recent World Bank report on

[25] Annex 1 provides a basic comparison of financial appraisal methodologies for real estate community and corporate enterprise ventures compared to cultural heritage real estate projects.

transformative climate finance acknowledged that climate finance is typically allocated to projects rather than systemic interventions (World Bank 2020).

In the impact investing arena, mission focused asset managers, can create community value clustering multiple strategic place-based or typology-based investment projects together. This consistency of mission focus can potentially create a critical mass by infusing market sector confidence into mainstream investors. West (2018) proposes the idea of the 'World City' to focus systems thinking on sustainable development. Medda, Caravelli, Panoylotou & Rapti (2013) highlights the benefits of an integrated portfolio approach in the context of aggregating a mission focused portfolio of diverse projects with a variety of risk and return ratios. Hoffstetter (2020) underlines the benefits of 'informal' collaborative investment clusters within a portfolio impact approach built around societal needs. Within an impact focused portfolio approach, 'universal owners' of portfolios, managed by independent financial intermediaries (including citizens, community groups, pension funds and institutional investors) can develop collaborative investment strategies that contribute to making the whole system more circular and sustainable. Financially independent mission driven community-led or region-led investment projects generate mutual benefit by working together to unlock investment barriers via integrated investment approaches. For example, an accumulation of place-led investment projects for energy efficient low-income residential adaptive reuse projects in a disadvantaged area, may improve the financial viability of mainstream revenue generating adaptation projects. Improving the financial market system in this way requires a focus on civil stewardship to leverage collaborative approaches (rather than individual assets) to de-risking investments.

UN Environment Programme (UNEP) 'Finance Initiative Net Zero Asset Owner Alliance' includes thirty-seven pioneering companies that have made a public commitment to transition their investment portfolios to net zero greenhouse gas emissions by 2050 within an holistic ESG approach (UNEP 2021). The innovation here is that these diverse corporate financial entities are transparently tackling a shared challenge which will inspire others to follow. According to Hofstatter (2021), this initiative connects the future with the present allowing the finance industry to hypothesize quantitative and qualitative pathways between where the system is now and where it needs to be in the future. GIIN (2021c) provides guidance on using IRIS+ to build an impact portfolio.

5.6 Sustainable Reporting Standards

Article 2c of the Paris Agreement (UN FCCC 2016). highlights the need for a financial regulators mandate to tackle uncompetitive markets, where corporate entities are allowed to generate false profits, by causing social and environmental harm to citizens in the economy, that is unpriced in the marketplace. Sustainable finance at EU level supports delivery of the European Green Deal Investment plan (EU 2019) by mobilizing (via guarantees and co-financing fund structures) and channeling public and private investment into the transition to a climate neutral, climate resilient, energy and resource efficient, human centric circular economy. This can be achieved by delivery of climate, environmental and social sustainability goals, including the Paris agreement and the UN Sustainability Development Goals.

While some agnostic financial intermediaries still operate on the assumption that their fiduciary duty is to maximize financial returns for their investors, there is increasing acceptance that fiduciaries have an ethical duty to optimize not only financial returns, but also the social and environmental outcomes generated as a result of how capital is employed (UNEP 2019a, 2019b). In this context, ECA (2019) defines sustainability reporting as the practice of measuring, disclosing and being accountable to internal and external stakeholders for organizational performance towards the goal of sustainable development.

5.6.1 ESG and Impact Reporting

Integration of environmental, social and governance (ESG)[26] considerations within the investment process is referred to by a myriad of terms including sustainable investing, socially responsible investing, mission-related investing and impact investing. MSCI identifies three common approaches to achieving sustainable investment strategies, which are not mutually exclusive:

- Values-based investing: Alignment investments with an individual or organization's ethical values;
- Impact Investing: Targeted investments to generate intentional positive social and/or environmental impact, which may prioritize impact over risk adjusted returns;
- ESG Integration: Assessment of long-term financial risks and opportunities, related to ESG issues, to build resilient and sustainable processes to enhance long term risk adjusted returns (MSCI 2019).

An ESG rating is designed to measure a company's resilience to long term industry material environmental, social and governance risks. Independent rating agencies evaluate ESG analytics to inform investment markets, although the European rating market remains unregulated. Kempeneer, Peeters & Compernolle (2021) identify a lack of a universal conceptualization of ESG and a divergence of ESG measurement practices among rating agencies, practitioners and academics. Comparability issues between the rating agency metrics, increases the risk of capital misallocation, greenwashing and product mis-selling (ESMA 2021)[27].

Sustainable investment strategies, including impact Investing, ESG compliance and climate resilience building processes, effect the pricing of financial assets and the long-term risk and return opportunities of investments. Citizens are demanding responsible approaches to investment from governments, corporate entities and investors, as the primary providers of capital, leading to the reallocation of capital in the financial markets towards investment opportunities that can demonstrate transparent environmental, social and governance (ESG) compliance (MSCI 2019). Within the institutional governance arena, asset allocation investment strategies, portfolio construction and risk

26 ESG considerations include, but are not limited to: (i) Environmental investment in the preservation of biodiversity including climate change mitigation and circular economy; (ii) Social investment in human capital and communities; (iii) Corporate governance management structures of public and private institutions including integrity regarding diversity, equity and inclusion.
27 ESMA also cited the lack of a legally binding ESG definition and comparability among providers of ESG ratings.

management processes must ensure that investments are resilient and financially sustainable in order to maintain their market share.

5.6.2 Sustainable Finance Reporting - EU Taxomony

In line with the Action Plan on Financing Sustainable Growth in Europe (EC 2019b), the Taxonomy Regulation (EU 2020c), creates a legal basis for the EU Taxonomy and provides a framework to facilitate the development of an EU wide classification system for environmentally sustainable economic activities, including legal obligations for all financial market participants.

The EU Taxonomy is a 'green finance' criteria tool to assist the 'transition to a low carbon, resilient and resource-efficient economy' by measuring sustainable investment flows and targeting EU funding mechanisms towards sustainable development priorities. The Taxonomy sets performance thresholds (technical screening criteria) for six environmental objectives, requiring economic activities to (i) Substantially Contribute to at least 1 objective; (ii) Do No Significant Harm (DNSH) to the other 5; & (iii) comply with minimum safeguards.

1. Climate change mitigation
2. Climate change adaptation
3. Sustainable and protection of water & marine resources
4. Transition to Circular Economy
5. Pollution prevention and control
6. Protection and restoration of biodiversity & ecosystems (EU TEG 2020a).

The EU Taxonomy is an implementation tool for policy makers, industry and investors to enable capital markets to classify and respond to investment opportunities that contribute to green transition policy objectives. It is also a guidance tool to encourage investors to allocate capital or influence company activities that make a contribution to climate goals and related SDGs. The more recent EU Taxonomy principles propose five principles for recovery and resilience within EU financial recovery mechanisms (EU TEG 2020b). The principles identify the need to build social, economic and ecological ecosystem resilience in preparation for future climate related disruption. In parallel with protecting vulnerable communities, the principles highlight the importance of creating robust collaborative financial investment frameworks to attract private investment to support and reinforce both member state and collaborative transnational investment towards reaching zero emission targets.

5.7 Investment Liquidity and Negative Interest Rate Policy

Linneman & Kirsch (2020) refer to the 'capital shortage myth' that demand for investment capital exceeds supply, insisting that investment capital is only scarce in places where there is high political risk, high economic risk and an absence of markets with meaningful exit opportunities. Despite this, Schnabel (2020) emphasizes slow moving adverse macro-economic trends, such as a slowdown in productivity growth, excess savings threatening investment liquidity and sustained demographic shifts and suggests that the pandemic is a wake-up call for governments to foster innovation and potential growth via further European integration.

According to Jorda, Singh & Taylor (2020) pandemics are habitually followed by long periods of depressed economic growth and a sustained drop in interest rates. This could potentially place increased pressure on investment markets due to the possibility of amplified loan and equity losses from defaulting investments. Schnabel (2020) advises that the medium to long term growth outlook, after the pandemic, will depend on whether public spending at national and European level, mainly through the NextGenerationEU Recovery Instrument, is used wisely to foster the euro area's growth potential and thereby to raise real equilibrium interest rates, in particular through investments that foster the transition to a carbon free and more digitized economy (effectively the circular transition).

Within the euro area economy, financial institutions play a significant role in credit mediation. While standard central bank expansionary monetary policy entails cutting interest rates to counteract economic stagnation in deflationary periods (where people and businesses hoard money instead of spending and investing) and stimulate borrowing and lending, the Governing Council of the ECB took the controversial step to introduce a negative interest rate policy (NIRP) in 2014 allied with a charge on excess bank reserves (Heider, Saidi & Schepens 2019) (Schnabel 2020). Table 3 shows ECB interest rates within the Eurozone since 2019.

The theory behind the European Central Bank (ECB) strategy is to encourage banks to provide more credit to the economy and to trigger a repricing of short-term interest rates for the future. Additionally, when banks are forced to fund excess reserves, there is a strong incentive to reduce them by shifting into slightly riskier assets, such as long-term government bonds, injecting additional investment funds into European economies.

Table 3 ECB Interest Rates within the Euro-System (since 12/2019)

Deposit Facility Rate (DFR): Charge on bank deposits	-0.5% (minus)
Targeted Long-Term Refinancing Operations (TLTRO): Liquidity to banking sector[28].	Zero %
Marginal Bank Lending Facility:	+0.25% (plus)

Source: www.ecb.europa.eu accessed 11/01/21

28 The ECB introduced policy measures to mitigate negative impact on banking profitability by providing two-tier exemption of a portion of bank reserves from negative rates and allowing banks to refinance existing debts on favourable terms via TLTR on the proviso that they extend credit to the economy (Schnabel 2020).

Section 6: Social Enterprise Investment Leverage Enablers

6.0 Cultural Heritage and Social Enterprise

While the importance of public action to leverage private investment should never be underestimated, it is also important to highlight the significant role of both social enterprise and participative community and regional investment strategies to address market failures.

Understanding the emerging financial landscape, with regard to the investment in cultural heritage, is a much about understanding the motivations of new participants to engage in the capital markets, as about innovations in financial instruments and investment models to leverage sustainable investment flows to protect and enhance human centric cultural heritage values. Bishop (2006) coined the term 'philanthro-capitalism' as a broad concept, not just about market instruments to solve economic issues, but also about a new generation of entrepreneurial venture philanthropists driving social and environmental change with a focus on achieving real impact rather than relying exclusively on traditional grant systems. Achleitner and SpeissKnafl (2012) identify emerging social enterprise leverage enablers as value banks, venture philanthropy funds, social Investment funds and advisors, social stock exchanges & funding platforms. Salamon (2014) adds capital aggregators, philanthropic banks, corporate originated philanthropic foundations, enterprise brokers and climate exchanges to this evolving list.

This growth of potential investment collaborators, now working alongside the public sector, has created new opportunities to channel capital towards achieving efficient sustainable cultural heritage development outcomes. Challenges arise in multilateral stakeholder funding engagement where there may be discrepancies in the alignment of mission focused investment goals, such as required risk adjusted market or below market financial return. To address this issue a number of human and institutional capacity building networking, mobilising and mentoring platforms have emerged to assist stakeholder matchmaking and alignment of investment agendas.

6.1 Recognising Social Entrepreneurship and 'Ugly Ducklings'

Social enterprise systems emerge and co-exist based on an interplay between bottom-up and top-down dynamics rooted in the political, legislative and economic country traditions. Bottom-up dynamics have their roots in community-led co-operative movements, while top-down dynamics are strongly linked with governmental welfare systems (EU 2020d).

The Schwab Foundation defines social entrepreneurship as a model that combines mission, dedication and compassion to serve the most vulnerable and marginalized populations of society with business principles and techniques from the private sector[29]. European Venture Philanthropy

[29] Schwab Foundation online definition https://www.schwabfound.org/about (accessed February 1st 2021).

Association (EVPA) define social enterprise as an organization that focuses on achieving social impact, applying market-based solutions to address public sector and market failure in innovative ways (Maretic and Bolton 2010) (Triponel and Agapitova 2016).

EU (2020d) identifies an array of organizational (legal form) and sector specific (policy and impact driven) definitions of social enterprise within diverse legal and institutional structures. Following on from the 'Social Business Initiative (SBI) adopted by the European Commission in 2011 (EC 2020e), EU (2020d) carried out a mapping exercise on social enterprise ecosystems to increase the visibility, identity and recognition of the social enterprise business model. Rather than provide a single definition, the research operationalizes the concept of social enterprise (SE) by adding minimum qualification dimensions:

- Entrepreneurial (Economic) dimension where the SE engages in market exchanges that generate sustainable financial revenues (min 25%) in addition to other sources of income such as grants, donations and voluntary work;
- Social (solidarity) dimension where SE is established by national legislation or statutes to explicitly serve the community or specific disadvantages groups;
- Inclusive governance-ownership where the SE has profit distribution limits and all stakeholders are represented in decision making process via governance models and ownership structures. To safeguard public benefit, an 'asset lock' must be in place to prevent the distribution of resources, such as profits, land or buildings, to investors in the event of dissolution (EU 2020d).

A key factor that distinguishes social enterprise entities from subsidy dependent organizations, is their pursuit of a financially sustainable business model. Due to their role as innovators, many social entrepreneurs report misalignments between their funding needs and what mainstream investors are willing to fund (Ashoka & McKinsey 2020) (Clarke, Langsam, Martin, Worsham 2018)[30].

Elkington (2020) refers to tomorrow's unfamiliar breakthrough solutions as 'Ugly Ducklings' described as an early-stage concept, mindset, technology or venture with the potential to drive positive (or negative) exponential change. Innovate social enterprise 'ugly ducklings' can experience difficulty attracting investment capital if their ideas are alien to existing norms. The challenge is to bridge the gap between innovative social enterprise and mainstream financial markets. The greater challenge is to recognize innovative social enterprise when it surfaces.

6.1.1 The Emergence of B Corporations

B Corporations are for-profit social enterprise companies with verified social and environmental performance, public transparency and legal accountability to balance profit and purpose[31]. The B

[30] Innovation Investment Alliance: Skoll Foundation, USAid, Mercy Corps, DUKE Centre for Establishment of Social Enterprise (CASE).
[31] B Corporation Definition by B Lab https://bcorporation.net/about-b-corps, accessed 2/2/2021 (Global, USA & Canada, Australia, Brazil, Chile, the Netherlands and London).

Corporation concept is administered by B Lab, a non-profit entity, incorporating global independent certification services. The defining difference between commercial enterprise and a B Corporation is that a B corporation create benefit for all stakeholders, not just shareholders. B Corp certification does not just evaluate a product or service. It assesses the overall impact of the company that creates the product or service, including assessment of a company's impact on its workers, customers, community and environment. (current and future). Global Reporting Initiative (GRI) and b impact Assessment (BIA) recently published a study on the 'Complementary Use and Linkage of the GRI Standards and the B Lab's B Impact Assessment (GRI & B Lab 2021). Examples of financial B Corporations include: Triodos Bank (the Netherlands) and Echo-Park Community REIT (USA) (see Section.10.5.5).

6.2 Social Enterprise Investment Enablers

A number of prominent traditional global philanthropic foundations (such as the European Cultural Foundation, MacArthur Foundation, Rockefeller Foundation, to name a few) have provided exceptional market leadership in developing innovative ways to channel private investment funds to under-resourced deprived communities, via philanthropic investment foundations that utilize a range of financial instruments in addition to grant aid. These actions have inspired both the profit motivated corporate world and the socially and environmentally motivated philanthropic world to see each other in a new light where mutually beneficial synergies can take place by restructuring corporate entities and cultural foundations to share the skill set and experience in addition to aligning human centric mission focus and financial goals.

The following section provides a broad categorization of social enterprise investment leverage enablers evident in the marketplace, bearing in mind that overlap exists within some functions such as the creation of collaborative funds.

i. Financial Intermediaries & Collaborative Funding Networks
ii. Participatory Communities & Regions
iii. Equity Risk Capital & Angel Investors
iv. Traditional & Hybrid Investment Philanthropic Foundations & Trusts
v. Hybrid Philanthropic Donor Advised Funds
vi. Co-Giving & Co-Investment Platforms: Exchanges, Lottery Funds & Crowd Funding
vii. Digital Pathfinding Networks

Fig. 3 provides a visualization of potential collaborative investment leverage enablers within the CLIC hybrid financial toolkit.

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Figure 3 Potential Investment Leverage Enablers within CLIC Hybrid Financial Toolkit

6.3 Financial Intermediaries & Collaborative Funding Networks

Financial intermediaries leverage private investment by channeling funds to *final recipients* via multi-layer structures involving public &/or private co-financing modalities of *beneficiaries* such as transnational entities, state agencies, financial intermediaries, collaborative funds, investors.

'Financial Intermediaries'[32], also termed capital aggregators, are financial entities that initiate the leverage of 'pooled' capital from a Collaborative Funding Network of investment partners ('beneficiaries'). The financial intermediary then channels the pooled funds, via selected financial instruments, to underfunded target recipients ('final recipients') within a pre-defined geographic

[32] WEF/OECD (2015) defines financial intermediaries as institutions that facilitate the channeling of funds between investor and investee company or project and between lenders and borrowers.

location, sector or disadvantaged community, that cannot access capital in traditional investment markets.

To hedge risk, financial intermediaries typically make investments in stages (Inception & Design / Adaptation / Use & operate) allowing them to only provide additional capital infusions when certain milestones have been achieved. Financial intermediaries can operate within for-profit, non-profit or hybrid fund structures including the provision of:

- Venture Philanthropy Capital: Capital leverage from different grant donors for mission driven intentional measured impact goals, mostly without expectation of financial return;
- Impact Investment Capital: Capital leverage from different investors that require an element of risk adjusted market return in addition to intentional measured socio-cultural &/or environmental impact return. Pooled funds are then blended into financial and capacity building instruments tailored to final recipient needs;
- Impact Foundation Capital: Capital leverage from foundations assets for intentional measured socio-cultural &/or environmental impact return with or without financial return (Richter 2014).

'Collaborative Funding Networks' typically incorporate a group of individual or institutional donors and investors who, pool funds, knowledge and other resource to achieve a common mission. Although funding collaboratives take a variety of forms, a common distinguishing feature is that they scale up their collective impact by networking to make coordinated decisions about the strategic targeting, leveraging and allocation of their pooled resources (Eikenberry & Bearman 2014).

More formalized institutional collaborative funding networks may involve the creation of an umbrella fund representing a number of smaller funds, termed 'Fund of Funds'[33]. Salamon (2014) defines a Fund of Funds (FoF) as an investment fund that owns a number of separate funds, each with its own risk and return focus, making it easier to assemble complex financial instruments for particular activities.

Despite the decentralized and democratized nature of collaborative funding networks, (Eikenberry & Bearman 2014) highlight potential operational challenges such as the difficulty in maintaining harmony and consensus within networks, sustaining long term capacity and efficiently matching pooled resources with target recipients to achieve desired impact. The more recent phenomena of online crowd funding platforms has opened the leverage market to a more inclusive audience by connecting with and facilitating multiple small scale donors to make targeted collaborative philanthropic contributions.

[33] Where financial instruments are implemented through a fund of funds, the entity implementing the fund (FoF) shall be considered to be the only beneficiary (Article 2(27) CPR) (EC2015).

6.3.1 Bank & Non-bank Financial Intermediaries & Funding Collaborators

World Bank (2013) categorizes financial Intermediaries as: (i) 'Bank' Intermediaries including commercial, credit union & savings banks; (ii) 'Non-bank' Intermediaries including government agencies, NGOs, foundations, social equity fund providers, community development & microfinance entities. Many Bank and Non-bank intermediaries, listed above, can potentially undertake the role of either financial intermediary or collaborative funding partner. Depending on their philanthropic mission, some non-banking collaborative funding partners vary in terms of governance and financial structure, types of fund members, level of engagement, and choice of financial instruments making them unsuited to the role of initiating financial intermediary. Examples of such potential collaborative investment partners include lottery funds, crowd funding ventures, capacity building, pathfinding and investment exchanges. Table 4 provides a broad categorization of supra-national, national or trans-national stakeholder categories that could potentially undertake the role of 'Financial Intermediary' &/or Collaborative Funding Partner.

Table 4 Potential Financial Intermediaries and Collaborative Funding Partners

Potential Bank & Non-bank Financial Intermediary & Collaborative Funding Network Partners	
Supra National Entities:	European Commission (EC), European Central Bank (ECB), European Investment Bank (EIB), Climate Change Bank (CCB) and Council of Europe Development Bank (CED), European Bank of Reconstruction and Development (EBRD), World Bank
Public Entities - State level (1st Sphere):	• Sovereign Wealth Funds • Local Government agencies • Quasi State agencies with financial powers
For Profit Private Entities (2nd Sphere)	• National Promotional Banks and Institutions (NPBIs), Investment, Development & Financial Institutions with Joint Initiative on Circular Economy (JICE) focus: ○ Bank Gospodarstwa Krajowego (BGK) PL; Groupe Caisse des Depots (CDC) & Bpifrance FR; Cassa Depositi e Prestiti (CDP) IT; Institutu de Credito Oficial (ICO) ES; Institut Catala de Finances (ICF) ES; Kreditanstait fur Wiederaufbau KfW) DE; Investitionsbank Berlin (IBB) DE; Netherlands Water Boards Bank (NWB) NL; SID banka (SID) SI[34]. • Insurance Companies • Pension Funds (Public & Private)
Non-Profit Private Entities (3rd Sphere)	• Traditional Non-profit Philanthropic Trusts & Foundations financed by private donors & investors

[34] NPBIs & JICE: https://www.circularcityfundingguide.eu/funding-types-and-their-applicability/debt/public-banks/national-promotional-banks-and-institutions-npbis/

Social Enterprise Entities (4th Sphere) Financial intermediary or collaborative partner	• Venture Philanthropy Entities including Equity Risk Capital & Angel Investors (Public and private exchanges) • Hybrid Investment Philanthropic Foundations & Trusts • Hybrid Donor Advised Funds
Social Enterprise Entity (4th Sphere) Collaborative partner	• Community Group Initiatives • Co-Investment Platforms: Crowd Funding & Lottery Funds • Digital Pathfinding Networks

6.4 Participatory Communities and Regions

Place based communities and regions, including urban and rural landscapes, are a growing focus of attention to deal with combined economic, physical, social and environmental challenges facing people. This idea is not new. Jacobs (1970) championed the urban diversity and the need to protect fragile democracies. More recently, social entrepreneurship has emerged as a hybrid of government intervention and pure business entrepreneurship, where social enterprise ventures enable citizens and communities to achieve transformative societal change (Osberg and Martin 2015).

A significant number of community-led social enterprise organizations, stemming from collective awareness, are evolving within the social enterprise arena to address unmet societal challenges such as the need to promote social justice, equity, equality and the protect the environment. This dynamic is more prevalent in member states where there is a strong social economy and 3rd sector tradition paving the way for new or transformative social enterprise entities.

Cultural heritage adaptive reuse activities are reinforced by the participation and commitment of community-led actions to enhance living and working conditions in deprived urban neighborhoods and isolated rural communities. Community activists often face financial and organizational capacity barriers excluding them from traditional capital market investment flows. Similarly, many local and regional government agencies lack the financial resources and institutional capacity to provide practical support for social enterprise activities.

International change making impact organizations such as Ashoka, Schwab and Skoll Foundations, UN Habitat and NESsT (among many others) provide capacity and resilience building and mentoring support for social economic development within different country operational contexts.

At city level, the Civic eState Network provides an example of pooling urban commons. Within the URBACT framework, Civic eState project involves coordinating social enterprise impact initiatives and impact measurement across different cities with shared challenges, to gain knowledge about the practicalities of the communal land trust models. This process is helping to building knowledge on the implementation of public, private and community partnerships and the management of urban commons to achieve sustainable financial outcomes[35].

In the USA, community equity real estate investment vehicles offer local communities the ability to purchase shares in local neighborhoods to combat gentrification issues. Emerging models, can be structured as for-profit (below market) or non-profit allowing for democratic control and local decision making, including:

- Neighborhood based Real Estate Investment Trusts (REITs);
- Member owned real estate co-operatives;
- Community land trusts (Theodos and Edmonds 2020).

Knowledge-sharing and pathfinding networks can also generate positive environments to enable mission focused communities to gain momentum for coordinated action to address societal needs. Informal community groups, such a co-living and co-working hubs also provide networking and promotional support for bottom-up community-led and place-led social enterprise initiatives (EU 2020d).

Table 5 Participatory Communities and Regions

Participatory Communities and Regions (Social Enterprise Networks)
• Ashoka Foundation: https://www.ashoka.org/en-us • Cities Investment Facility (UN Habitat Platform): https://unhabitat.org/programme/cities-investment-facility-cif • Civic eState Network: pooling urban projects (URBACT): https://urbact.eu/civic-estate • IntBau (Traditional building, architecture & Urbanism): https://www.intbau.org/ • Interreg Cultural & Creative Hubs (Greece & Italy): https://greece-italy.eu/rlb-funded-projects/creativehubs/ • Monument Watch: https://www.wmf.org/watch • NESsT (social enterprise in emerging markets): https://www.nesst.org • NESTA Innovation Foundation: http://www.nesta.org.uk • Revolving Instruments for Cities in Europe (RICE) within EU Multi Regional Assistance (MRA) programme: https://www.fi-compass.eu/mra/multi-region-assistance-mra • Schwab Foundation: https://www.schwabfound.org/ • Sharing Cities Alliance: https://www.sharingcitiesalliance.com/ • Skoll Foundation: https://skoll.org/ • URBACT European Territories Co-operative Programme: https://urbact.eu

Note: Illustrative examples only

[35] URBACT Financing the Urban Commons (Part 1): https://urbact.eu/financing-urban-commons-part-i

6.5 Equity Risk Capital & Angel Investors

Tuan (2014) identifies emerging forms of socially responsible capacity leverage entities that combine equity risk capital practices with philanthropic goals termed 'venture philanthropy' or 'angel investment'. This practice involves the provision of financial instruments by for-profit, non-profit or 'hybrid' (for profit and non-profit) financial entities. Gianoncelli & Boiardi (2017) define social venture capital as an enterprise approach to tackling social problems through investment, supporting the creation and expansion of commercially sustainable enterprises to maximize social and financial returns. Maretich & Bolton (2010) define social enterprise as an organization that focuses on achieving social impact by applying market based solutions to address public sector and market failure in innovative ways. Social enterprise can take a variety of legal forms.

6.5.1 Direct Equity Risk Capital Investors

Equity risk capital, also 'termed 'venture capital', is provided in tandem with human and institutional capacity building consultancy support for target recipients, to achieve intentional and measurable social, cultural and environmental impact. Equity venture philanthropy fund activities may be either geographic or sector (residential, office, retail, Industrial or leisure) focused. They increasingly incorporate people and community led placemaking goals and the need to achieve intentional impact measurement and management (IMM) goals in addition to ESG compliance and alignment with SDGs mapping in their decision-making process.

Table 6 Direct Equity Risk Capital & Angel Investors

Direct Equity Risk Capital & Angel Investor	
Equity Risk Capital & Angel Investors (Venture Capital)	• Asian Venture Philanthropy Network: https://avpn.asia/ • Cities Investment Facility (UN Habitat Platform): https://unhabitat.org/programme/cities-investment-facility-cif • Ellen MacArthur Foundation CE100 Network of strategic partners, partners & members. (e.g. Circularity Capital, Banca Intesa SanPaolo, BNP Paribas): https://www.ellenmacarthurfoundation.org/our-story/our-network/strategic-partners/intesa-san-paolo • European Cultural Foundation (ECF) – Culture of Solidarity Fund: https://culturalfoundation.eu/initiatives/culture-of-solidarity-fund • European Sustainable Investment Forum: https://events.climateaction.org/sustainable-investment-forum-europe/ • Forum of Sustainable & Responsible Investment: https://www.ussif.org/ • Grantmakers for Effective Organization [GEO]: https://www.geofunders.org/ • NESsT (social enterprise in emerging markets): https://www.nesst.org • Robin Hood Foundation in NYC: https://www.robinhood.org/ • Venture Philanthropy Partners (VPP) North Carolina: http://www.vppartners.org/ • World Monuments Fund: https://www.wmf.org/

Note: Illustrative examples only

6.5.2 Indirect Equity Risk Capital Investors

Indirect equity investment opportunities in the venture capital arena takes place via public and private stock and bond exchanges. In 2003, the launch of the Chicago Climate Exchange laid the foundation for socio-cultural stock exchanges by offering investors a potential financial return in addition to generating positive socio-cultural and environmental impacts. Since then, the evolution of social stock exchange platforms provides a transparent market mechanism for enterprises with a socio-cultural and environmental mission to raise finance on the capital markets while protecting their triple bottom line corporate structure. The distinction here is that social and environmental exchanges encourage investment rather than philanthropic donations.

The main rationale is the efficient allocation of capital by transparently pricing financial instruments against financial and social return that investors are willing to accept, in addition to assisting corporate enterprise to offset the cost of achieving SDGs, ESG Compliance and in some cases intentional impact (IMM). While social stock exchanges and private investment platforms are still in the development phase, they broadly take the form of:

- Environmental Exchanges (Regulated) enabling investors to trading environmental rights (buy and sell carbon credits) during a set time frame;
- Social Stock Exchanges (Regulated) enabling investors to purchase and onward trade bonds issued by social enterprises, operating within strictly defined eligibility criteria;
- Private Platforms (Self-regulated) enabling syndication of private investment funds to purchase and onward trade interests in private social enterprise partnerships (Robeco and Booz & Co 2009) (Shahnaz, Kraybill & Salamon 2014).

Enterprise brokers typically provide traditional investment advisory services with some firms branching into the socio-cultural and environmental impact investment arena. Social enterprise brokers source and connect social and environmental investors to mission focused investment opportunities with the potential to deliver risk adjusted market returns in addition to socio-cultural and environmental impacts (Hagerman & Wood 2020). The choice of financial instruments and funding collaboratives entail different financial risk and return profiles, leverage opportunities and investment scale requirement giving enterprise brokers an important role in structuring impact investment strategies.

Table 7 Indirect Equity Risk Capital via Exchanges and Funds

Indirect Equity Risk Capital via Socio-cultural & Climate Exchanges and Circular Funds
Stock Exchanges (Regulated): • Chicago Climate Exchange [CCX]: https://climatechangeconnection.org/solutions/carbon-pricing/cap-trade-system/carbon-markets/ • Euronext - ESG funds: Amsterdam Brussels Dublin Lisbon London Oslo Paris: https://www.euronext.com/en/list-products/bonds/esg-bonds • European Climate Exchange [ECX]: https://www.eea.europa.eu/data-and-maps/data-providers-and-partners/european-climate-exchange • European Union Emissions Trading Scheme [EU ETS]: https://ec.europa.eu/clima/policies/ets_en • Impact Exchange of Mauritius [IIX]: https://iixglobal.com/iq-issue-q2-2013/the-launch-of-impact-exchange/ • Impact Investment Exchange [IIX] Singapore: https://iixglobal.com/ • Mission Markets trading platform supporting social and environmental capital markets: https://missionmarkets.wordpress.com/ • Social Stock Exchange Limited [SSE] UK
Environmental, Social and Governance Index • MSCI Sustainable Impact Index: https://www.msci.com/msci-acwi-sustainable-impact-index • MSCI ESG Universal Index: https://www.msci.com/msci-esg-universal-indexes • Cambridge Associates Impact Investing Index: https://www.cambridgeassociates.com/ • S & P Global Natural Resources Index: https://www.spglobal.com/spdji/en/indices/equity/sp-global-natural-resources-index/#overview
Circular Economy Funds (Regulated): • BlackRock & EMF CE Exchange Traded Fund: https://www.blackrock.com/us/individual • BNP Paribas CE Exchange Traded Fund: https://www.easy.bnpparibas.fr/professional-professional/

Note: Illustrative examples only

6.6 Traditional & Hybrid Philanthropic Foundations & Trusts

Philanthropy is broadly defined as 'private action or the use of private resources for public purpose'[36].

6.6.1 Traditional Philanthropic Foundations & Trusts

Cultural philanthropic foundations fulfil a diversity of policy driven non-profit functions with regard to cultural heritage. Private foundation funds for public good play a significant role across Europe (circa 800 Foundations) with combined budgets amounting to €60 billion per annum (ECF & AKS 2020). In stark contrast to the mature North American model, the concept of philanthropy on a Pan-European level 'hardly exists' mainly comprising small national and local foundations (ECF & AKS 2020). For example, the oldest Pan-European foundation, European Cultural Foundation (ECF), founded in 1954, is funded entirely from Dutch sources. The cultural heritage agenda is represented within European Cultural Foundation, in the absence of a designated European Heritage Foundation. While traditional philanthropic foundations have the potential to provide a cohesive and inclusive link

36 http://alliancemagazine.org/philanthropy-glossary/

between European & national policy makers and civil society, cross border investment synergies are severely hindered by political lethargy in terms of unsolved legislative and taxation collaboration barriers (ECF & TGE 2017). According to (McKinsey 2020) philanthropic communities mobilized an unprecedented response to the Coronavirus[37], indicating that European philanthropic foundations are uniquely placed to play an essential role in future rebuilding and recovery efforts for Europe.

The charitable non-profit status of heritage trusts is also an important asset in the process of persuading the public to donate funds, legacies and property. An important power of a trust is the right to own property inalienably, which means that once declared, such property can never be sold or taken from the trust by government except by an act of parliament. Thus, a declaration of inalienability implies perpetual protection of heritage assets donated to charitable trusts. In many jurisdictions (but not all), charitable trusts benefit from fiscal privileges (Kearns 1997; Borley 1997).

6.6.2 Emerging Hybrid Investment Philanthropic Foundations

The more recent phenomena of hybrid Investment philanthropic Foundations involve the restructuring of traditional non-profit cultural foundation to enable parallel for-profit mission focused philanthropic functions. Foundation core assets are used as collateral to leverage additional investment funds in the quest for social impact as well as financial returns evidenced by meaningful metrics. In the cultural heritage arena, some charitable foundations are utilizing a range of blended debt, equity and risk mitigation instruments additional to traditional grant instruments, whilst also collaborating with various investment partners, including for-profit, non-profit and hybrid entities with a mission in line with the foundation's charitable mission. Salamon (2014) uses the term 'Philanthropic Bank' to describe this pursuit of leverage from a foundation's endowment assets, combined with the intellectual capital of the foundation, to encourage the flow of private investment capital to create measured mission impacts. Not all foundations will have the desire or capacity to follow this route due to legal and administrative challenges, however this pioneering model is gaining momentum with the emergence of key support structures such as financial intermediaries, socio-cultural exchanges, cultural enterprise brokers, capacity builders and pathfinders (Salamon 2014).

37 Combined European commitments of €1.1 billion by May 2020.

Table 8 Traditional & Hybrid Investment Philanthropic Foundations & Trusts

Traditional & Hybrid Investment Philanthropic Foundations & Trusts	
Traditional Philanthropic Foundations & Trusts	**European Origin** • Allianz Kulturstiftung AKS (Germany 2000): https://kulturstiftung.allianz.de/en_EN.html • Calouste Gulbenkian Foundation (Portugal 1956): https://gulbenkian.pt/en/ • European Cultural Foundation ECF (Netherlands 1954): https://culturalfoundation.eu/ • Fondazione CRT (Italy 1991): https://www.fondazionecrt.it/ • Irish Landmark Trust (Ireland 1992): https://www.irishlandmark.com/ • King Baudouin Foundation Belgium (1976): https://www.kbs-frb.be/en/ • Stichting INGKA Foundation (the Netherlands 1982): https://www.ingkafoundation.org/ **USA Origin** • Bill & Melinda Gates Foundation (USA 2000): https://www.gatesfoundation.org/ • Getty Foundation (USA 1984): https://www.getty.edu/foundation/ • KL Felicitas (Global 2000): https://klfelicitasfoundation.org/ • MacArthur Foundation (USA 1970): https://www.macfound.org/ • Rockefeller (USA 1913): https://www.rockefellerfoundation.org/ • WK Kellogg Foundation (USA 1930): https://www.wkkf.org/
Emerging Hybrid Investment Philanthropic Foundations	• Calvert Impact Capital (USA 1995): https://www.calvertimpactcapital.org/ • FB Heron Foundation (USA 1992): https://www.heron.org/ • Ford Foundation (USA 1936): https://www.fordfoundation.org/ • Habitat for Humanity International (USA 1976): https://www.habitat.org/ • Taconic Foundation (USA 1958): https://www.berkshiretaconic.org/ • The KRESGE Foundation (USA 1924): https://kresge.org/ • The Schwab Foundation (Switzerland 1998): https://www.schwabfound.org/

Note: Illustrative examples only

6.7 Hybrid Philanthropic Donor Advised Funds (DAFs)

Hybrid Corporate Philanthropic Funds involve the restructuring of for-profit corporate financial institutions, already managing mutual investment funds, to create a parallel non-profit tax exempt fund offering philanthropic investment options for donors (Cohen 2014). A characteristic of this leverage mechanism is the 'Donor Advised Fund' (DAF) structure which allows donors to create an individual tax-deductible charitable account within the ring-fenced philanthropic arm of the financial organization and choose an investment strategy based on their specific risk profile and investment timescale. Ultimate management and decision-making over collaborative pooled capital and distribution to target recipients remains with the corporate financial institution.

A Foundation of Philanthropic Funds (FJC) in the USA, structures Donor Advised Funds into revolving accounts. Marks (2021) states that by prioritizing activities with a high likelihood of recovery, (fund) structures create the potential for donors to amplify their impact, revolving their funds so that the same philanthropic dollar can have multiple impacts on multiple projects.

Table 9 Hybrid Philanthropic Donor Advised Funds

Hybrid Philanthropic Donor Advised Funds (DAFs)	
For-profit corporate financial institution enabled non-profit Philanthropic 'Donor advised Fund'	• A Foundation of Philanthropic Funds (FJC) https://fjc.org/giving-and-investing/?opennav=donor-advised-fund • Cultural Heritage Finance Alliance (CHiFA) (USA): https://heritagefinance.org/ • Foundation of Philanthropic Funds (FJC) (USA) https://fjc.org/ • Bank of the West Wealth Management (BNP Paribas Group USA): https://www.bankofthewest.com/wealth-management.html • BNP Paribas Foundation (Eurozone): https://group.bnpparibas/en/ • Calvert Giving Foundation (USA): https://www.calvertimpactcapital.org/about/about/history • Charities Aid Foundation (CAF) Philanthropy (UK): https://www.cafonline.org/ • Charities Aid Foundation (UK): https://www.cafonline.org/ • Citi Foundation (USA): https://www.citigroup.com/citi/foundation/ • Fondation Philanthropica (Switzerland): https://www.swissphilanthropy.ch/en/ • Goldman Sachs Philanthropy Fund (USA): https://gspf.goldman.com/gspf/GSPhilanthropy/tabid/116/Default.aspx • National Philanthropic Trust (UK): https://www.nptrust.org/ • Schwab Charitable Fund (USA): https://www.schwabcharitable.org/ • Silicon Valley Community Foundation (USA): https://www.siliconvalleycf.org/ • The Ireland Funds (Ireland): https://irelandfunds.org/ • Triodos Impact Assets (the Netherlands): https://www.triodos-im.com/ • Vanguard Charitable Endowment Fund (USA): https://www.vanguardcharitable.org/

Note: Illustrative examples only

6.8 Co-Giving & Co-Investment Cultural Heritage Platforms

Within the cultural heritage arena, a complex array of digital pathfinder portals have emerged in recent years. These include cultural heritage matching crowd funding and lottery funding ventures.

6.8.1 Cultural Heritage Crowd Funding Ventures

In the last decade, crowdfunding models across Europe have evolved from a fringe fund raising tool to a recognized financial instrument providing capital leverage for ventures, ranging from local community initiatives to large urban regeneration initiatives. With advancement in digital technology, crowd funding ventures opens up inclusive donating, investing and lending opportunities.

Based on an extensive data set[38] of crowdfunding campaigns within the cultural and creative sector in Europe, EC (2017)[39] found that running a crowdfunding campaign serves purposes beyond finance such as audience development, community engagement, skills development, promotion and marketing research. A UK study[40] made similar findings, with additional observations that most crowdfunding campaigns are driven by local interest and social media is vital for crowd funding to work (Baeck, Bone & Mitchell 2017). The study also identified the emergence of public & private partnerships, including matching funding schemes, within crowdfunding platforms. Mazur (2017) identifies three main models of crowdfunding platform:

- Donation-based where funders donate money to support a cause with no return requirement;
- Reward-based where funders donate money in exchange for rewards, such as a product or service the funded entity can provide;
- Equity-based Investment where funders provide capital in exchange for a revenue or profit-share in the project or enterprise;
- Loan-based Investment where funders provide capital in the form of a 'peer to peer' subordinated loan, requiring payment.

Matched crowdfunding entails multiple small donations, raised from online platforms, pooled with larger institutional (local & national government and cultural foundations) and corporate donations. Matching crowdfunding models include:

- 'In first'' where an institutional investor provides an upfront investment and the balance is funded from the crowd venture;
- 'Top up' where institutional investors require the crowd venture to raise a pre-defined percentage of the funding target, with the promise of 'topping-up' the campaign if the target is reached;
- 'Bridging' where a central portion of funds are provided by the institutional investor once a certain target percentage has been reached. The balance of funds are then raised via crowdfunding In the final phase.
- 'Real time' where matching funds happen in real time. For example, for every €1 donated or invested by the crowd, the institutional investor will ''top-up with an equivalent amount (Baeck, Bone & Mitchell 2017).

Equity-based and loan-based investment crowdfunding initiatives require a revenue generation activity, which either pays back the loan with interest or generates net profit for investors. Generally,

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[38] 75,000 European Creative & Cultural Organisations running crowdfunding campaigns hosted on European and global US-based platforms (2013-2016).
[39] EC (2017) is accompanied by a European Crowdfunding for Culture hub: www.crowdfunding4culture.eu
[40] Nesta, Dept. DCMS, Arts Council of England & Heritage Lottery Fund survey of Crowdfunding Platforms and 450 charities, community groups & social entrepreneurs.

loan-based investments are unsecured, although secured loans, such as real estate and development loans are technically possible. However, the high transaction fees associated with real estate investments may make the process prohibitive. Regulation for donation-based and reward-based crowdfunding does not exist at the EU level, although investment-based equity and debt models will be subject to both EU and member state regulation relating to the underlying use of equity and debt financial instruments (Mazur 2017). An interesting trend with particular relevance to cultural heritage, is the creation of 'fund-matching' partnerships within crowdfunding platforms, between public and private funders such as local governments, private investors, philanthropic foundations and financial institutions, to restore cultural heritage assets that engender public interest (EC 2017) (Baeck, Bone & Mitchell 2017) (Collins, Swart & Zhang 2013).

Although crowdfunding is resource intensive, research shows that crowdfunding has a leverage effect that can go beyond the funding of one project or organization. Despite this, little is known about the socio-cultural impact of cultural crowdfunding ventures (EC 2017) (Baeck, Bone & Mitchell 2017).

The crowd funding landscape is highly fragmented with a proliferation of small niche platforms operating in different economic sectors and geographical locations, with varying business models, payment systems and fee structures creating resultant tax disparity (particularly in cross border initiatives). At present, no code of conduct is in place to regulate the crowdfunding industry in Europe, which relies on the track record and sense of goodwill platform established by platforms.

Table 10 Digital Platforms: Crowd Funding Ventures

Digital Platforms: Crowd Funding Ventures
Independent Heritage Crowd Funds • Diazoma (Greece): https://www.diazoma.gr/en/ • European Crowdfunding Hub: https://www.crowdfundinghub.eu/ • Fondation du Patrimoine (France): https://www.fondation-patrimoine.org/ • FundIt (Ireland): https://fundit.ie/ • Global Heritage Fund (Global): https://globalheritagefund.org/ • Heritage Plus the Crowd (UK): https://www.crowdfunder.co.uk/funds/heritage

Note: Illustrative examples only

6.8.2 Cultural Heritage Lottery Funding

European Lotteries (EL) is the umbrella organization of national lotteries operation 'games of chance' across Europe[41]. The main lottery activity of EL members is comprised of draw based games with brand names including Lotto, EuroMillions, EuroJackpot and Joker.

[41] European Lotteries, incorporation European State Lotteries and Toto Association, established in 1983, under Swiss law, with circa 70 members, with 50 members based in EU member states (EL 2018) (www.european-lotteries.org).

Regulated European Lotteries can be a public or privately owned company. In all EU member states, national lotteries must comply with national statutory gaming regulations (under principles of subsidiarity), monitored by competent Gambling Authorities, to ensure consumer protection including legal and tax compliance. EL members also engage with a 'Responsible Gaming Certification' process to ensure standards of Corporate Social Responsibility (CSR) and consumer protection. EL is part of the Global Lottery Community, including World Lottery Association (WLA) and Global Lottery Monitoring System (GLMC)[42].

In 2018, €18 billion, generated by European Lottery (EL) members was returned to society in their respective countries and channeled towards national tax revenues, research, sports, culture and social projects. Cultural heritage projects and activities benefit within the culture category, although it is difficult to establish the exact contribution to heritage as this varies by country and by year. For example, in the period 1991-2017, GLUCKSSPIRALE (Germany) provided €500 million for the conservation of heritage monuments. LOTTOMATICA (Italy), Lotto Baden-Wurttemberg (Germany), the UK Heritage Lottery Fund (HLF) and the French 'Loto du Patrimoine' have developed 'heritage specific' lottery fund models (Baeck, Bone & Mitchell 2017), which could inform growing calls for the creation of a 'European Heritage Lottery Fund' to fund Pan-European cultural heritage projects.

Table 11 Digital Platforms: Heritage Lottery Funds

Digital Platforms: Heritage Lottery Funds
• Heritage Lottery Fund (UK): https://www.heritagefund.org.uk/ • Loto du Patrimoine (France): https://www.fondation-patrimoine.org/ • Lotto Baden-Wurttemberg (Germany): https://www.lotto-bw.de/ • LOTTOMATICA (Italy) Wednesday lottery dedicated to Ministry of Culture and Tourism: https://www.lottomatica.it/

Note: Illustrative examples only

[42] In 2019, Council of Europe signed into force legally binding global co-operative 'Macolin Convention' to tackle manipulation of sport competitions with support from the Global Lottery Community, including European Lotteries (EL), World Lottery Association (WLA), and the Global Lottery Monitoring System (GLMC).

6.9 Digital Pathfinding Networks

Pathways for the creation of liaisons between impact driven entrepreneurial investors and resource strapped cultural heritage projects and communities can be hindered where investors and investees simply cannot find each other. Evolving technological advancements, such as digital portals, within the cultural philanthropic investment landscape, has made this knowledge sharing and matchmaking process more transparent and achievable, although still complicated to decipher due to the myriad of emerging online digital giving and pathfinding investment platforms (Digital Pathfinders). By way of example:

- EIT Climate – KIC is a European climate initiative supported by the European Institute of Innovation and Technology. The organization acts as a lever for change, via 13 hubs across Europe and 39 countries globally, to test pathways for place-based systems and value chains in pursuit of zero carbon, climate resilient just and inclusive society (https://www.climate-kic.org/);
- The Heritage Alliance (UK) provide an International Heritage Funding Directory to enable heritage NGOs and communities to take an active role in fostering international relationships through heritage https://www.heritagefundingdirectoryuk.org/wp-content/uploads/PDF/International-Funding-Directory.pdf

Table 12 Digital Pathfinding Networks

Digital Pathfinding Networks:
• Asian Venture Philanthropy Network: https://avpn.asia/ • Cities Investment Facility (UN Habitat Platform): https://unhabitat.org/programme/cities-investment-facility-cif • Civic eState Network: pooling urban projects: https://urbact.eu/civic-estate • Ellen MacArthur Foundation CE100 Network of strategic partners, partners & members: https://www.ellenmacarthurfoundation.org/our-story/our-network/strategic-partners/intesa-san-paolo • Erasmus Skills Training: https://www.erasmusskills.eu/eskills/ • Europa Nostra: https://www.europanostra.org/ • European Cultural Foundation (ECF) – Culture of Solidarity Fund: https://culturalfoundation.eu/initiatives/culture-of-solidarity-fund • European Institute of Innovation & Technology (EIT) Climate KIC https://www.climate-kic.org/ • European Sustainable Investment Forum: https://events.climateaction.org/sustainable-investment-forum-europe/ • European Venture Philanthropy Association (EPVA): https://evpa.eu.com/ • Forum of Sustainable & Responsible Investment: https://www.ussif.org/ • Global Impact Investing Network (GIIN): https://thegiin.org/ • Global Innovation Investment Alliance: https://www.globalinnovationexchange.org/programs/skoll-usaid-innovation-investment-alliance/info • Grantmakers for Effective Organization [GEO]: https://www.geofunders.org/ • Habitat for Humanity International (USA 1976): https://www.habitat.org/ • ICOMOS: https://www.icomos.org/en • IntBau (Traditional building, architecture & Urbanism): https://www.intbau.org/ • Interreg Cultural & Creative Hubs (Greece & Italy): https://greece-italy.eu/rlb-funded-projects/creativehubs/

- Kultur & Arbeit e.V (Germany), https://kultur-und-arbeit.de/
- Monument Watch: https://www.wmf.org/watch
- NESTA Innovation Foundation: http://www.nesta.org.uk
- NESsT (social enterprise in emerging markets): https://www.nesst.org
- Revolving Instruments for Cities in Europe (RICE) within EU Multi Regional Assistance (MRA) programme: https://www.fi-compass.eu/mra/multi-region-assistance-mra
- Scaling Pathways (Innovation Investment Alliance, Skoll, UsAid, Mercy Corps): https://scalingpathways.globalinnovationexchange.org/programs/skoll-usaid-innovation-investment-alliance
- Sharing Cities Alliance: https://www.sharingcitiesalliance.com/
- The Heritage Alliance: https://www.theheritagealliance.org.uk/
- URBACT European Territories Co-operative Programme: https://urbact.eu
- World Monuments Fund: https://www.wmf.org/ COE, https://www.coe.int/en/web/portal/home

Note: Illustrative examples only

Section 7: Hybrid Financial and Non-Financial Instruments

7.0 Leverage Capacity of Financial and Non-Financial Instruments

In the past decade, a proliferation of financial instruments have emerged to leverage capital towards combined economic, cultural, social and environmental impacts. Inter-related economic demand-side and supply-side policy tools are the fundamental building blocks with which governments traditionally implement heritage policy. Keynesian economic theory promotes direct government intervention (demand side policies), via government spending such as grants and direct government loans, funded by taxation and borrowing. Classical economic theory promotes indirect government intervention (supply side policies), such as fiscal incentives to create a positive economic environment to entice private investment. Depending on investor profile, some funding tools are market oriented requiring a risk adjusted market rate of return, while others are impact oriented with below market risk adjusted return expectation. Some financial instruments have emerged in the environmental and social arena, particularly in developing economies, which are only being considered in the context of adaptation within the circular cultural heritage economy.

Salamon (2014) highlights wider acceptance by both philanthropic foundations and private investors of a role for market-based solutions in addressing social challenges such as community development, environmental stewardship and global poverty. This move to align investment decisions with global social needs, articulated by the SDGs, has been catalyzed by a growing body of skilled non-profit trusts and foundations and socially driven entrepreneurs. The leverage capacity of Financial Instruments (FIs) can take a myriad of forms:

- Using a FI, such as a grant or equity share, to piggyback additional 'blended' FIs for CapEx.
- Using FIs, such as tax instruments, to reduce ongoing operating costs (OpEx) thereby lowering expenses and increasing revenue.
- Using FIs to recycle funds to multiply financial gain and value creation:
    - Funds are recycled when loans are repaid or equity returns are achieved, for re-distribution to other cultural heritage activities.
    - Start-up finance can be used to leverage funds to initiate a revolving fund. For example, a non-profit heritage trust or foundation could source a grant or low interest loan to purchase and adapt an obsolete historic structure. Upon completion, the structure is sold (or let) and the profit (or revenue streams) are then recycled. This will only work in buoyant market conditions (See Real estate revolving funds S. 6.8.2.4).
    - A heritage trust or foundation could also increase leverage by using the assets on its balance sheet as collateral to guarantee loans rather than issuing grants.

The spread of possibilities for blending financial instruments for cultural heritage adaptive reuse provides both opportunities and challenges for both cultural curators (owner occupiers, landlords, tenants) and impact investors. Financial opportunities arise due to the broad range of financial instruments offering a diversified toolbox of choices to assist in the achievement of positive and intentional socio-cultural and environmental impacts. This is important due to the non-heterogeneous nature of tangible and intangible cultural heritage. Financial barriers surface when some evolving funding tools are new to the cultural heritage community due to their procurement requirements and complex partnership requirements, requiring new technical implementation skills that lay outside the familiar traditional territory of grants, low interest loans and tax incentives

7.1 Flexible Toolkit of Investment Leverage Instruments

Varying socio-economic and political contexts throughout Europe highlight the importance of financial instruments remaining flexible in order to engage with differing state aid traditions and governance structures. The level of investment required in cultural landscape management projects depends on numerous country specific factors such as the extent of obsolescence and degradation of existing built assets, geographic location, demographic trends, urban configurations, municipal revenue generation, the level of a country's economic development and the ability to mobilize financial resources. Emerging economies have more onerous economic, social and environmental infrastructure challenges to combat, bearing in mind the need to ensure inclusive prosperity and opportunities for all (UN Habitat 2020). This is further exacerbated by the fact that less developed countries lack basic data collection which makes it more difficult to create a benchmark to measure target impacts against.

Blended Financial Instruments (FIs) within integrated place-led or typology themed initiatives can produce considerable synergy to create 'added value' to the financial viability of vulnerable heritage resources, in addition to fostering public-private partnerships to leverage private investment to tackle economic, social and environmental aspects of urban decline. Before discussing categorization of financial instruments, it is important to clarify that the role of traditional financial and regulatory instruments, initiated by state agencies, is still necessary to ensure the protection of many non-renewable heritage resources.

To complement the categorisation of emerging impact investment leverage enablers, discussed in Section 6, this research develops a categorisation of financial and non-financial instruments for inclusion within the CLIC Toolkit. Fig. 4 provides a visualization of potential hybrid financial instruments within the CLIC financial toolkit.

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To illustrate more recent evolutionary enhancements in practice, the toolkit tables (Tables 13-21) highlight both traditional and evolving financial, and non-financial instruments within nine 'umbrella categories' as follows:

i. Grant & Endowment Instruments
ii. Tax Instruments
iii. Debt Instruments (Bonds & Loans)
iv. Equity Instruments
v. Risk Mitigation & Performance Instruments
vi. Impact Metric Instruments
vii. Heritage Regulation & Real Estate Instruments
viii. Capacity and Resilience Building Instruments
ix. Digital Pathfinding Tools

Figure 4 Potential hybrid Financial and Non-financial instruments within CLIC Toolkit

Source: Author

Given the complex nature of cultural heritage, involving diversified stakeholders (pooling) and a diverse range of financial and non-financial instruments (blending), there is inevitable overlap within the categorisation process. For example, inclusion of a category for 'Heritage Regulation & Real Estate Instruments' is imperative in the context of adaptive reuse of cultural built heritage assets. However, heritage real estate instruments typically engage a range of blended financial (grant, tax, debt, equity tools) and risk mitigation instruments, necessitating unavoidable overlap. Practical indicative 'Patterns of Use' case studies of financial and non-financial instruments are provided in Section 10 of this report and on the Horizon 2020 CLIC Knowledge and Information Hub (http://www.clicplatform.eu) incorporating search fields for Religious, Military Civil, Industrial, Residential, UNESCO, Circularity performance and public/Private funding.

7.2 Philanthropic Grant & Endowment Instruments

Table 13 Philanthropic Grant & Endowment Instruments

Traditional Grant Instruments	Grant & Endowment Instrument Enhancements
-Direct or matching philanthropic grant-aid including in-kind volunteer contributions	-Philanthropic grants and endowments combined with capacity building mentoring
-Mortgage subsidy in lieu of grant	-Grants funded by crowd funding ventures
	-Prize and competition grant awards

Note: See Section 10 Evidence Based Indicative Patterns of Use for examples.

Following on from the discussion on traditional and hybrid philanthropic foundations in Section 5.6, the publication 'Imagine Philanthropy for Europe', based on a Europe wide consultation of philanthropic organizations, highlights the need to overcome the limitations of European national foundation governance structures to stimulate untapped Pan-European cultural heritage impact opportunities. The following financial and capacity building instruments are suggested, including:

- EU Philanthropic matching fund that pools EU and Foundation resources into a joint venture European Flagship Fund (EFF)[43];
- Pan-European Digital philanthropic crowd funding platform;
- Inclusive citizen focused European Community Heritage Foundation (ECF & AKS 2020).

The traditional grant instrument of providing a cash transfer from donor to target recipient, with no expected repayment, remains unchanged although some enhancements have emerged in the marketplace such as targeting grant aid to achieve specific measured impacts and innovations in

[43] Suggested allocation of 1% of annual €60 billion European Foundation budgets would create €600 million annual injection of capital to be matched (ECK & AKS 2020).

the area of idea generation allied to funded competitions, prizes and crowdfunding that engender public participation.

Grant instruments can vary greatly in design characteristics such as the competitive application process, discretionary decision criteria for allocation of funds, administration, degree of government regulation and the level of performance monitoring and control over funded activities exerted by the grantor. Some grant instruments require matching contributions from grant recipients in the form of financial contributions or 'in kind' benefits such as voluntary services. The discretionary decision-making process associated with grant instruments is fraught with political pressure to spread grants across political jurisdictions and satisfy vocal lobby groups irrespective of the location of endangered cultural heritage resources (Pickerill & Armitage 2009).

7.2.1 Venture Philanthropy Grants & Crowd Funding Ventures

Venture philanthropy grants entail capital leverage from individual or collaborative (pooled) corporate donors for mission driven measured philanthropic impact goals. Public fundraising can be initiated by Philanthropic Foundations with a transparent socio-cultural &/or environmental mission focus, although the foundation will maintain autonomy in relation to decision making on the distribution of funds. A more recent phenomena involves equity crowd funding ventures that rally public funds for specific target projects such as saving an identified building at risk. While crowd funding structures can be informal in nature and used for any purpose (such as the global GoFundMe online fundraising Platform), a number of impact driven cultural heritage focused equity crowd funding platforms have surfaced in recent years as the concept of crowd funding matures (see Section 7 case studies). Crowdfunding structures are dealt with in more detail in section 5.8.

Amassed funds, from philanthropic foundations and structured impact crowd funding ventures, are distributed to target recipients via traditional grant instruments which are often combined with capacity building mentoring support. Typically, these grant instruments are employed in the early inception and design stage of cultural activities to encourage financial stability of the recipient, without expectation of financial return to the grant donors. Depending on the regulatory environment (legislation varies within member states), corporate grant donations, without return expectation, may be tax deductible in addition to providing the donor with potential media kudos (Pickerill and Pickard 2007) (Salamon 2014).

7.2.2 Competition & Prize Awards

A distinction can be made between competitions and prizes. Competitions, such as EU Heritage in motion competition (www.heritageinmotion.eu) and the McKinsey Global Institute (MGI) 'Opportunity for Europe' Essay Competition (www.mckinsey.com), challenge society to resolve social dilemmas (MGI 2015). While prizes, such as the European Heritage / Europa Nostra Awards the European Capital of Culture awards (www.ec.europe.eu) and the Nobel Prize for Literature (www.nobelprize.org), reward achievements made by individuals or organizations. McKinsey (MGI

2015) maintains that competitions offer an opportunity to generate media publicity about social issues in a transparent manner that attracts problem solving solutions from diverse sectors of society. High profile prizes and competitions induce the leverage potential of media attention as "prizes highlight and elevate superlative behaviors, ideas and achievements in order to motivate, guide and inspire others" to create positive change (MGI 2015). Despite the acknowledged need for community engagement in decision making, Frumkin (2014) raises concerns that the model of relying on the collective wisdom of the general public, via voting rights, can have a negative impact on the internal capacity of philanthropic foundations by removing their power to make informed social decisions. From a positive perspective they focus attention on social issues, strengthen community engagement and promote problem solving through market innovation.

7.3 Tax Instruments

Table 14 Tax Instruments

Traditional Tax Instruments	Tax Instrument Enhancements
Tax Deductions, Exemption, Freeze: -Income / Corporation tax credits including tax deductible sponsorship -Property Tax -Value Added Tax (VAT) / Sales Tax -Transfer Tax (Stamp Duty) -Capital Gains Tax & Inheritance Tax -Land Value Capture (LVC) Instruments	-Place-Led, Community-led, Housing-led, Typology-led tax credit incentives -Tax Increment Financing (TIF) bond instruments (form of Land Value Capture) -Art-Bonus, Eco-Bonus, Super Bonus & Façade Bonus Tax Credits

Note: See Section 10 Evidence Based Indicative Patterns of Use for examples.

Tax (Fiscal) incentives offer an effective mechanism to encourage private investment flows in line with government policy. Traditional tax incentives include:

- Income / corporation tax credits: Deduction of a fixed percentage of specified expenditure from income/corporation tax liability. A barrier associated with income tax incentives is the inability of low-income tax payers to claim relief;
- Sponsorship Incentives: Income / corporation tax relief for donations and legacies bequeathed to non-profit cultural trusts and foundations;
- Property tax Incentives: Deduction, exemption or temporary freeze of property tax;
- Value Added Tax (VAT): A specific VAT reduction for cultural heritage activity does not exist although member states have VAT autonomy within the boundaries of European 'weighted average' VAT requirements.

- Transfer (Stamp Duty), Inheritance and Capital Gains Tax (CGT): Full or partial exemption to prevent the dismantling of private owners' cultural heritage assets in the transfer of ownership member states need to ensure equitable and inclusive tax policy (UN Habitat 2020). Tax instruments designed to relieve the financial burden of private stakeholders in the adaptive reuse of cultural heritage, by deferring, reducing, or eliminating tax obligation, takes three forms:
- Incentives to prevent the demolition and replacement;
- Incentives to reduce the cost of repair, adaptation and maintenance;
- Incentives to encourage heritage donations, such as cash, property, easements and transfer development rights to non-profit heritage bodies.

Indirect, tax based incentives involve no direct transfer of money although foregone taxes represent a cost to the state. Following the legislative enactment of tax incentives, the state agency dealing with tax revenue must inform the public and issue regulations and explanatory notes to ensure equitable distribution of the incentive. Narrowly defined eligibility conditions attached to tax incentives are less likely to waste benefits, but more complex to administer and monitor. Monitoring the positive and/or negative impacts of indirect incentives can be problematic, as it is difficult to determine what activities would have taken place in the absence of the incentive. EFT & TGE (2017) highlight the fact that cross border grant-giving and investment initiatives by private cultural foundations across Europe, is hindered by the fiscal autonomy of member States and lack of a pan European digital taxation system.

Within autonomous member states, fiscal neutrality is a prerequisite to the introduction of tax instruments, where tax policies should not discourage improvements to cultural heritage assets. For example, in the absence of strong regulatory policy, property taxes in some countries can be counterproductive where owners are incentivized to neglect or demolish cultural heritage assets in order to avoid a higher tax liability associated with repairing and adapting their cultural heritage assets. Some jurisdictions, exempt vacant property from property tax, thereby incentivizing obsolescence and decay, rather than encouraging adaptive reuse. The process of obtaining planning and building permits can also alert revenue officials to potential increases in the tax base, which may deter owners from following correct regulatory procedures (Pickerill & Pickard 2007).

The main argument against tax relief measures is that they are inequitable as they only benefit taxpayers and high-income earners in particular. The counter argument is that tax incentives are non-coercive as their take up is at the discretion of taxpayers. Potential inequities of this nature can be resolved, for example, by allowing tax-exempt entities and low-income earners to receive a higher level of grant assistance. Although not specifically implemented for the purpose of heritage conservation, the precedent of a tax credit rebate programme in the USA highlights the possibility of providing a rebate of earned tax credits to tax-exempt and low-income earners (Pickerill & Pickard 2007).

In some countries, social enterprise entities enjoy fiscal benefits on the basis of their non-profit organizational structure or the social nature of their activity. Fiscal benefit can take the form of corporate tax exemption on gained profits, VAT exemption or reduction and/or tax deductions for private or institutional donors. Countries with specific tax benefits for social enterprise include Austria, Denmark, Estonia, France, Germany, Greece, Hungary, Ireland, Italy, Lithuania, Luxembourg, Poland, Portugal, Romania, Slovakia, Spain (EU 2020d).

Roberts and Elkington (2021) suggest the introduction of fiscal disincentives to speculative secondary investment markets would 'crowd-in' capital to the real economy by making it more profitable. For example, a variable Capital Gains Tax (CGT) could incentivize long-term patient investment shareholders (reduced tax rate) thereby encouraging a flow of funds towards social enterprise and climate change investment innovations

7.3.1 Tax Increment Financing (TIF)

Tax Increment Financing (TIFs), termed 'Tax Hypothecation' is a form of land value capture, which allows governments to finance urban/ rural regeneration and infrastructure activities by borrowing against the forecast uplift in property tax and other revenues, such as developer levies by issuing bonds based on predicted increased future revenue. TIFs are designed on the premise that urban regeneration can be funded via various financial investment incentives, backed by a government guaranteed bond issue, which is then serviced and repaid by future property tax increments resulting from development and investment activity (Brooks & Meltzer 2010) (Noring 2019).

The merits of value capture and its impact on the broader economy are the subject of ongoing political debate. The key challenge is isolating the impact of funded regeneration/development initiatives on future real estate values, and hence linked future tax revenues. Predicting future value creation, designing and timing the method of capture and engaging the community on the costs and benefits of this approach is complex (Infrastructure Australia 2016). Ingham & Hong (2012) point out that balancing the rights of the individual landowners with the rights of the local community to achieve an equitable societal outcome. In effect, equitable land value capture tools need to separate the internal value generated by private real estate development projects and the value generated by public investment such as rezoning or infrastructural improvements. The Chicago TIF reform panel (2011) found that TIFs are strong instruments for supporting job creation and neighborhood regeneration, although they are only effective with strong transparent municipal processes.

The concept of Land Value Capture (LVC) is discussed in Heritage Regulations and Real Estate Instruments (Section 7.8.3).

7.4 Debt Instruments: Loan & Bond Markets

Table 15 Debt Instruments (Bonds & Loans)

Traditional Debt Instruments	Debt Instrument Enhancements
Loans (Debt)	***Loans (Debt)***
-Commercial bank loans	-Venture capital loan
-Government loan (0% or low interest)	-Quasi-equity venture capital loan (equity share option)
	-Micro Finance investment vehicles
	-Revolving loan funds
	-Green finance loans
	-Energy efficiency mortgage label
Bonds (Debt)	***Bonds (Debt)***
-Government bond issue (tax exempt)	-Social Impact government bonds
-Private placement bonds	-Social impact corporate bond Issue (Long term Bond / -Tax Exempt' Short term Note)
	-Tax Increment Finance (TIF) Bond Instruments (form of Land Value Capture)
	-Human Capital Performance Bonds (Risk Performance Instrument)

Note: See Section 10 Evidence Based Indicative Patterns of Use for examples.

Note: Secured Loan (Estate Asset as collateral) / Unsecured Loan (Social Venture).

From a financial perspective, debt is a means of achieving leverage when the debt allows borrowers to increase their assets which in turn generates more net revenue (McVeigh & Sass Rubin 2014). Debt instruments include:

- Loans:
  - Real estate mortgages and pre-development financing loans;
  - Loans (1st preference senior or subordinated/mezzanine loans) for long term CapEx finance including restoration/renovation, adaptation, &/or retrofit;
  - Bridging Loans for short term cashflow issues (such as delay in funding payments);
  - Microfinance startup and SME enterprise loans;
- Bond Issues (Fixed securities).

7.4.1 Loans and Smart Finance (FinTech)

All loans carry financial and reputational risk to both the lender and borrower. In traditional markets, lenders demand higher interest rates from perceived high-risk borrowers with low credit rating or limited market track record. However, many non-profit and local community cultural heritage initiatives find it challenging to access traditional bank lending because they do not comply with market lending criteria. Prior to the credit crisis, cultural heritage activities in some jurisdictions, were funded by state (financed by bond issues) or philanthropic foundation (financed by donations) backed low interest loans. The advantage of low or zero interest loans being that the interest rate is transferred back to the borrower. Cultural activities left to the mercy of the commercial banking sector do not fare so well, as lending criteria requires a track record of positive revenue streams, collateral assets, experienced management and developed reporting systems.

Post credit crisis, non-traditional equity backed microfinance lenders have emerged in the capital markets to fill the banking lending void by offering online micro-lending services via private Fintech platforms, capitalized on public or private exchanges. For example, the privately owned Silicon Valley based 'Stripe' global payment infrastructure platform (www.stripe.com)[44] launched 'Stripe Capital' (USA) in 2019 providing online loans to small and emerging enterprises registered on their platform. Since 2019, Stripe Capital allows borrowers to 'repay as they earn', meaning that repayments can come from the future customer sales on the Stripe platform, where the loan amount and flexible repayment structure is predicated on analysis of the borrower's platform transaction activity (Short 2019). In 2020, the Stripe fintech platform extended the loan service to other online platforms enabling them to offer finance to their business customers through Stripe Capital via an end to end lending computer interface (Taylor 2021).

Senior debt interest rates for commercial bank loans and mortgages are calculated as a percentage of the principle and represents the risk adjusted cost of capital in the marketplace that can be used as a benchmark when assessing the investor's Opportunity Cost of Capital (OCC) to assess different capital market investment alternatives. Credit worthy borrowers can top up a commercial bank loan with an equity venture mezzanine (subordinate) loan, which typically carries a higher risk of default and thus interest rate above commercial senior debt rate (McVeigh, Sass & Rubin 2014).

Both senior debt (commercial bank loans) and mezzanine equity (venture risk capital loans) interest rates may be significantly increased to reflect real, or perceived, additional investment risk associated with adaptive reuse of built heritage or landscapes enhancement initiatives in non-prime locations or disadvantaged communities. The same rhetoric applies to underutilized or abandoned built heritage in advanced states of disrepair or dereliction, particularly protected structures and conservation areas, due to the perceived cost of additional regulatory burdens.

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[44] Founded by Patrick & John Collison in 2010, Stripe is a privately owned company (not floated on the public stock exchange). The company is valued at $95 billion with recent investors including Ireland's State Sovereign Wealth Fund (National Treasury Management Agency), Allianz, Fidelity, Baillie Gifford, AXA, Sequoia Capital. Market rivals include PayPal, Square Adyen (Kruppa & Bradshaw 2021) (Taylor 2021).

A combination of bank lending constrictions, allied with prohibitively high interest rates for cultural heritage activities, has triggered a rise in social purpose venture risk capital loans (seed and gap funding) for cultural heritage activities at subsidised (below market) interest rates. Social purpose venture capital loans are typically enabled by a financial intermediary, accumulating borrowed capital from impact driven philanthropic financial (and sometimes non-financial) entities, via credit inducement. In addition to providing debt finance, these financial intermediaries build capacity in social purpose finance markets by improving the credit rating of cultural heritage institutions. In time, cultural heritage institutions will be in a position to leverage more conventional funding, making these capacity building ventures a sustainable action. Micro finance investment vehicles work on a similar basis to social purpose venture capital where an investment fund or financial intermediary, serves as a conduit for capital flowing into microfinance investment institutions for distribution to micro enterprise entrepreneurs (Salamon 2014).

7.4.2 Bond Issues

Bond issues, also termed fixed term securities, are a common traditional debt instrument used by governments, for profit and non-profit entities to raise funds to finance long term capital investment (CapEx) projects or shorter term ongoing operating expenditures (OpEx). Bond securities with shorter maturities are termed 'Notes'. The rate of return of a Bond (or Note) is dependent on the issuers market credit rating, prevailing interest rates and the borrowing term. Issuing a bond involves significant management expertise. Bonds can be purchased directly from the bond issuer or traded on the secondary markets.

Within the cultural heritage arena, social bonds can be issued for socio-cultural activities including, inter alia, heritage led urban renewal projects, affordable housing and community development initiatives. Once funds have been secured (borrowed) via an area or typology based bond issue, they can be redistributed to target recipients using an array of blended financial instruments including, inter alia, grants, debt, equity and risk mitigation guarantee instruments. While private non-profit social purpose entities can initiate a bond issue on a taxable basis, most bonds are issued by government agencies, either solo or within a public private partnership, to ensure tax-exempt investment status for bond purchasers (Balboni & Berenbach 2014).

From a leverage perspective (bond issuer), 'tax exempt' bond repayment rates are lower than commercial loan interest rates which are taxable. In addition, the investors annual return or 'Gross Redemption Yield' (GRY) for social bond issues is closely linked to the credit rating of the issuing entity, with a high credit rating indicating a low risk and thus lower cost of leveraged funds. Credit ratings from triple A to triple B are considered investment grade (Balboni & Berenbach 2014). Low interest social bond issues rely on social impact investors willing to purchase their bonds and provide below market rate capital. From the investor perspective (bond purchaser), social bond instruments provide socially responsible and impact investors with a relatively risk averse asset to incorporate within a diversified investment portfolio, in addition to providing a liquid investment that can be traded on the secondary markets.

7.5 Equity Instruments

Table 16 Equity Instruments

Traditional Equity Instruments	Equity Risk Capital Instrument Enhancements
Self-Finance (1-100%)	-Equity Share Instruments -Quasi Equity Share Instruments -ESG & social / environmental impact stock exchange

Note: See Section 10 Evidence Based Indicative Patterns of Use for examples

An equity instrument is an investment tool which enables the investor to purchase an ownership share in a socio-cultural venture with a claim on future returns in the form of value creation (capital gains) and/or profitable revenue streams (dividends). Traditional equity investors forsake the less risky collateral backed returns of debt instruments by speculating for risk adjusted higher returns. Critically, if the investment venture fails, equity holders are at risk of losing their initial capital investment as their share of any liquidated assets is subordinate to debt instruments. Brand & Kohler (2014) divide equity instruments into two categories:

- Standard equity instruments which involve the purchase of ownership shares in an enterprise with a right to a share in profits;
- Quasi equity instruments which involve a hybrid debt & equity structure which is used to finance early-stage social enterprises with no track record and non-profit entities, as follows:
    - Convertible notes can be created for promising early-stage social enterprise by providing a bridging finance debt instrument (fixed term and interest rate) which can be converted to equity in the future when the enterprise matures
    - Revenue share payments can be created for non-profit entities that are prohibited from issuing ownership shares or distributing profits. The instrument is structured like a loan (fixed term and interest rate) where the investor may get an additional percentage of revenue over a pre-determined threshold thereby ensuring sufficient cash flow for the non-profit entity.

Private equity investors (investing directly in enterprises not floated on a formal stock exchange) face additional liquidity and return risk in relation to early-stage adaptive reuse projects and socio-cultural enterprises with limited cash flow expectations (Brand & Kohler 2014). This has compelled the emergence of social impact equity investors in the cultural heritage arena, blending different financial instruments to fit the risk profile of cultural activities, to potentially fill this funding gap.

Equity investors can invest in various stages of a project or enterprise (phased finance), although it is most often used at an early development stage, at a point where activities are unable to secure debt financing. Equity instruments play a vital role in absorbing early-stage losses until a cultural venture begins to generate enough revenue and create enough value to access traditional equity tools. For example, Grassroots Business Fund and Calvert Impact Capital (USA) both provide starter capital in the form of a convertible note equity instrument that combines elements of debt and equity. Calvert Impact Capital is profiled in Section 10.5.1.

7.6 Risk Mitigation & Performance Instruments

Table 17 Risk Mitigations & Risk Performance Instruments

Risk Mitigation Instruments	Risk Mitigation & Performance Instrument Enhancements
-Government loan guarantee	-Corporate or philanthropic loan guarantee -Risk Performance Instruments (Human capital performance bonds) -Micro Insurance

Note 1: See Section 10 Evidence Based Indicative Patterns of Use for examples

Note 2: Secured Loan (Real estate asset as collateral) / Unsecured Loan (Social venture)

7.6.1 Risk Mitigation Instruments

As in all capital markets, debt default carries the risk of bankruptcy, damaged reputation and poor credit rating negating future borrowing ability. Lenders may be induced to issue loans, reduce interest rates, or extend the loan term for cultural heritage projects upon receipt of a loan guarantee, or reserve cash deposit, from credit worthy public or private third-party partners to the borrower. This shifts the risk from the lender to the credit enhancer in order to induce the lender to make a loan.

Philanthropic foundations have traditionally used a variety of funding initiatives to support the development of tangible real estate projects, such as affordable housing, with an economic development focus. Cultural heritage project finance initiatives are able to mitigate risk for commercial bank lenders by providing collateral assets, such as real estate or business assets, to mitigate the risk of loan default. For example, the Kresge Foundation in Michigan (USA) provides loan guarantees by committing a portion of its grant budget to provide for possible calls on the guarantee. This enables borrowers to source and leverage capital from other financial sources and preserve the foundation assets (www.kresge.org). Providers of a guarantee may, or may not, charge the borrower a fee for the guarantee. Governments and private foundations may also provide guarantees for mission focused bond issues to enhance their credit rating. For example, Bill and Melinda Gates Foundation provided a bond guarantee to create leverage in the form of a $10,000,000 guarantee for $67,000,000 bond issue for a charter school bond. By offering a guarantee of a bond issue, the Gates Foundation was able to stimulate the flow of millions of private investment capital into a social purpose activity, at below market rates, without expending any of its own resources (Balboni & Berenbach 2014).

7.6.2 Performance Risk Financing (PRF)

A complexity arises in the case of service-based cultural initiatives which lack tangible assets as collateral to mitigate risk. Performance Risk Financing (PRF) seeks to mitigate risk with measurable outcomes as opposed to tangible physical assets. Measurable outcomes can relate to human wellbeing and performance financing could be structured to address additional societal concerns such as environmental and circular sustainable practices. The more uncertain the outcome, the higher the performance risk of the project and the greater risk premium investors will be likely to demand.

The mechanism has been termed ‘Pay for Success’ finance (Von Glahn & Whistler 2014). Variations of performance financing are being developed in the United States, Canada, Australia and the UK in pilot form indicating its entry to the market as a relatively new innovation (www.americanprogress.org). When a service provider achieves the agreed upon social outcomes or impacts, the state pays the project, and by extension re-pays the investors, the principle plus a risk premium. In effect, private investors take on risk of the service provider achieving their goals.

Performance Risk Financing is a Public Private Partnership (PPP) tool that combines public-led performance-based procurement (service contracting) with private investors and non-profit or for-profit service providers to achieve targeted financial return with measured social impact. Von Glahn & Whistler (2014) identify common characteristics of the financial instrument, including:

- Public contracting for measurable social ‘impact’ outcomes;
- Transparent performance-based feedback loop allowing for preventative interventions and improved fiscal performance;
- Transfer of performance risk to private investors;
- Alignment of risk-based capital efficiency.

A distinction has to be made between for-profit and non-profit service providers. Failure of for-profit bodies to achieve their goals, culminating in financial loss, can result in tax write offs. Non-profit bodies are limited in their risk-taking capacity as they lack this revenue cushion. Performance finance attempts to overcome the limited capacity of government and non-profit service providers to absorb risk, by sharing it with private investors. Von Glahn & Whistler (2014) provide an example of a New York City (USA) initiative funding an intervention to reduce reconviction of former inmates of Rikers Island correction facility, supported by a Community Reinvestment Act loan of US$9.6 million. The performance risk is 75% covered by a US$7.2 Million credit enhancement in the form of a loan guarantee from the Bloomberg Foundation, while the remaining 25% of the performance risk is borne by investors. This innovative financial instrument attempts to contribute towards more efficient and sustainable use of public investment by rebalancing public expenditure towards preventive interventions. In Australia the government of New South Wales initiated proposals for performance risk initiatives to reduce the demand for foster care. In 2011, the US Minnesota Legislature attempted to set up a Human Capital Performance Bond via a government issued bond that proposed to use bond revenue to pay service providers based on outcomes. The Massachusetts legislator set aside $50,000,000 for performance contract payments. While the Minnesota Bond never came to fruition, a study on lessons learned from Minnesota (NAF 2015) provides useful insights into the reasons for this failure, including:

- Social impact financing initiatives require a strong public sector champion;
- The complexity of funding streams from multiple levels of government limits the ability to capture savings;
- Administrative costs associated with social impact financing are prohibitively high
- Assumptions of risk and risk aversion are limiting factors to progress in contract provision (NAF 2015).

Based on the NAF (2015) findings, this mechanism could potentially be restructured to allow broad replication to attract a broader pool of funders and investors to social, cultural and environmental ventures. As performance finance evolves, beyond pilot schemes, it is likely that different financial instruments can come into play by blending debt and equity instruments. Government agencies will require cost benefit analysis of pilot projects to confirm if government cost savings are in fact taking place.

7.7 Impact Metric Instruments

Cultural heritage adaptive reuse activities, within this overview of financial and non-financial instruments, include the adaptation and energy retrofit of tangible built heritage assets. For this reason, real estate and construction metrics are also included within this tool. A range of real asset instruments are discussed in the following section on ‘Heritage Regulation and Real Estate Instruments’ (S. 7.8).

Table 18 Impact Metric Instruments

Traditional Impact Metric Instruments	Impact Metric Instrument Enhancement
Financial Metrics -Internal Rate of Return (IRR) -Net Present Value (NPV) -Investor Target Rate of Return (Discount Rate) -Capital Asset Pricing Model (CAPM) ***Real Estate & Construction Market Metrics*** -GRESB: Global Real Estate Sustainability Benchmark (ESG Integration) -Wired Score Certification -LEED Certification -BREEAM Certification -WELL Certification -RESET Air Certification-nZeb Certification (EPBD) -Net Zero Carbon Standard (World Green Building Council) -National Green Building Council Standards	***Governance Metrics*** -Global Reporting Initiative (GRI) -Environmental, Social and Governance (ESG) compliance incorporating SDGs mapping and UN -Principles of Responsible Investment (PRI) -EU Taxonomy Compliance -B Corporation Certification ***Intentional Impact Metrics*** *(Community, Portfolio, Investor, Tenants)* -IRIS Catalogue of Metrics (GIIN) -IRIS+ Core Metric Sets (GIIN) -Impact Management Projects (IMP) Financial Markets (GIIN) -Compass Benchmarking (GIIN) -Task Force on Climate-related Financial Disclosures (TCFD) ***Informal Real Estate Benchmarking*** -CE Transitioning -Public Realm & Community Project Provision -Tenant wellbeing -Green Tariff energy price structures for using renewable resources -Reducing portfolio greenhouse gas emissions -InTime live monitoring of energy consumption

Note: See Section 10 Evidence Based Indicative Patterns of Use for examples

7.7.1 Impact Market Metrics and Benchmarking

Individual and institutional investors are increasing demanding rigorous IMM practices to align with global sustainable development agendas. A cornerstone of impact investing is the ability to translate impact intention into verifiable impact results. GIINs (2020b) analysis on 'The State of Impact Measurement and Management Practice' highlights interpretation, comparison and validation of impact results, to negate 'impact washing', as the most significant challenge facing impact investors. CHiFA (2021) reasons that heritage-led regeneration projects have achieved limited access to capital markets in the past due to a lack of impact measurement tools specifically relating to cultural heritage.

Global Impact Investing Network (GIIN) acknowledge that although IMM practices have matured in the last decade (IRIS+ Core Metric sets and Impact Management Projects for Financial Markets) opportunities for further refinement remain (GIIN 2002a). GIIN (2021b) identifies the need for a broad suite of analytical tools such as impact benchmarks, ratings and indices. GIIN has developed COMPASS as an open access step-by-step methodology to assess investments within a portfolio or to benchmark investments relative to industry impact performance across asset classes. These insights can be considered by investors alongside financial performance, risk, liquidity and resource issues (GIIN 2021b).

The European Venture Philanthropy Association (EPVA) provide step-by-step toolkit of strategies and best practice to assist investors for impact (Gianoncelli, Picon & Martinez 2020). A number of other initiatives are investigating new ways of creating and sharing value in the context of societal benefit, including:

- 'Tomorrow's Capital' inquiry by Volans is redefining the principles of triple bottom line approaches to corporate governance to enable capital transformation (Roberts & Elkington 2021);
- 'Civic Capital Project' by Darkmatter Labs and McConnell Foundation is developing innovative financial instruments and models for value creation (Roberts & Elkington 2021);
- Harvard Business School's impact weighted accounts initiative builds impact into financial statements to reflect a company's positive and negative impact on its stakeholders (GIIN 2021b);
- MSCI carbon footprint index assesses the carbon footprint of equity investments seeking to mitigate climate change (GIIN 2021b).

Section 5.3 looks at Impact in the context of the Asset Risk.

7.7.2 Real Estate & Construction Market Metrics for Energy Efficiency

Adaptive reuse of cultural built heritage precludes the embodied carbon of new build thereby directly contributing to net zero targets. As part of the Green Deal, the Energy Performance Buildings Directive (EPBD) supports measures to assist member states to create the conditions to scale up renovation activity, boost energy performance of existing building stock and improve the smart readiness of buildings (EU 2018). Renovation strategies to achieve National Energy and Climate Plans (NECPs) are outlined by the Commission as part of a new Renovation Wave (EC2020). EU member State must initiate national financial measures to improve the energy efficiency of buildings, including:

- Establishing long term renovation strategies to decarbonize national building stock in line with NECP targets;
- Set energy performance requirements to ensure new buildings are nearly zero energy rated (nZeb);
- Require energy performance certification on sale or rental buildings;
- Consider rating smart technologies 'Smart Readiness' of buildings such as automated control systems for air quality and ventilation (EC 2020).

Within the real estate and construction industry, a number of independent global sustainability certification bodies provide sustainable benchmarks to inform the investment marketplace. Investors and developers engage with the benchmarking process voluntarily, establish sustainability and circularity performance and gain market share from investors seeking responsible investment opportunities. Global real asset benchmarks include, inter alia:

- **GRESB Score**: 'Global ESG Benchmark for Real Assets' is an independent non-profit foundation providing investor-driven global ESG performance benchmark and reporting framework of real assets for for listed property companies, private property funds, developers and investors that invest directly in real estate (https://gresb.com/gresb-real-estate-assessment/). The Real Estate Assessment generates two benchmarks: The GRESB Real Estate Benchmark and the GRESB Development Benchmark. Foundation based in the Netherlands;

- **LEED Certification**: 'Leadership in Energy and Environmental Design' provides a voluntary independent global sustainability benchmark and certification process to certify sustainable buildings and neighbourhoods. Launched by the US Green Building Council (https://www.usgbc.org/about/brand);
- **BREEAM Certification**: 'Building Research Establishment Environmental Assessment Method' provides a voluntary independent global sustainability benchmark and certification process for environmental performance of buildings. Launched by the UK Building Research Establishment (https://www.breeam.com/);
- **WELL Certification**: provides a global benchmark for healthy buildings (https://www.wellcertified.com/);
- **WiredScore Certification**: provides a voluntary global benchmark for digital infrastructure in commercial buildings (https://wiredscore.com/);
- **RESET Air Certification**: provides a voluntary global structured benchmark for sensor-based continuous monitoring and certification programme for the built environment (https://www.reset.build/);

- **nZEB Certification:** 'nearly Zero Energy Buildings' rating under the European Energy Performance of Buildings Directive (EPBD) (EU 2010) requires all new buildings to be (nZEB) by 31st December 2020 and all buildings acquired by public bodies by 31st December 2018. Each member state has discretion on how this directive is applied nationally;
- **Net Zero Carbon Standard:** World Green Building Council (WGBC) (https://www.worldgbc.org/advancing-net-zero).

GIIN (2021) make an observation that SDG alignment & mapping and Environmental, Social and Governance (ESG) Integration strategies do not fulfil the criteria for intentional measured impact. However, real estate and construction sustainability metrics are constantly evolving and improving to include tenant and community engagement initiatives in line with clear sustainability and human centric policy direction from the UN and the EC. Together, these benchmarks providing a positive step towards intentional impact metrics relating specifically to the built environment. Knowledge sharing and data collection platforms for Listed and Un-listed real estate vehicles, also inform the evolving real estate and construction impact agenda, such as:

- INREV: Non-profit European Association knowledge sharing platform for Investors in Non-Listed (unlisted) Real Estate Vehicles. Based in the Netherlands[45].
- EPRA sBPR: European Public Real Estate Association - Best Practice Sustainability Recommendations[46].

7.8 Heritage Regulation and Real Estate Instruments

Tangible built heritage assets (bricks & mortar) provide a distinctive cultural context for urban (streets, neighborhoods, cities), peri urban (villages, towns) and rural landscapes. The fact these built heritage resources also form a cohesive layer within the real estate investment and development marketplace, creates an opportunity for developing circular adaptive reuse and placemaking investment strategies that contribute to cultural valorization and energy efficiency, whilst also saving these finite resources for current and future generations. In reality, purely profit motivated private real estate investors and developers prioritize investment opportunities in less regulated environments, leading them to avoid projects involving protected structures and contaminated landscapes (CHiFA 2021).

The inclusion of 'Heritage Regulation and Real Estate' instruments within the CLIC toolkit is based on the contribution that real estate assets and related enterprise activities make to the European economy in terms of human wellbeing, economic competitiveness and achieving Europe's climate neutral goals. Heritage conservation has a central role to play in resource efficiency and

[45] InRev: https://www.inrev.org/welcome-inrev
[46] EPRA sBPR: https://www.epra.com/about-us

carbon reduction requiring the convergence of diverse fields of knowledge including land use planning, heritage conservation, climate resilience and property development (CHiFA 2021).

The combined research of the European Associations of Investors in Non-listed Real Estate Vehicles (InRev) and the European Public Real Estate Association (EPRA) provide key statistics in relation to real estate markets generally, including the adaptive reuse cultural heritage sector:

- Commercial property contributed €452 billion to the EU economy in 2019;
- The commercial property sector invests €291 billion per annum in building refurbishment and development. With infrastructure and housing, this represents 63% of all capital investment in the EU;
- Residential and commercial property are critical to achieving EU environmental targets as they offer energy saving potential and economic activity via investment of circa €60 Billion per annum;
- Circa 40% of office space is leased rather than owned, which frees up capital and enables tenants to lease new space as requirements change;
- The real estate sector directly employs 4.2 million people in Europe (InRev & EPRA 2020).

Driven by the common goals of cultural heritage conservation, climate resilience and human prosperity, a variety of real estate instruments, encouraging mutually beneficial initiatives, are emerging in the market-place stemming from open collaboration between local community groups (formal and informal), local authorities, financial institutions, investment and development companies.

Table 19 Heritage Regulation & Real Estate Instruments

Heritage Regulation & Real Estate Instruments	Heritage Regulation & Real Estate Instrument Enhancement
Investment Structures -Public Private Partnership (PPP) -Quasi Development Agencies -Master Planning -Strategic Development Zones	***Direct Investment Structures*** -Public Private Partnership (PPP) -Public Private People (or community) Partnerships -Joint Ventures Schemes (limited time horizon) -Public Asset Corporations (PAC) - publicly owned & privately managed RE assets ***Indirect Investment Structures*** -Revolving Funds -B Corporation-Real Estate Investment Trusts (REITs) (listed or unlisted)

	-Real Estate Investment Funds (REIFs) and companies (listed or unlisted) -Partnerships
Real Estate Regulatory Instruments: -Transfer Development Rights (TDR) -Planning Bonus -Easement Donations	***Real Estate Regulatory Instruments:*** -Land Value Capture (LVC) -Betterment Levies and Taxes -Developer Contributions -Leveraging public land assets -Renovation lease -Social value lease -Energy efficiency mortgage label (EEML)

Note: See Section 10 Evidence Based Indicative Patterns of Use for examples

7.8.1 Direct Real Estate Investment Structures

Place-led investment leverage initiatives typically identify a geographically defined area, characterised by an accumulation of physical, economic and social problems, as a platform for the collaborative public, private and community engagement. As the cases studies in Section 10 demonstrate, substantial benefits can be gained via collaborative funding initiatives incorporating a socio-cultural and environmental impact agenda. Local communities, in collaboration with non-profit philanthropic and heritage focused foundations have a significant role to play in promoting, lobbying and providing capacity and resilience building and financial support for area-based cultural heritage activities. The more recent escalation and integration of hybrid for-profit social enterprise entities and B Corporations, with a social and environmental agenda, has opened up the market for further intentional impact opportunities. Direct and indirect real estate investment structures take a myriad of legal forms.

Direct real estate investment structures include:

- Public ownership (state owned & managed);
- Private ownership
  - Private owner / investor
  - Corporate entity (for-proft / non-profit);
- Public Private Partnership (PPP) & Public Private People Partnership (PPPP)
  - Joint Venture Scheme (JVS) with short-term time horizon
  - Public Asset Corporation (PAC) publicly owned and privately managed.

7.8.1.1 Public Private Partnerships

Unlike private ownership, state agencies focus on accountability over market innovation, in their land ownership and management strategies. Noring (2019) highlights the extent to which public authorities are less efficient, less dynamic and less accountable than private forms of ownership and management. Public Private Partnerships (PPP), more recently termed Public Private People Partnership (PPPP) structures, involving cross-sector collaboration, plays an increasingly significant role in a variety of cultural heritage adaptive reuse and urban / rural regeneration schemes to allow both financial and impact risk-adjusted returns to be shared. Diversification offered by combinations of partnership structure also permits a wide range of resources and capacity building skills to be combined to solve parallel socio-cultural and environmental issues.

Cross-sector partnerships combining various levels of government (state, regional and local level) with other stakeholders, such as non-governmental organizations (NGOs), quasi-autonomous non-governmental organizations (QUANGOs), non-profit organizations, corporate entities, local communities and private individuals allows the risks and returns of cultural heritage strategies to be shared. The diversification offered by combinations of partnership structure, ranging from high-budget to a simple exchange of information and expertise, permits a wide range of resources and skills to be brought together. Partnerships involving community collaboration, termed public private people (or community) partnerships (PPPP), play an increasingly significant role in a variety of area-based cultural heritage initiatives. Within partnership structures, financial instruments involving investment from state funds, typically maintain an important role in stimulating and incentivizing private investment flows to realize mutually beneficial cultural heritage goals

Within place-led initiatives, collaboration efforts involve wide ranging, often disparate, interests relating to the historical, cultural, social, economic, and physical character of the defined area. Partnership formation in the cultural heritage arena is also complex in that the balance of power within the partnership structure is often difficult to achieve. To ensure that compromises made to satisfy divergent stakeholders goals are negotiated with transparency between concerned parties, integrated pro-active approaches, such as Historic Urban Landscape (HUL) studies and Local Area Plans (LAPs), increasingly form a critical part of place-led funding investment strategies. It was often deemed beneficial to define heritage district boundaries through special legislation and to establish a local development authority under the umbrella of the local or national government. Within defined district boundaries, such authorities are in a position to pursue socio-cultural and environmental planning goals, in tandem with regeneration strategies, giving a high priority to the adaptive reuse of urban and rural vernacular historic fabric (Pickerill 2015). A detailed PPP case-study on GrangeGorman urban community regeneration [Ireland] is provided in Section 10.5.6.

7.8.2 Indirect Real Estate Investment Structures

Investment platforms and Special Purpose Vehicles (SPVs), within Alternative Investment Funds (AIFs), provide investors with the opportunity to make indirect investment in real estate assets by pooling funds to purchase properties, as an alternative to direct investment assets. Indirect real estate investment vehicles include:

- Real Estate Investment Funds (REIFs) (Listed or Unlisted on the stock exchange);
- Real Estate Investment Trusts (REITs) (Listed on the stock exchange);
- Real Estate Revolving Funds;
- Syndicates involving a one-off real estate investment purchase;
- Co-Giving and Co-Investment Platforms relating to tangible real assets: Stock Exchange, Lottery Funds & Crowd Funding Ventures (see Section 6.8).

For profit company structure relates to whether company shares are publicly traded on the stock exchange requiring a 'Public Limited Company' (PLC) or a private ownership share structure (not publicly quoted on the stock exchange) requiring a 'Limited Liability Company' (LLC) or 'Limited Liability Partnership' (LLP). Non-profit entities, such as charitable trusts and foundations are structured as 'Company Limited by Guarantee' (CLG) in the absence of ownership shares.

7.8.2.1 Alternative Investment Fund (AIF) Structures

The European regulatory environment, relating to cross border investment schemes, via the European Passport is complex and can be broadly categorized as either UCITS[47] or non-UCITS structures, termed Alternative Investment Funds (AIFs). An Alternative Investment Fund (AIF) is a type of collaborative investment structure where funds are raised from a number of investors with a view to investing them in accordance with the defined investment policy.

Under the EU AIFMD[48] regulatory regime, AIFs must appoint an Alternative Investment Fund manager (AIFM) and may be structured as:

- Qualifying Investor AIFs (QIAIF): aimed at professional investors, subject to investment restrictions, such as a minimum initial investment of €100,000 with no limit on investments thereafter. QIAIFs can be marketed freely to professional investors across the EU and the EEA buy an authorized AIFM using the AIFMD EU marketing passport.
- Retail Investor AIFs (RIAIF): are aimed at individual investors and more restrictive than QIAIFs, lacking the automatic right to market across the EU under the AIFMD passport. Access to EU & EEA markets can only be granted on a case by case basis.
- Fund Vehicles listed on the stock exchange (AIFMD Directive 2011/61/EU).

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[47] Undertakings for Collective Investment in Transferable Securities (UCITS).
[48] EU AIFMD Compliance Directive 2011/61/EU. AIFMD EU Passport applies to European Economic Area (EEA), in addition to EU member states.

QIAIFs can accommodate a number of investment possibilities including, inter alia, Real estate funds, Fund of Funds, Loan funds, Private equity funds, Venture capital funds, Infrastructure funds, Hedge funds, Sovereign wealth funds, Emerging market funds. The choice of fund structure is informed by investment strategy such as type of assets, single or diversified asset portfolio, tax efficiency, risk management and EU or international distribution requirements (Fox & Rooney 2015). Member states can implementation national corporate and fiscal legislative regulation regarding the structure of fund types within the EU AIFMD regulatory regime. Funds can be unlisted or listed on the stock exchange. Real Estate Investment Companies, Investment Funds (REIFs) and Investment Trusts (REITs) and Syndicated Limited Partnerships are equity instruments that own and operate income producing real estate.

7.8.2.2 Real Estate Investment Fund (REIFs) Companies

Within the Alternative Investment Fund (AIF) regulatory regime, real estate investment companies and funds can invest in underlying real estate assets via whooly owned Special Purpose Vehicles (SPVs) in order to ringfence the liability relating to each real asset. The SPV can also facilitate tax efficiency by avoiding or reducing withholding tax on dividend and interest payments to the QIAIF (MHC 2010). Tax law can vary greatly between member states. To give an indicative example, the SPV is a taxable entity in Ireland, so can avail of Ireland's double tax treaties to avoid or reduce withholding tax. At the same time, transactions within the SPV can be structured so rental income is matched by tax deductible expenditure, thereby reducing taxable profit. As a tax exempt vehicle, a QIAIF will not be laible for any tax on interest income and dividend received from the SPV (MHC 2010). See case study on IPUT plc. REIF [Ireland] in Section 10.5.3.

7.8.2.3 Real Estate Investment Trusts (REITS)

Real estate fund managers also have the option to set up a Real Estate Investment Trust (REIT) within the remit of AIF, requiring the appointment of an AIF manager, and listing the REIT structure on a recognized Stock Exchange (Fox & Rooney 2015), necessitating a Public Limited Company structure (PLC). REITs are designed to deliver tax efficient and reliable dividends payments to investors with modest long-term share price appreciation. In order to maintain a tax efficient structure, where investors are not open to double taxation, REITs must satisfy operating restrictions, which varies between member states. European member states with REIT enabling legislation in place include Belgium, Finland, France, Germany, Greece, Hungry, Ireland, Italy, Luxembourg, Spain, The Netherlands (PCW 2019)[49]. The main operating restrictions are that the REIT company must primarily be in the business of owning and operating real estate and must payout a pre-

[49] International REIT enabling legislation is in place in Australia, Brazil, Bulgaria, Canada, Hong Kong, India, Japan, Malaysia, Mexico, New Zealand, Singapore, South Africa, South Korea, Taiwan, Thailand, Turkey, United Kingdom & USA (PCW 2019).

determined percentage of taxable income (varies by country) on dividends to shareholders, some of which may be paid in stock. Shareholders are then taxed, if they are taxable entities, on their dividend income. The regulations relating to the administration and taxation of REIT restructures varies from country to country[50]. REITS can also trade at significant discount to the value of underlying real estate assets as they are subject to the whims of stock market sentiment (Linneman & Kirsch 2020). PCW (2019) analysis of worldwide REIT structures finds that REITs have demonstrated a strong comeback from the financial crisis, responded well to the ever-changing market environment and produced attractive returns for their investors in the low interest rate environment in recent years. See case study on Hibernia REIT [Ireland] in Section 10.5.4. Also Nico Echo Park Community REIT and B Corporation [USA] in Section 10.5.5.

7.8.2.4 Real Estate Revolving Funds

A revolving fund structure provides a pro-active tool to purchase and adapt endangered heritage structures and onward sell (or let) them to sympathetic new owners (or tenants) with protective covenants. The most common sources of start-up funds for revolving funds are grants from government agencies, cultural foundations or corporations. Lending institutions can provide funding in the form of debt finance secured by the fund's assets or personal guarantees. As funds gradually become depleted, fund-raising is an ongoing activity of most revolving funds.

Revolving funds are most effective when they target heritage structures and disadvantaged area that have been neglected by the private sector. A variety of public or private entities can operate a revolving fund, but the majority of funds that buy and sell properties are managed by private, non-profit entities in order to attract capital from donors. Publicly owned heritage structures may also be sold or let on a long-term lease to a non-profit revolving funds for a nominal payment, in exchange for repair and adaptation of the structure. When a heritage structure requires emergency stabilisation or when the magnitude of the conservation task is a deterrent to buyers, funds may carry out necessary works prior to resale or relet, acting as a developer of last resort. Some funds are proactive instigating place-led heritage initiatives, while some are reactive dealing with identified buildings at risk. For example, Dublin Civic Trust (Ireland)[51] purchases and undertakes adaptive reuse works to heritage buildings at risk of demolition, using a non-profit revolving fund structure. The Irish Landmark Trust[52], a non-profit organization, leases abandoned heritage assets (such as lighthouses, castles and gate lodges) and carries out adaptive reuse works, for letting as self-catering holiday accommodation. The negotiated lease term is usually circa 50 years and once a lease expires, the heritage asset reverts to the owner. Non-profit cultural heritage revolving funds

[50] In some countries, mortgage REITS lend money directly to real estate owners and derive revenue from interest paid on mortgages (Linneman & Kirsch 2020).
[51] Dublin Civic Trust http://www.dublincivictrust.ie/. The Trust is a member of Europa Nostra, ICOMOS, Building Limes Forum Ireland, INTBAU (traditional building, architecture and Urbanism network) and European Environmental Bureau (EEB)
[52] Irish Landmark Trust https://www.irishlandmark.com/

rely on techniques such as renovation lease agreements to ensure long-term protection of the properties they sell on. Remedies in the event of non-conformance must be included in the renovation agreement including, the right to sue for specific performance, provision for liquidated damages or the right of the fund to complete the rehabilitation and place a lien on the property for the expenditure incurred (Moriarity and Lutzker 1993). See further examples case studies on various non-profit and for-profit real estate revolving funds in 'Patterns of Use: Investment Funds, Trusts and Foundations Section 10.5.

7.8.2.5 Syndicated Limited Partnerships & Companies

Syndication is a method of raising capital for large scale real estate investments in which a group of investors pool their capital to invest in a single property. Most private syndicates shield investors from potential liability by forming either a Limited Liability Partnership or Limited Liability Company to own the real estate on behalf of the individual investors and thus shield them from liability. The main benefit of a syndicate structure is that is allows investors to control investment decisions, compared to real estate investment companies (REIFs and REITs) where investors lose control over the investment decision making process (Cook 2016).

7.8.3 Cultural Heritage Real Estate Regulation

Creating a balance between state enabled regulatory tools and financial instruments forms the basis with which many state agencies implement cultural heritage policy. The tension between built heritage resources and the property rights of their owners varies in relation to the severity of regulatory policy (Costonis 1997). Legislative measures are of limited use unless political commitment exists to monitor compliance and use sanctions for non-compliance, such as, fines &/or expropriation. Enforcement of regulatory policy is often hindered by a lack of available resources to carry out inventories to identify cultural assets for protection and monitor ongoing compliance.

In countries with weak heritage regulation, or jurisdictions with large numbers of unprotected (unlisted) heritage resources, state agencies can stimulate desired cultural heritage policies by re-defining property rights in ways that encourage the private sector to engage in socially desirable behaviour involving built heritage assets. A discrepancy between the high Residual Site Value (RSV) of heritage structures (market value of land beneath the heritage asset relative to the market value of the heritage asset above ground), coupled with the low density and low income-producing capability of many historic assets can prompt owners to alter or demolish heritage structures in order to maximise zoned development rights.

Tools of government action to alter property rights to protect cultural heritage assets, include:

- Land Value Capture (LVC) Tools (Linked to Tax Instruments S.6.3)
- Conservation Easements
- Transfer of Development Rights (TDRs)
- Energy efficiency mortgage labelling
- Landlord & Tenant Rights

7.8.3.1 Land Value Capture (LVC) Tools

Noring (2019) describes Land Value Capture (LVC) where local governments can increase their tax revenue based on the increased value of privately held land derived from rezoning, infrastructure and other public investments. The concept of land value capture, although not new, has gained renewed interest in recent years as local governments search for financial models to raise local investment capital without raising taxes. Infrastructure Australia (2016) identifies a range of value capture mechanisms, each with their own benefits, risks and implications for funding leverage, including:

- Betterment levies;
- Developer levies (contributions);
- Real estate (property) tax ;
- Property transaction tax (CGT, Inheritance/Gift Tax and Stamp Duty);
- Leveraging government land assets.

The main sources of land value capture are the recouping of unearned land value uplifts benefiting private property owners due to:

- Close proximity to publicly funded infrastructure projects, such as transport hubs, increasing land values;
- Close proximity to area based urban regeneration initiatives, causing urban gentrification and spiking land values;
- Granting of beneficial development rights, via the planning system, such as re-zoning allowing high value, & higher density, redevelopment uses.

7.8.3.2 Conservation Easements

A Conservation Easement is a legal ‘restrictive covenant’ that ensures the long-term protection of heritage assets by donating property rights, such as the right to prohibit demolition or inappropriate adaptation to defined structures, parts of structures (facades, interiors) or land, to an easement holding body such as a non-profit heritage trust, foundation or government agency (Byrtus and McClelland 2000). In all other respects the property remains privately owned. The value of the conservation easement is equal to the difference between the market value of the property before granting the easement (including any residual development value) and the market value of the property after the granting of the easement, taking all enhancement and redevelopment restrictions into account (Pickerill & Pickard 2007). The property owner takes a charitable tax deduction (income, inheritance, gift tax) relating to the assessed value of the easement donation. The existence of an easement may also cause a decrease in a property's tax assessment (Watson and Nagel 1995). A conservation easement agreement specifies the critical historic features that must be protected and any alteration to historic features specified in the easement agreement can only take place with the express permission of the easement holding body. Conservation easement donations may apply for a term of years or into perpetuity. The easement applies to the land (not the owner) and binds future property owners to its provisions. Perpetual easement may be attached to the deeds.

In countries or regions, with weak regulatory policy, owners of historic structures or land can voluntarily donate a conservation easement to a non-profit trust, foundation or government body while maintaining private ownership. In the USA, a conservation easement can be donated on any historic structure included in the National Register of Historic Places or within a Registered Historic District (if the building contributes to the character of the district or is protected by a state or municipal preservation ordinance). At the federal level, easements are only granted to historic property owners whose land is accessible to the public. Rules vary at state level, although often parallel the deductions available at the federal level, without the public access requirement. Any reasonable expenses related to the donation of an easement experienced by the donor may also be tax deductible as miscellaneous expenses in addition to the value of the easement. Such miscellaneous expenses include legal and accounting assistance, survey costs, recording and appraisal fees (Watson and Nagel 1995). Most easement programmes require that an easement donor contribute to an ‘easement endowment’ or administration fund. In order to enforce an easement into perpetuity, any mortgage holder whose legal ownership right is senior to the easement donation must subordinate its rights in the property to the right of the recipient preservation organisation (Delvac, Escherich and Hartman 1997). The rights of mortgagees must be carefully set out in the easement agreement to avoid extinguishment of the easement deed in the event of foreclosure. Historic Annapolis Foundation in Maryland has worked out a barter system, exchanging various services such as ground maintenance, historical research or architectural drawings in exchange for exterior easements (Watson and Nagel 1995).

7.8.3.3 Transfer Development Rights (TDR)

‘Transfer Development Rights’ (TDRs) involve the ‘ring fencing’ and transfer of air rights above low density historic structures, located in high density urban areas, to alternative zoned sites. By selling foregone development rights to an alternative site (preferably a brownfield site not located in a historic district) and by committing to maintain the historic structure, the property owner receives funding to finance the repair and maintenance works. The incentive package compensates the landmark owner for the economic opportunity foregone by not redeveloping the site.

In 1973, Costonis developed a TDR programme, called the 'Chicago Plan' as a means for preserving the city of Chicago's downtown commercial landmark buildings (Costonis 1974). Transfers of rights deriving from a single heritage structure may be made to one or more transferee sites, subject to defined density and height restrictions. The transfer of development rights, away from a built heritage structure, alleviates the site from the threat of inappropriate adaptation or demolition (Costonis 1997). There may also be an intermediate stage between severing and transferring, in which the development rights are placed in a development bank, created for the purpose of buying and selling these development rights, for eventual transfer (Costonis 1997) (Roddewig and Inghram 1987). State agencies may also sell development rights to raise funds (Ziegler 1995).

The value of the air rights are agreed by negotiation on a building per metre basis. An administrative authority, dealing with TDR, could periodically issue an index of the value of a stated increment of development rights within a transfer district. Cash flow problems can be encountered in a depressed real estate market as transfer development rights lose value. TDR programmes in Maryland and New Jersey have developed municipal development rights banks (Ziegler 1995b). New York City's zoning resolution provides for the transfer of development rights from buildings designated as historic landmarks. The New York City Landmarks Commission stipulate a wide array of controls including preliminary authorisation for the transfer, approval with regard to the materials, design and scale of the proposed project due to the close proximity to a landmark structure. In addition, a preservation maintenance plan must be drawn up for the long-term maintenance of the landmark (Pickard and Pickerill 2002, 2007).

7.8.3.4 Energy Efficiency Mortgage Label (EEML)

The Energy Efficiency Mortgage Label (EEML), introduced in 2021, is a global industry-led initiative of the European Mortgage Federation - European Covered Bond Council (EMF-ECBC]. EEM labels relate to finance for purchase, construction and renovation of residential and commercial buildings with a focus on building energy performance. The initiative measures portfolio alignment to inform regulatory compliance with the EU Taxonomy. It also enables implementation of the EU Green Deal and Renovation Wave Policy[53].

7.8.3.5 Landlord & Tenant Rights

Landlord and Tenant agreements can encourage cultural heritage behaviors. Examples of Social Value Leases and Renovation leases (repair and leasing scheme) are outlined in Section 10.3.

[53] The Energy Efficiency Mortgage Label: https://energyefficientmortgages.eu/

7.9 Capacity & Resilience Building Instruments

Table 20 Capacity & Resilience Building Instruments

Direct Service Provision & Advisory Instruments (Cultural Heritage)	Capacity Building & Resilience Instruments
-Government advisory service	-Networking, mobilising & mentoring -Technical business mentoring (Angel Investors) -Education & Skills Training -Technical Repair & Maintenance Support

Note: See Section 10 Evidence Based Indicative Patterns of Use for examples

An emerging group of organizations provide capacity building services in the form of knowledge sharing, training, technical support, mobilization and matchmaking networks, without financial assistance.

7.9.1 Human & Institutional Capacity Support

The efficient implementation of transformative circular adaptive reuse processes requires human and institutional capacity to manage the sourcing and structuring of capital investment funding. UN Habitat (2020) states that well resourced human capital and institutional capacity, such as coordinated multi-level governance structures, robust policy and legislative frameworks, strong leadership and collaborative skills is a necessary prerequisite to combat urban and rural landscape challenges. UN habitat (2020) states that a strong human capital base adapts faster to advances in innovation, and digital technology, in the realization of the SDGs thereby improving the ecological adaptive capacity of communities. The growing transition to a knowledge based global economy is of particular relevance in the context of networking, mobilizating and mentoring between diverse stakeholders, including local communities, involved in the adaptive reuse of cultural heritage.

The investment capabilities of local governments to engage with mission driven impact focused cultural heritage projects relies on their institutional capacity to administer financial instruments to leverage capital. Strengthening institutional capacity of local government is vital to the efficient allocation and use of public resources. Gaspar (2019) refers to the need for better spending rather than more spending. UN Habitat 2020) refers to the diverse range of legislative and institutional structures exist across and within countries which can impact on local governments institutional capacity to maintain and increase their revenue base. Many local governments face budgetary deficits and are dependent on property tax revenues and insufficient financial transfers from central government, leaving them with limited capacity or autonomy to achieve a positive investment credit rating or employ financial instruments. In order to accomplish value creation in cultural landscapes, central governments need to ensure that legal and institutional mechanisms, within intergovernmental structures, allow local governments to engage with collaborative financial initiatives to leverage additional external investment and ultimately achieve desired SDGs in their region.

7.9.2 Technical 'Brick & Mortar' Repair & Maintenance Support

The concept of Monument Watch originated in the Netherlands in 1973 promoting the concept that 'Prevention is better than cure' by offering members independent inspections, ongoing monitoring, minor repairs, preparation of repair and maintenance plans, (www.monumenten.nl). The basic model entails the umbrella organization acting as a platform for consultation between the provincial associations. Association services both public and private owners of heritage monuments regardless of classification. Members (owners or managers of monuments) submit their buildings for inspection on a voluntary basis. The inspection team (architect, craftsperson & interior specialist) carries out a survey of each monument internally and externally placing special attention on less accessible areas that are sensitive to decay. Urgent repairs may be repaired temporarily. The Monument status report provides a detailed description of the monument, highlights urgent structural problems and identifies repair and maintenance priorities that should be carried out in the short to medium term. The Monument Watch approach is characterized by its support for regular maintenance in order to avoid costly restoration works in the long term. Annual membership fees are low and inspection fees are priced below market. Despite government funding, monument watch inspectors provide independent consultancy services and interpretation of the status report remains the responsibility of the building owner. Government authorities justify financial support on the basis that informed regular maintenance of monuments will reduce the need for large scale costly restoration works in the long term, which would be financed through public funds. The powers of Monument Watch do not include punishing misdemeanors or awarding grant aid. While the provision of regional maintenance grants is not conditional upon monument owners becoming members of Monument Watch, the regional government advise grant applicants to become members as the application procedure necessitates the provision of a condition report on monuments. Some provincial authorities insist on Monument Watch membership as a pre-requisite to receiving funding. provincial maintenance grant aid. Similar model organizations have since been established across Europe, including:

- Monumentenwacht Vlaanderen was founded in the Flemish region of Belgium 1991
- Germany (DenkmalWacht Brandenberg und Berlin, Baden-Wurttemberg, ~Noordrhein-Westfalen & Hessen www.baudid.de) 1999 & 2004
- Denmark (Bygningsbevaring www.bygningsbevaring.dk) 2004 (Wu & van Laar 2020).

Projects with a similar ethos have evolved in:

- Bath pilot UK (Maintain our Heritage www.maintainourheritage.co.uk) 1999
- Hungry (Maintainer network of Hungarian movement and building foundation Mameg www.mameg.hu) 2006 & 2012-2014
- Lombardy, Italy (Fondazione Cariplo Cultural District Project with H BIM modelling) 2005
- Slovak (Pro Monumenta Project) 2014
- Portugal, Spain & France (Heritage Care Project with H BIM modelling) 2016 (Wu & van Laar 2020).

7.10 Digital Pathfinding Tools

Table 21 Digital Pathfinding Tools

Digital Pathfinding Tools:
-Cultural Heritage Portals
-Environmental Portals
-Philanthropic & Impact Investment Portals
-Stock Exchange Portals
-Crowd Funding Portals
-Lottery Funding Portals

From a communication perspective, in the context of matchmaking, grant-giving, co-investing, knowledge sharing, service provision and volunteering, digital portals provide visible pathways for stakeholders to find each other in an emerging cultural financial landscape. Online platforms and exchanges, within this new networked 'Philanthro-capitalist' economy, differ in relation to their organizational structure, the nature of engaged 'users' and the diverse range of shared or exchanged resources. These online platforms will continue to evolve and adapt in order to retain their market share in a crowded and highly competitive ethereal landscape. In addition to providing secure electronic systems for the transfer of funds, digital technology innovations in recent years have revolutionized knowledge transfer and networking within the cultural heritage sphere. Advances in R&D for Proptech and Fintech are currently in an early evolutionary phase creating speculation about future possible technical, regulatory, security and privacy future scenarios.

Section 8: Crosscutting Issues for Cultural Heritage Value Creation

8.0 Roadmap for Participatory Prosperity

The design of the CLIC circular hybrid financial toolkit evolved from the following query:

"Can circular financial instruments be designed and tailored to protect people and ecosystems in parallel with adaptive reuse of vulnerable cultural heritage resources?"

Cultural heritage adaptive reuse activities embody circular economy dimensions that engender socio-cultural, environmental and economic regeneration within the global value chain. This embodiment means that cultural heritage has the potential to halt viscous circles of disinvestment and act as a catalyst for exponential regenerative change.

As outlined in S.2.1 'Aligning Human and Financial Capital for Socio-technical Systems Change' to achieve participatory circular human prosperity, the cultural heritage investment arena must re-evaluate public and private investment leverage enablement strategies. In this regard, a number of cross cutting issues are identified from this research study.

8.1 Virtuous Investment Circles for Exponential Value Creation

Human capital is inextricably linked to socio-cultural and environmental capital, but also closely bound to financial capital market systems. A shift in the collective mindset about what constitutes value creation has been building since the global financial crash in 2008. The Pandemic created a tipping point when the fragility of human populations and society was exposed. The collective consciousness is moving along a transformative trajectory from vicious 'profiteering' investment circles to more virtuous 'human centric' investment circles. This is a slow process and some sectors of the economy, such as social enterprise enablers, are further along the conscience pathway leading to human prosperity.

The transition to a more sustainable and circular future economy will result in inevitable disruption in the financial ecosystem leading to both value creation (Regenerative Capital) and value destruction (Degenerative Capital) in different sectors of the economy, although the extent of this is not yet known. The financial eco-system is still grappling to gain the cross functional vision needed to unlock the investment potential offered by corporate citizenship and social enterprise opportunities to achieve positive exponential social and environmental impact. In other words: Virtuous circles of exponential growth.

In term of built heritage resources, key investment barrier is the high cost of adaptive reuse, relative to potential low investment revenue streams in non-prime locations. This lack of profit generation is exacerbated by the fact that built heritage assets are often low-density structures, compared to current high density zoning allowances in many urban areas. This creates a dangerous

Opportunity Cost of Capital (OCC), where pure financial metrics will encourage neglect and ultimate demolition of heritage asset to access the more profitable residual site value (i.e. the valuable zoned land mass beneath the heritage asset). The mindset around opportunity cost needs to be redefined by investors to consider the real societal 'cost' of not investing in social enterprise innovations and adaptive reuse projects that are furthering the transition to a circular economy.

8.2 Collaborative Social Enterprise Structures

The growth in social enterprise structures in recent years indicates that the investment mindset is increasingly recognizing the potential benefits of supply-side investment leverage mechanisms, to compliment traditional demand-side mechanisms, for the adaptive reuse of cultural heritage [54].

Understanding the investment motivations of mainstream financial market investors and social enterprise investment enablers, including participative local communities, to engage in collaborative funding partnerships is central to designing innovative hybrid financial instruments to safeguard complex cultural heritage values.

Emerging social enterprise investment leverage enablers, with a mission to 'create value and give back', signal an appetite for 'real' long-term sustainable investment opportunities in the marketplace. Social entrepreneurs demonstrate the use of alternative value creation models, including the use of evolving impact metrics, to deal with the challenges to our societies, economies and the planet in sustainable and inclusive ways.

Market oriented capital leverage enablers, such as pension funds, insurance companies, equity venture funds and real estate investment funds, have a fiduciary obligation to their co-investors and shareholders to mitigate risk and optimize investment returns, in parallel with alignment with SDGs and certified ESG metrics and. Some more enlightened corporate entities are increasingly recognizing investor demand for socially responsible investment strategies by undertaking transparent sustainability materiality assessments to inform sustainable and circular asset management practices and goals exceeding ESG compliance.

The spectrum of capital market investment leverage enablers, ranging from philanthropic grant-givers and social enterprise investors (impact first) to purely profit motivated investors (finance first), captures a broad knowledge base and skillset. Collaborative partnership arrangements between

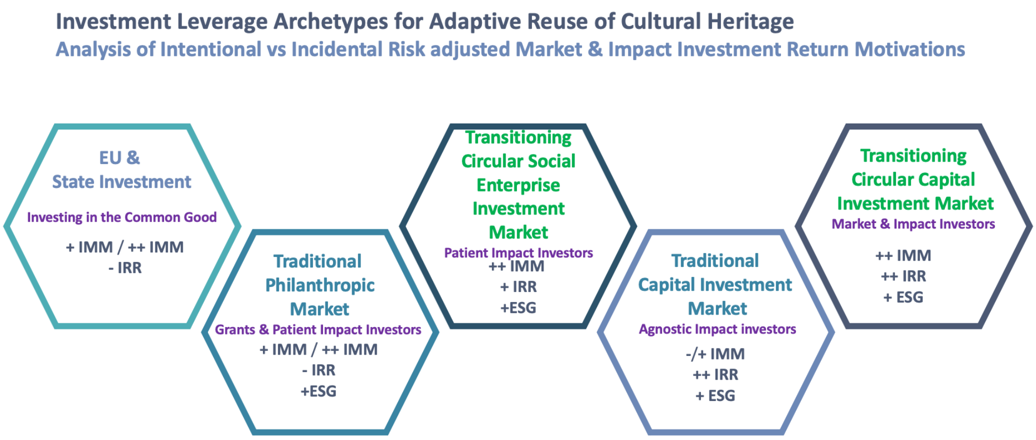
[54] Direct demand-side (Dy) government policies include bond issues, grants and direct government loans involving the state directly transferring money to another stakeholder to finance (or part finance) cultural activities. Indirect supply-side (Sy) government policies include tax incentives, risk mitigation (loan guarantees) and capacity building (knowledge sharing and skills training) involving no direct transfer of money and no recording of state expenditure (Pickerill & Pickard 2007).

capital investment leverage enablers, within the spectrum of these two extremes, will facilitate the cross fertilization of knowledge and skill.

8.3 Investor Motivations by Archetype (Risk, Return & Impact)

Scrutiny of the investment motivations of mainstream capital market investors versus market oriented social enterprise investors facilitates interpretation of evolving market behavior within the transitioning financial landscape for cultural heritage investment. Investment leverage archetypes can be categorized based on their broad motivation to achieve predefined risk-adjusted financial return in parallel with socio-cultural and environmental impact (bearing in mind risk may be real or perceived). Socio-technical systems change is evident in ‘transitioning circular social enterprise investment’ and ‘circular capital investment’ markets which are both engaging ‘recycled capital’ (revolving funds) based on financial returns (market or below market) in parallel with intentional impact metrics. Figure 5 provides a broad visual overview of investment leverage archetypes for adaptive reuse of cultural heritage.

Figure 5 Investment Leverage Archetypes for Adaptive Reuse of Cultural Heritage



Risk adjusted Socio-Cultural & Environmental Impact Return Motivation		Risk adjusted Market Return Motivation (Internal Rate of Return: IRR)	
Intentional Impact Measurement & Management	++ IMM	Intentional Full Market Return	++ IRR
Incidental Impact Unmeasured (negative or positive)	- /+ IMM	Intentional Below Market Return	+ IRR
Environmental, Social & Governance Compliance	+ ESG	Incidental Market Return / Loss (Any profits recycled)	- IRR

Source: Author

Note: All financial entities must comply with the EU Taxonomy ‘green’ criteria tool (EU TEG 2020a).

Investment leverage archetypes include:

- EU & Member State Agencies: National state agency initiatives funded by EU structural funds, national tax revenues and bond (debt) instruments to onward fund direct and indirect market intervention strategies and collaborative partnership (PPP) arrangements for ARCH. State agency onward investment using direct (Grant, Debt & Equity tools) and indirect (Tax, Risk Mitigation, Regulation, Real Estate & Capacity Building tools) market intervention, requiring minimal Risk adjusted Below Market Financial Return. Financial losses are tolerated to safeguard the common good (-IRR). Motivation to 'recycling capital' for value creation to improve economic competitiveness in addition to human and planetary wellbeing. Engagement with intentional impact metrics (++IMM), in additional to positive incidental impact (+IMM).
- Traditional Philanthropic Markets: Philanthropic entities providing support for ARCH activities, using Grant tools and additional 'patient' mission focused investments via Debt, Risk Mitigation, Real Estate & Capacity Building tools, requiring zero or minimal Risk adjusted Below Market Financial Return (-IRR). Motivation to improve human and planetary wellbeing. Mixture of positive incidental unmeasured impact (+IMM) and intentional impact metrics (++IMM) as metric methods mature and entities build capacity to comply. ESG compliant (+ESG).
- Traditional Capital Investment Markets: Agnostic impact investors in ARCH activities, using Debt, Equity, Tax, Risk Mitigation & Real Estate tools. Motivation to maximize financial profit in the form of Risk adjusted Market Return (++IRR), with little regard to intentional impact metrics, although incidental unmeasured impact (negative or positive) may arise (-/+IMM). Engagement with ESG compliance (+ESG) due to competitive market demand.
- Transitionary Circular Social Enterprise Investment Markets: Emerging 'patient' mission focused social enterprise investors in ARCH activities, using Debt, Equity, Tax, Risk Mitigation, Real Estate & Capacity Building tools. Motivation to 'recycle capital' for value creation to improve human and planetary wellbeing, by achieving Risk adjusted Below Market Return for reinvestment (+IRR). Engagement with Intentional Impact Metrics (++IMM) and ESG Compliance (+ESG).
- Transitionary Circular Capital Investment Markets: Emerging mission focused investors in ARCH activities, using Debt, Equity, Tax, Risk Mitigation, Real Estate & Capacity Building tools. Motivation to maximize financial profit in the form of Risk adjusted Market Return (++IRR) in parallel with 'recycling capital' for value creation to improve human and planetary wellbeing. Transitionary engagement with Intentional Impact Metrics (++IMM), in addition to ESG compliance (+ESG).

8.4 Choice and Design of Revolving Hybrid Financial Instruments

Circular 'Regenerative' funding strategies seek to strengthen the financial sustainability and resilience of final recipients. Four bodies of knowledge are central to the choice and design of financial instruments within a circular funding strategy: Tool knowledge; Circular design knowledge; Stakeholder knowledge and Impact knowledge. The choice of strategic blended combinations of hybrid financial and non-financial instruments will change from community to community (region to region and country to country) depending on stakeholder requirements in political and economic context (including cultural ideological predispositions).

Within a collaborative fund structure, rational capital allocation investment decisions revolve around each investor's return expectations, return time frame, appetite for risk and defined social and environmental impact goals. The final design of blended hybrid financial instruments at project, fund or portfolio level must be tailored to the specific needs of final recipient. This preference is ratified by evolving impact metrics that support the ethos that well designed hybrid financial instruments have the capacity to recycle financial capital for the perpetual benefit of socio-cultural and environmental capital.

8.5 Risk Assessment Analytics

Social enterprise ventures carry an additional duty of care 'impact liability' as failure of a financial instrument can negatively impact vulnerable communities. This creates a dual metric of risk adjusted market return (or below market return) and risk adjusted impact return.

Risk assessment is complicated by the fact that constructive or destructive social and environmental externalities cannot be captured within mainstream market appraisal techniques such as Discounted Cash Flow (DCF) or benchmarking metrics such as Internal Rate of Return (IRR). These financial market metrics are limited in their analytical insights as they are incapable of quantifying investment risk such as timing and stability of projected cash flows, liquidity, institutional capacity of stakeholders, intergenerational equity or ecological planetary limitations.

High risk investments yield higher returns, although run a greater risk of financial loss, and vice versa. Inspired by FB Heron Foundation 'Mission Investing Continuum' (FB Heron Foundation 2017) and informed by the GIIN annual survey (GIIN 2020b), Figure 6 provides a visualization of the risk spectrum of market, and below market, investment returns of financial and non-financial instruments (by Asset Class), bearing in mind that the level of market risk and impact risk may differ.

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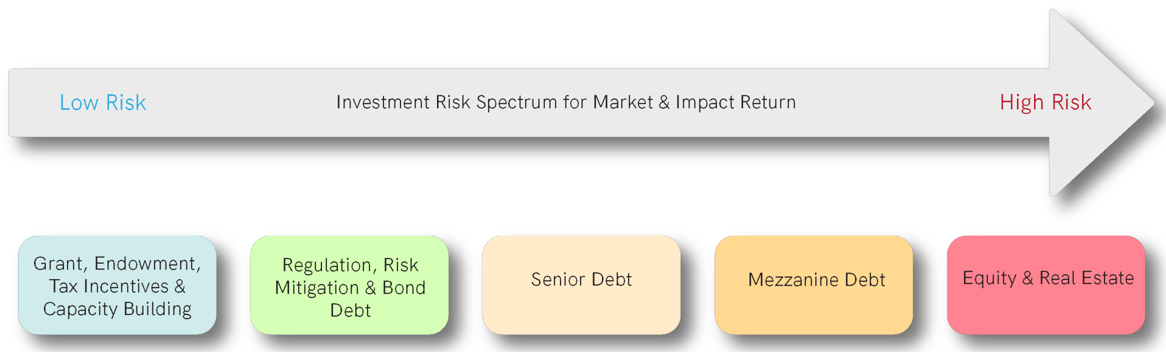
Figure 6 Investment Risk Spectrum of Market & Impact Return by Asset Class



Source: Author

8.6 Circular Finance Embracing 'Stakeholder Capital'

Within a circular economy, capital allocation investment decisions can no longer revolve around pure profit motivation and the blinkered self-interest of investors. There is an intangible dimension to circular economy thinking with regard to capital allocation decision making, that is often lost in translation. Citizens support government policy capital allocation decisions via fiscal spending (funded by tax revenues) and via risk sharing (such as government guarantees for state bond issues and commercial bank liabilities[55]). Capital markets must collectively embrace the concept of 'Stakeholder Capital' on the basis that if risks and potential losses are shared by society, then any resultant rewards must also be shared with society.

Citizens are demanding responsible approaches to investment from governments, corporate entities and investors as the primary capital allocation decision makers. Investment benchmarking to inform capital allocation decisions is complicated by a myriad of corporate ESG measurement and weighting practices among rating agencies. The risk of capital misallocation, greenwashing and product mis-selling, detrimental to genuine circular investment opportunities, will disrupt investor decisions until ESG reporting standards are aligned and regulated in Europe (and Internationally).

[55] For example, following the banking crisis in 2008 austerity measures were introduced in some member states, such as increased taxes and public sector pay cuts, to underwrite the liabilities of poorly regulated distressed national commercial banks.

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The EU Taxonomy sets screening criteria for six sustainable performance thresholds[56] relating to economic activity within the financial markets. The Taxonomy Principles strive to encourage robust collaborative financial investment frameworks to attract transnational private investment towards zero emission targets. While this is undoubtedly a positive step in the quest for circularity and the green transition, financial instruments must only comply with one environmental objective and 'Do No Significant Harm' (DNSH) to the other five. In order to achieve exponential transformative socio-technical systems change within the financial ecosystem, the parameter of DNSH is no longer enough to protect vulnerable communities. The challenge will be to design hybrid financial instruments that actively contribute to multiple objectives set out in the EU Taxonomy and thereby gain greater competitive recognition within financial markets.

8.7 Connective Networking Infrastructures

The rise of combined market driven and impact focused venture capital investment initiatives, combined with the rise in citizen-led co-giving and co-investment crowd funding platforms, indicates an eagerness among proactive people and communities to coalesce in order to safeguard tangible and intangible cultural heritage resources.

A critical investment bottleneck still exists in creating sustainable investment leverage for small scale local community cultural heritage activities, particularly in disadvantaged urban and depopulated rural locations. Work still remains to cultivate 'connective networking Infrastructures' to foster tactical relationships between 'grassroot' cultural heritage initiatives and cash-rich investment markets.

The use of risk mitigation and capacity building instruments, aligned with the development of digital network pathfinding tools, is vital to bridging the connective infrastructure gap to open up micro investment leverage opportunities for underserved local communities and regions.

The potential contribution of a trans-national cultural heritage philanthropic foundation to engender greater financial synergy between citizens, local communities, capital markets and local government agencies remains untapped[57].

8.8 Evolving Impact Performance Metrics

Capital market invest strategies rely heavily on economic market sentiment in addition to increasing reliance on intentional socio-cultural and environmental impact metrics. Many investment

[56] 1.Climate change mitigation; 2.Climate change adaptation; 3.Sustainable and protection of water & marine resources; 4.Transition to Circular Economy; 5.Pollution prevention and control; 6.Protection and restoration of biodiversity & ecosystems (EU TEG 2020a).

[57] This need was articulated in a recent study titled 'Imagining Philanthropy for Europe' by the European Cultural Foundation and Allianz Kulturstiftung (ECF & AKS 2020).

leverage financial instruments can only be materialized with political support, via legislative and revenue enactment. This underlines the importance of providing transparent and robust evidence-based analytics on the positive impacts of cultural heritage activities, to bolster both investor confidence and political support.

While it is widely acknowledged that basic impact metric measurement techniques are still under refinement, the measurement issue is exacerbated by the time frame of impact, where it is difficult to discern specific impact returns within multiple community or place-led investments.

CHiFA (2021) further point out the importance of social, environmental and economic benefits accruing from heritage regeneration investment projects, acting as a catalyst to encourage and enable further regenerative gains, thereby maintaining the circularity flow.

8.9 Defined 'Asset Class' for Cultural Heritage

There is no single metric for assessing the impacts of heritage-led regeneration (CHiFA (2021). Capital allocation to cultural heritage adaptive reuse activities, within investment funds, is not always transparent as 'cultural heritage' can potentially fall under the auspices of culture, tourism, real estate and/or Infrastructure sectors. For example, the GIIN sectoral investment category of 'other' relating to real estate, tourism, community development, retail and agnostic investors could potentially relate to cultural heritage adaptive reuse activities, but may overlap with other GIIN categories including, inter alia, infrastructure, energy, housing, microfinance, forestry and arts & culture investments. (GIIN 2020b)[58]

To encourage private investment capital flows to cultural landscapes and communities, cultural heritage must be recognized as a *'Market Asset Class'*. Transparent impact analytics relating to a defined field of cultural heritage would facilitate both traditional capital market financial metrics and evolving socio-cultural and environmental impact metrics to generate evidence-based data relating to the costs and 'real' benefits of cultural heritage activities. Only then, can informed market and impact risk assessment take place to inspire greater investment confidence and justify increased investment flows.

8.10 Portfolio Approach to Heritage Commons

The size of many individual Paris-aligned or SDG-aligned investment opportunities, whether regional, community or place led, are often too small for institutional investors. A mission focused portfolio approach would enable a cross benefit effect allowing individually unfeasible projects to gain viability with critical mass. In the cultural heritage investment arena, there is limited capacity in

[58] Survey respondents include 294 for-profit & non-profit asset managers, foundations, financial institutions development finance institutions, pension funds and Community Development Finance Institutions (GIIN 2020b).

the marketplace to achieve critical mass by packaging individual projects into larger investment portfolios by asset class as no formal asset class exists for cultural heritage.

8.11 'Regenerative Capital' crafting 'Virtuous Investment Circles'

Sustainable and circular investment strategies are central to leveraging transformational socio-technical systems in the cultural heritage industry. The concept of 'Regenerative Capital[59]' for cultural heritage adaptive reuse relies on an investment rationale that nurtures Responsible, Resilient and Regenerative transitionary activities (Elkington's 3 Rs), additional to the triple bottom line, in the real economy (Elkington 2020).

The arrival of investment vehicles on the stock market supporting adopters, enablers and beneficiaries of circular and sustainable economy is a positive step indicative of a changing mindset in the financial ecosystem regarding planetary protection. However, the onward trading and re-trading of established stocks in the secondary markets is a relatively safe haven for mainstream investors. Real transformation in the form of 'Regenerative Capital' for cultural heritage adaptive reuse will require a constant flow of mainstream investment funds (from equity investors, pension funds, insurance companies), along-side less risk averse philanthropic and social enterprise investment funds, to stream directly to 'real world' grassroots community level and regional level social enterprise activities (as opposed to secondary investment markets). For this reason, collaborative partnership models between more risk averse mainstream investment markets and less risk averse (patient and tolerant) social enterprise investors is the key to creating successful virtuous investment circles.

[59] Regenerative Economics entails the application of nature's laws and patterns of systemic health, self-organization, self-renewal and regenerative vitality two socio economic systems (Fullerton 2015). Regenerative Capital enables global systems change in the context of achieving Responsibility, Resilience and Regeneration in addition to the triple Bottom Line (Elkington 2020).

Section 9: Visualizing a 'Virtuous Investment Circle' Framework Funding Model for ARCH

9.0 Creating a Conceptual Circular Funding Model

A significant unmet demand for funding to halt the ongoing depletion of Europe's finite heritage assets still remains, as a misalignment persists between the investment needs of the owners and curators of cultural resources and what mainstream investors are willing to finance.

Decisions regarding the blending of hybrid financial instruments and pooling of stakeholder investment funds can be tailored to the specific needs of financial beneficiaries and final recipients, bearing in mind each stakeholders financial and impact return expectations, timeframe and appetite for risk.

At project, fund or portfolio level, social entrepreneurs have the potential to make a significant contribution to regeneration capital allocations for cultural heritage adaptive reuse on a number of fronts. Specifically, social entrepreneurs can act as both financial intermediaries and collaborative partners to ensure virtuous circles of value creation by:

- Blending complementary hybrid financial instruments within mutually beneficial multidisciplinary collaborative fund structures;
- Recycling capital within revolving fund structures to ensure exponential benefit for recipients;
- Enabling connective infrastructure between mainstream financial markets and local participatory communities and regions;
- Developing portfolio approaches to tackle combined socio-cultural and environmental challenges by combining numerous small-scale 'real world' projects and activities to create critical investment mass opportunities;
- Opening up networking pathfinding and matchmaking channels to aligning investment goals within diverse collaborative partnerships;
- De-risking investments mitigation by taking a first loss position within partnership ventures to attract and cushion risk averse cash-rich mainstream investment partners;
- justifying regenerative circular funding flows by engaging with intentional Impact Measurement Management (IMM) metrics.

The CLIC Circular Financial toolkit is designed to assist individual, community and institutional investors to plan a mutually beneficial investment leverage strategy to enable cultural heritage social enterprise activities. Table 22 provides a reminder of the mutually beneficial collaborative investment relationships with the CLIC Financial Toolkit.

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Table 22 Mutually Beneficial Collaborative Investment Relationships

Investment Leverage Enablers	Financial & Non-financial Instruments
(i) Financial Intermediaries & Collaborative Funding Networks (ii) Participatory Communities & Regions (iii) Equity Risk Capital & Angel Investors (iv) Traditional & Hybrid Investment Philanthropic Foundations & Trusts (v) Hybrid Philanthropic Donor Advised Funds (vi) Co-Giving & Co-Investment Platforms: Lottery Funds & Crowd Funding (vii) Digital Pathfinding Networks	(i) Grant & Endowment Instruments (ii) Tax Instruments (iii) Debt Instruments (iv) Equity Instruments (v) Heritage Regulation & Real Estate Instruments (vi) Risk Mitigation & Performance Instruments (vii) Impact Metric Instruments (viii) Capacity and Resiliance Building Instruments (ix) Digital Pathfinding Tools

9.1 Mapping a Funding Strategy [National, Regional, City, Local Level]

Cultural heritage investment strategies involving long-term investment horizons. Funding strategies developed at national, regional, city or local level need to remain flexible in community context and meaningful for a broad range of participatory stakeholders, taking motivations behind funding decisions into consideration.

Mapping stages within a funding strategy should not be considered in a linear fashion, rather a systemic view should be taken encompassing all elements in unison. This strategy will allow stakeholders to explore funding synergies in political and economic context. A virtuous investment leverage mapping exercise of the financial landscape can be broadly structured as follows:

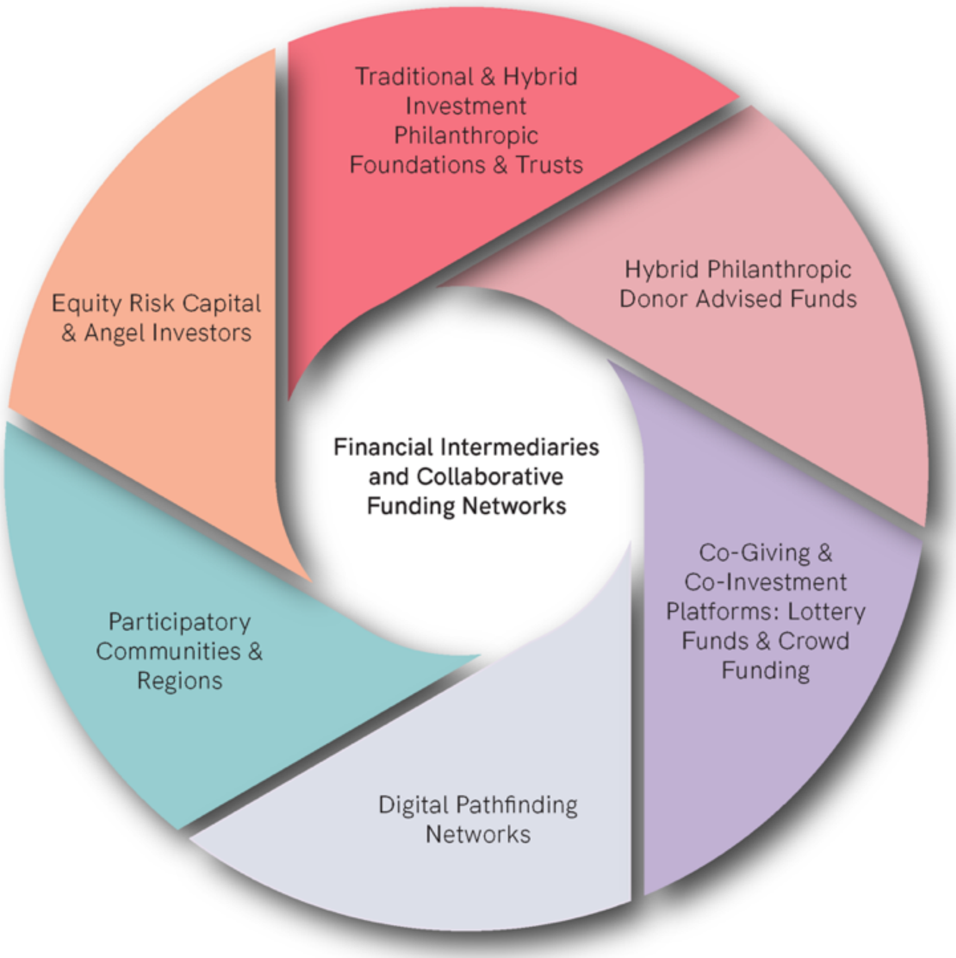
9.1.1 Stage 1 Identify Collaborative Investment Leverage Enablers (Pooling)

Project promoter takes the role of financial intermediary and seeks collaborative network partners. Social enterprise investment leverage enablers (See Section 6), including participatory communities and region[60], could potentially take the role of financial intermediary and begin the process of identifying possible collaborative funding, risk sharing, capacity & resilience building and impact partners, via pathfinding network tools. This stage entails considering potential investor motivations, synergies, conflicts and power-relationships that may evolve between partners, bearing in mind that stakeholders may have more than one role and that these roles may conflict. This layer of analysis will illuminate the most significant sets of relationships within the funding process and help to identify what governs the way different relationships are likely to

[60] Most likely with the exception of co-giving & co-investment platforms.

be sustained. Fig. 7 provides a visualization of potential social enterprise investment leverage enablers working in unison under the guidance of the coordinating financial intermediary.

Figure 7 Social Enterprise Investment Leverage Enablers



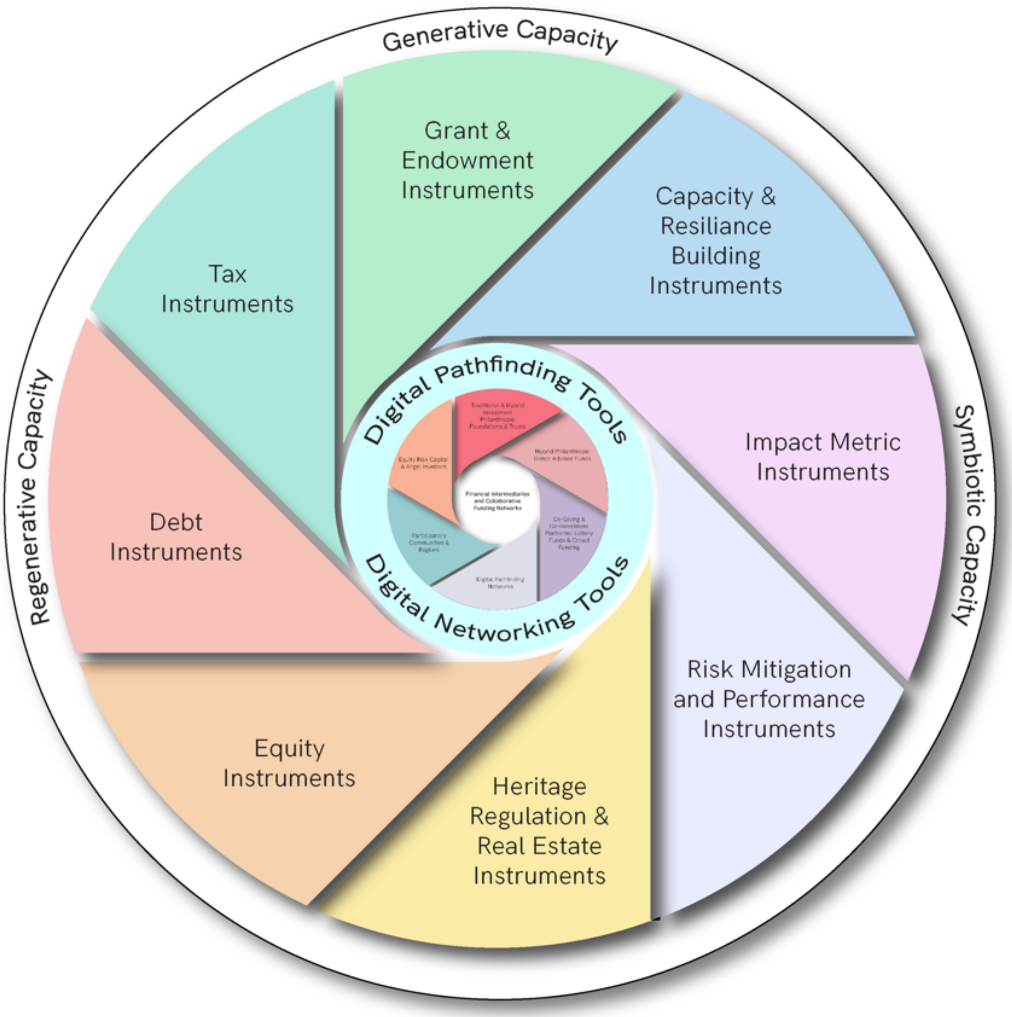
9.1.2 Stage 2 Identify and Design Circular Hybrid Financial Instruments (Blending)

Collaborative partners identify potential complementary financial and non-financial instruments for blending. Depending on the expertise, skills and knowledge base of the collaborative network partners, a range of blended hybrid financial and non-financial (See Section 7) can be selected for consideration. The final choice and design of blended hybrid combinations can be tailored to the specific needs of both funding beneficiaries and final recipients, bearing in mind the risk, return and impact goals of network partners. Figure 8 provides a visualization of the 'Virtuous Investment Circle' (VIC) stemming from the CLIC financial toolkit - incorporating umbrella categories of hybrid financial instruments enabled via collaborative social enterprise investors' and enclosed within the ecological boundaries of the planet. The design of hybrid financial instruments for ARCH must be mindful of their generative, regenerative and symbiotic capacity to create value while simultaneously protecting human prosperity. – termed 'Regenerative Capital'. Annex 2 provides a collated summary checklist of financial and non-financial instruments within the identified CLIC umbrella categories.

9.1.3 Stage 3 Identify Intentional Impact Metrics (IMM)

Identify intentional impact measurement and management goals and potential measurement metrics to justify current and future public and/or private collaboration investment flows.

Figure 8 Shutter Lens Visual: 'Virtuous Investment Circle' of ARCH



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9.2 Conceptual 'Virtuous Investment Circle' Funding Framework for ARCH [National, Regional, City Level]

Figure 9 Conceptual 'Virtuous Investment Circle' Funding Framework for ARCH

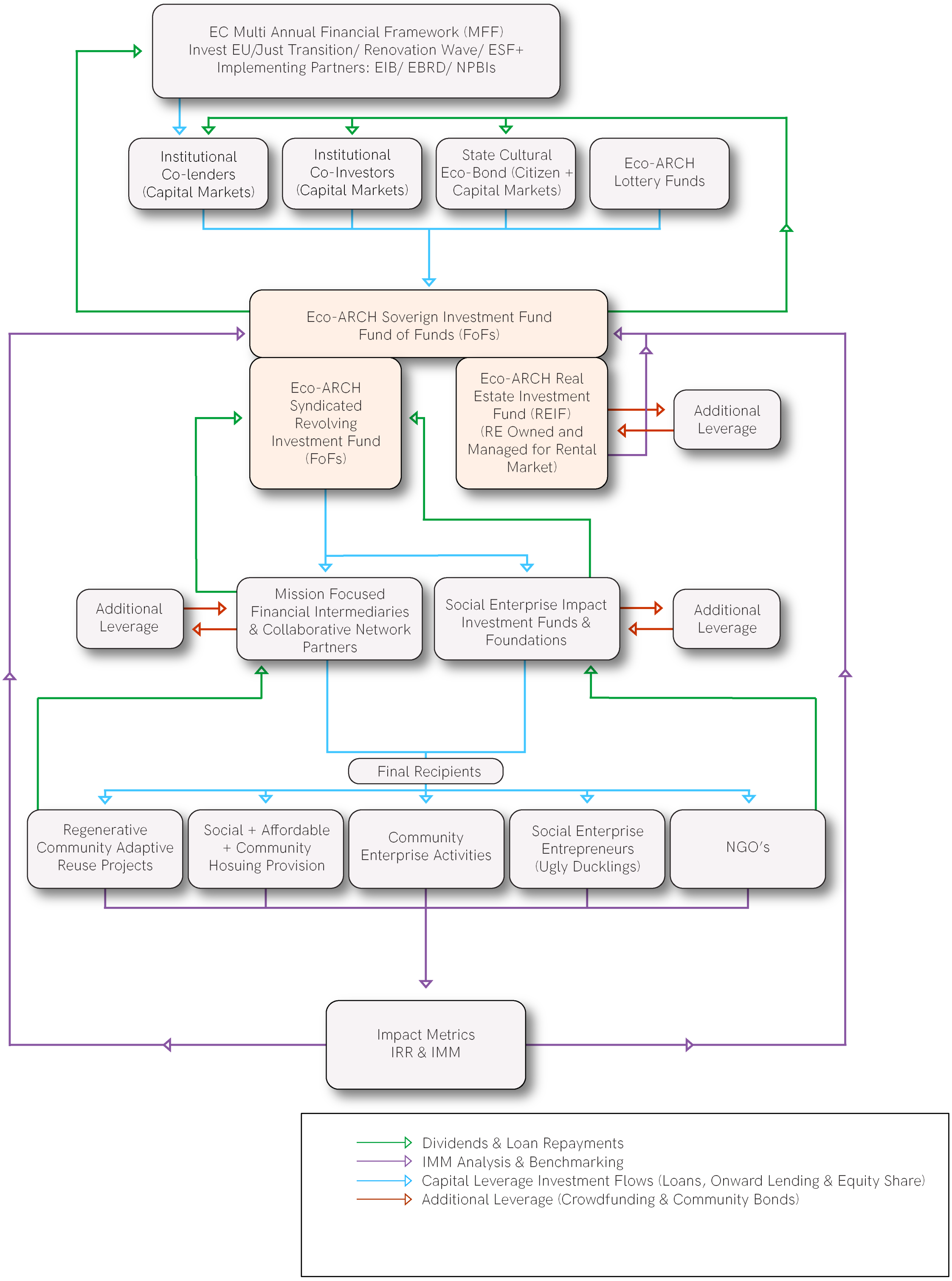

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Fig. 9 visualizes a conceptual ‘virtuous investment circle’ (VIC) funding framework at National, Regional or City Level for adaptive reuse of cultural heritage.

The conceptual funding framework envisages the creation of a sovereign investment fund at national, regional or city level. The suggested framework design is inspired by European revolving funds; Social enterprise impact fund models; Equity venture funds, Donor advised impact funds; Heritage lottery funds and Alternative investment funds (AIFs) such as Real Estate Investment Funds (REIFs) and Real Rstate Investment Trusts (REITS).

The conceptual fund is titled ‘Eco-ARCH Sovereign Investment Fund’ (shaded in fig. 8) and is structured as a Fund of Fund (FoFs)[61]. Within the Sovereign Investment Fund, the conceptual framework model envisages two (or more) sub-funds:

- Echo-ARCH Syndicated Revolving Investment Fund: where patient low-interest loans, loan guarantees and quasi-equity share tools are provided for mission focused social enterprise activities including adaptive reuse of cultural heritage and energy retrofit;
- Echo-ARCH Real Estate Investment Fund (REIF): where real estate fund owns and manages real estate assets for rental market revenue returns (Real estate assets including state owned assets, bequeathed or purchased assets). The REIF could potentially source ‘Additional Leverage’ opportunities to supplement funds.

The Eco-ARCH sovereign investment fund could be financed from multiple sources, such as:

- Institutional co-lenders channeling funds from mainstream capital markets;
- Institutional co-investors channeling funds from mainstream capital markets;
- State Cultural Eco-Bond (combined cultural heritage & green bond) channeling funds from both:
    - Institutional investors via mainstream capital markets;
    - Citizens via on-line sales platform with inclusive share purchase starting at €20;
- Echo-ARCH Lottery Fund via predefined Heritage Lottery draw or Heritage scratch-card.

Multiannual Financial Framework (MFF) funding from the European Commission (such as, inter alia, Invest EU, Just Transition, Renovation Wave, JICE) could be channeled through the Eco-ARCH Syndicated Revolving Investment Fund via Implementing Partner (EIB, EBRD, NPBIs) for onward lending to collaborative social enterprise impact funding entities, including:

- Mission focused financial intermediaries and collaborative network partners (Financial Beneficiary)
- Social enterprise impact investment funds and foundations (Financial Beneficiary)

Social enterprise impact funding entities (financial beneficiaries) receiving channeled loan funds from the Eco-ARCH Syndicated Revolving Investment Fund could utilize these funds to generate

61 The technicalities of legal structure would vary in different member states relating to pre-existing administrative, legal and political structures.

‘Additional Leverage’. These expanded funds are then onward channeled to final recipients in the form of patient investments, via loan guarantees (risk mitigation instrument) and low interest loans (revolving loan debt instrument) in parallel with technical and advisory support (capacity and resilience building instrument). Final recipients include, inter alia:

- Regenerative community adaptive reuse projects;
- Social, affordable and community housing provision;
- Community enterprise activities;
- Social enterprise entrepreneurs;
- Non-government organizations.

Final recipients may potentially also leverage received funds using ‘Additional Leverage’ instruments. Additional Leverage instruments could potentially include a variety of different hybrid funding instruments, such as, grants and endowments, tax incentives, risk sharing tools, land value capture tools, co-giving and co-investment crowdfunding platforms, community equity share investment tools and social value leases (see Section 10 for evidence based indicative patterns of use for idea generation).

All revolving investment streams are justified by the use of intentional Impact Measurement and Management (IMM) metrics, in additional to financial returns. Financial returns filter back up through the finance ‘waterfall’ via loan repayments and dividend returns to co-lenders, co-investors, Eco-Bond holders and the European Commission (MFF) Revolving Funds for re-distribution again and again. This framework potentially creates a ‘Virtuous Investment Circle’ (VIC) of ‘Regenerative Capital’ in the form of full (and below) market risk adjusted financial return and positive socio-cultural and environmental impact return due to the mission focus of the funds.

9.3 Regenerative Capital in Motion

The following ‘Evidence Based Indicative Patterns of Use’ in Section 10, show that cultural heritage has the potential to become a vector for circular economy transitionary ambitions with the capacity to make a real contribution to both the SDGs and the European Green Deal. Some hybrid financial instrument combinations and collaborative investment leverage partnership arrangements, highlighted in this report, did not exist 15 years ago. Thus, it is not unreasonable to predict that the financial landscape is still evolving in line with expansion in human capacity and the ongoing need for human centric solutions to dysfunctional eco-systems. Future manifestations of hybrid circular financial instruments will not be effective unless the selection and design process remains empathetic to the needs of local communities and ecosystems, in parallel with vulnerable heritage resources. A final word to the wise: Keep a look out for Elkington’s social enterprise ‘Ugly Ducklings’ as they may be tomorrow’s innovative ‘Green Swans’[62].

[62] See ‘The Swanspotter’s Guide’ (Elkington 2020).

Section 10: Evidence Based Indicative Patterns of Use

10.0 Pattern of Use Categories

The following patterns of use examples illustrate a range of hybrid funding models driven by a range of public and private investment leverage enablers. These examples chosen by the author are indicative of tool design and patterns of use in political context, including:

- Grant, Debt, Equity & Risk Mitigation Instruments (S. 10.1)
- Tax Instruments (S. 10.2)
- Real Estate Instruments (S. 10.3)
- Capacity Building and Risk Mitigation Instruments (S. 10.4)
- Investment Funds, Trusts and Foundations (Debt & Equity) (S. 10.5)
- Co-Giving & Co-Investment Platforms (Debt & Equity) (S.10.6)
- Case Studies on Blending Financial Instruments (S.10.7)

10.1 Patterns of Use: Grant, Debt, Equity & Risk Mitigation Instruments

10.1.1 Federal Historic Preservation Fund Grants [USA]

A combination of Federal and State enabling legislation in the USA facilitates local policymakers to blend a suite of financial instruments in order to achieve specific cultural heritage objectives in place-led (area-based) contexts benefiting distressed historic structures and local communities. Debt Instruments (bonds and revolving loans) are combined with grants, easement donations and tax incentives to leverage capital for cultural heritage adaptive reuse activities.

The US Department of the Interior, through the National Park Service (NPS), administers the Historic Preservation Fund (HPF) Grants in Aid Programme. The HPF provides grants to States, Tribes, local governments and non-profit entities to leverage private investment for historic preservation and community projects focused on heritage preservation. Recipients are required to provide a 40% match to their HPF funds. Matching funds may take the form of services in kind (including building materials, rent and administrative costs) or volunteer hours. The Secretary of the Interior's Standards for the Treatment of Historic Properties including guidelines for preservation, rehabilitation, restoring and reconstructing historic buildings, apply to all grants in aid projects assisted through the historic preservation fund and must be certified by the SHPO (NPS 2017).

10.1.2 State Enabled Blended Grant, Debt & Tax Instruments [USA]

The federal government provide a federal tax exemption for debt obligations issued by state or local governments. As a result, 'Bond' issues back many cultural heritage state funding programmes through the State Bond Bank. By pooling the credit standing of participating local governments, the bond bank permits municipal governments to borrow on more favourable terms than they could otherwise. The federal government may also guarantee loans made by private financial institutions for works to protected structures (National Register designated).

An example of a state enabled grant and revolving loan programme is the State of New Jersey tax-exempt historic preservation Bond programme (federal tax exemption) administered by the New Jersey Historic Trust a non-profit preservation body (NJ 1967). New Jersey Historic Trust is a Preservation Easement holding body. The New Jersey Historic Trust (NJHT) was created by law in 1967 to provide training, stewardship and stable sources of funding that safeguard heritage resources and strengthen communities.

10.1.2.1 NJ Historic Preservation Revolving Loan Fund via Bond Issue [USA]

The New Jersey Historic Preservation Revolving Loan Fund, established in 1987, is funded through State Historic Preservation Bond Issues[63], providing financing for preservation, improvement, restoration, rehabilitation and acquisition of historic properties. Eligible applicants include local government and certified tax-exempt non-profit entities. Eligible properties include historic structures listed in the New Jersey or National Register of Historic Places or structures that contribute to the significance of a listed historic district. Loan amounts range from $25,000 to $370,000. No single loan amount can exceed 15% of the revolving fund balance as of July 1st in the current fiscal year.

10.1.2.2 NJ Historic Grant Fund Financed by Corporate Tax [USA]

The preservation New Jersey Historic Preservation Fund was established by legislation (S2456) in 2016 to provide a stable annual source of matching funds from the State's Corporate Business Tax (CBT) for open space, farmland and historic preservation projects[64]. The legislation defines the percentage of funding for the historic preservation fund at 5% ($3-4 million annually depending on annual budgets). In 2021, The historic preservation fund offers two grants with allied capacity building assistance, including: Capital grants ($5,000-$750,000), Historic site management grants ($5,000-$50,000). Eligible grant recipients (including local governments and certified non-profit entities) must provide 3:1 matching funds (for every $3 grant, $1 in matching finds is required to cover project costs of $4) that may include 'in-kind benefits' such as voluntary work. Grant recipients must execute a

[63] (SNJ 2020) highlights high levels of aggregated State debt, relating to Bond issues, including many historic preservation' related Bond issues authorized by the state of New Jersey in 1987, 1989,1992, 1995, 2007, 2009.
[64] This fund was previously financed by the NJ Historic Preservation Bond Programme.

conservation easement donation with the New Jersey Historic Trust ranging from 5 years to perpetuity depending on the amount of grant received. That NJHT holds two types of Historic Preservation Easements. Term Easements cover a specific time period and are tied to properties receiving grants (Easement term 15 year for $50,000-$100,000; 20 years for $100,000- $450,000; 30 years for $450,000+). Perpetual easements are not necessarily tied to New Jersey Historic Trust grant awards and are intended to provide for long-term protection of historic resources providing tax advantage to the easement owner (NJHT 2021). A third Heritage tourism grant ($5,000-$50,000) programme is funded by 'Discover New Jersey History License Plate Fund'. Funds raised from car license plate sales are deposited in the fund and held in interest bearing accounts in public depositories. The fund offers grants to eligible applicants to develop and promote visitor ready sites at heritage tourism destinations. Funds may be invested or reinvested in such securities as approved by the State Treasurer. There are no matching fund or easement donation requirements. Since 1990, $145 million in grants have been awarded to preservation projects, leveraging additional private investment due to the matching fund requirement (www.njht.org accessed 19/2/2021).

10.1.3 National Restoration Revolving Loan Funds [The Netherlands]

National Restoration Loan Fund (Nationaal Restauratiefonds (NRF) was established in 1985 by the Ministry of Education, Culture & Science[65] and works with this ministry, the Cultural Heritage Agency of the Netherlands, local authorities, private funds and private partners. The restoration fund is a non-profit entity that administers twenty-six funds on behalf of the state, provinces, municipalities and private organizations to provide low interest mortgage and restoration loans, via a revolving fund, for purchase, restoration, sustainability work (energy saving) and adaptive reuse of monuments:

- Owner Occupier Loans: 10 year fixed at 1% or 20 year Fixed at 1.5%
- Business or commercial rental loans: 10 year fixed at 1.5% (www.restauratiefonds.nl).

The NRF also partner with local communities to create and manage area-based revolving funds and find financial solutions for adaptive reuse projects. Examples of regional partner revolving funds include Gelders Monumentenfonds and Drents Monumentenfonds. The Drents Monumentenfonds is also aligned with Monumentenwacht Drenthe (www.monumentenwachtdrenthe.nl) to assist with architectural and energy inspections.

10.1.4 National Maintenance Grant [The Netherlands]

Works to historic monuments are regulated by the Dutch Environmental Planning Act (Omgevingswet) 2019. Since 2019, the NRF manage payments for an annual maintenance subsidy

[65] The Netherlands has 55,000 national monuments and 41,000 municipal monuments.

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(grant), provided by the Cultural Heritage Agency (Ministerie van Onderwijs, Cultuur en Wetenschap), for national monument owners (replacing the previous annual maintenance tax deduction scheme). The housing subsidy amounts to 38% of costs for repair and maintenance of foundations, replacement of jointing or masonry on the facade or monumental painting work. Owners of national monuments that do not have a residential function, such as a museum, church, Castle, palace, mill or agricultural building or buildings owned by a charity may also receive of repair and maintenance subsidy based on a 6 year conservation maintenance plan. The subsidy may also be used for a feasibility study to explore the adaptive reuse possibilities, including emergency works to stabilize the building pending works. NRF provide an online information portal Wegwijs in monumentenland (www.munumenten.nl).

10.1.5 Hight Street Heritage Action Zones [UK]

Place-led Heritage Action Zones utilize grant, real estate, impact and co-giving & co-Investment Platforms. The 'Future High Streets Fund' (FHSF) administered by the Ministry of Housing, Communities and Local Government funds coordinates two initiatives including:

- High Street Heritage Action Zones (HSHAZ) within 'Historic England' High Street Cultural Program (2020-2024) administered in partnership with National Lottery Heritage Fund and the Arts Council England. £95 million government funding (including £3 million form the National Lottery Heritage Fund), administered via partnership with local government, to 68 identified high streets with underutilized and obsolete built heritage.
- The Architectural Heritage Fund (AHF) 'Transforming Places through Heritage' (TPTH) for individual buildings in the ownership of community groups or non-profit charitable entities.

AHF grants focus on place-based initiatives led by local authorities, neighborhood or community-led groups, such as community Land Trusts, where strategic regeneration programmes are underway, including Heritage Action Zones and Townscape Heritage Areas and include:

- Project viability grants up to £15,000 (100% of costs);
- Project development grants up to £100,000 (90% of costs);
- Crowdfunding challenge grants up to £25,000 pounds to match fund crowdfunding campaigns;
- Transformational project grants up to £350,000 for repair, restoration and adaptation to bring a building back into use (80% of costs);
- Community shares booster grants up to £10,000 to enable Community Benefit Societies and Co-Operatives to raise equity funds (in partnership with Co-Operative UK) (AHF 2019).

Community share projects are financed by the sale of shares to community investors for an equity share (ownership stake) in the enterprise seeking funds, rather than a donation. This method of funding is not possible for companies limited by guarantee as they are unable to issue shares. However, community heritage projects can attract investment via community share projects by raising matching funding from Co-Operative UK that supports community businesses to create better places across England (Fenn 2018).

10.2 Patterns of Use: Tax Instruments

10.2.1 Federal Historic Tax Credit [USA]

The National Park Service (NPS), in partnership with State Historic Preservation Offices (SHPO) and the Internal Revenue Service (IRS) administers a Federal historic Preservation Tax Incentive Programme, called the Historic Tax Credit (HTC)[66]. Tax credits reduce tax liability dollar for dollar and are transferable, via syndication (sold), to third party investors to alleviate cash flow issues. Investment in historic tax credits can also count towards the requirement for banks to support (termed 'Green-lining') community investment, under the Community Reinvestment Act (1977).

The programme provides 20% federal income tax credit, on qualifying expenditure, to property owners who undertake a substantial rehabilitation of an income producing historic structure, while maintaining its historic character and contributing to the economic revitalization of older communities in cities and towns, along main streets and in rural areas. The historic structure must be certified by the National Park Service. The tax credit amount can be written off over 5 years. All works to certified historic structures must conform to the 'Secretary of the Interior's Standards for Rehabilitation' (NPS 1997) and be approved by the State Historic Preservation Office (SHPO) before the tax credit can be claimed (complex tax provisions apply). Since inception in 1976, the NPS has certified the rehabilitation of over 45,000 historic structures throughout the United States, with the HTC leveraging cumulative impact, including $173.7 billion (inflation adjusted) in private investment in historic adaptation and generating 2.8 million jobs[67] (Rutgers & NPS 2020). Over the period FY1978-2019, the Federal HTC yielded a net benefit to the US Treasury by generating $38.1 bn (inflation adjusted) in federal tax revenues, compared with $32.9 bn (inflation adjusted) allocated tax credits/costs, in addition to economic impacts such as job, income and wealth creation (Rutgers & NPS 2020). These projects involve buildings that were abandoned or underutilized and in need of substantial adaptation to return them to economic viability and the majority are located in economically depressed areas (low and moderate income census tracts). The HTC has a complex application process including evaluation of the historic significance of the property, description of the proposed rehabilitation works and certification of completed works. Many states emulate the federal HTC at state level, which can be combined with the federal subsidy.

[66] National Historic Preservation Act 1966, NPS Regulations 36 CFR 67, IRS Regs. 26 CRF 1.48-12 Qualified Rehabilitation Buildings, IRS Code S.47 Rehabilitation Credit, Public Law No. 115-97 (Dec.2017)
[67] Preservation Economic Impact Model (PEIM) an economic model developed by Rutgers University Center for Urban Policy Research (Rutgers & NPS 2020).

10.2.2 Historic Tax Credit Costs, Benefits and Impact Metrics [USA]

The HTC is a tax expenditure with the public cost equal to the credit percentage of 20%. Federal tax credits require publication of annual econometric impact assessment reports to show the impact (economic, socio-cultural and environmental) return on public investment. Leverage and multiplier effects support the economic argument that the federal historic tax credit is an effective strategic investment strategy. The National Park Service (NPS) utilize the Preservation Economic Impact Model (PEIM) an economic model developed by Rutgers University Center for Urban Policy Research (Rutgers & NPS 2020). The PEIM metrics include Jobs, Income, Wealth (GDP value added), Output and Tax Revenues generated by adaptation activities for federal, state and local government agencies.

Based on the PEIM analysis of National HTC data for FY 2019 (Oct. 2018-Sept. 2019), 1042 completed historic adaptation projects, certified by the National Park Service, created $6.4 billion total private investment borne by property owners (including $5.8 billion in Qualified Rehabilitation Expenditures (QRE) under Internal Revenue Code). National HTC investments generated:

- 109,000 jobs (including construction 39,000 and manufacturing 25,000);
- $4.6 bn in income (including construction $1.7 billion and manufacturing $1.1 billion);
- $6.2 bn in GDP (including $2 billion in construction and $1.7 billion in manufacturing);
- $1.6 bn in tax revenues (Federal $1.1 bn, State $0.3 bn & Local $0.3 bn) (Rutgers & NPS 2020).

10.2.3 Tax Credits for Historic Preservation Easements [USA]

An historic preservation easement is a voluntary legal agreement typically in the form of a deed, the permanently protects an historic property. An historic property owner who donates an easement may be eligible for the federal income tax credit (NPS 2010).

10.2.4 Federal New Markets Tax Credit [USA]

The New Market Tax Credit (NMTC) (US IRC 2000) structure is designed to stimulate private investment capital to facilitate economic and community development in distressed communities. The NMTC provides a mechanism to leverage finance for the benefit of non-profit entities that have real estate development or charitable activities within low-income census tracks. Each year, Community Development Financial Institution (CDFI) Funds allocate ‘New Market Tax Credits’ to non-profit ‘Community Development Entities’ (CDE) following a competitive application process (with transparent criteria-based Impact scoring system). A CDE is an entity that serves or provides investment capital for low-income communities or people. Private investors then make an equity investment (termed ‘Qualified Equity Investment’ QEI) in non-profit Community Development Entities (chosen by CDFI fund) by channeling capital through the CDFI Fund. Investors receive a 39% tax credit over a seven-year period in return (Sanders 2009). Complex tax rules apply to modes of investment leverage depending on whether the CDE becomes an equity leverage partner with the private investor or a leverage lender, by providing debt finance to be combined with the investor's equity finance. In some cases, a new project specific fund, incorporating combined equity and loan funds, may be created to attract additional third-party leverage investment. Although the NMTC structure is aimed at taxpaying investors, it is designed to benefit tax exempt entities with the mission focus to assist distressed communities. The investor generates a positive after tax return an investment in the form of reduced taxes, while the tax-exempt entity receives a financial boost allowing impact focused projects and activities to be completed with equity funds, very little of which need to be repaid (Sanders 2009).

10.2.5 Federal Low Income Housing Tax Credit [USA]

The Low-income Housing Tax Credit (LIHTC)[68] provides developers with a non-refundable tax credit to subsidize the construction and rehabilitation costs of housing developments with strict income limits on eligible tenants[69]. Although not specifically designed to fund the adaptive reuse of historic assets, the LIHTC can be combined with federal and state historic tax credits on eligible projects. Eligibility and affordability requirements have changed periodically in response to economic market booms and slumps. Currently, the tax credit is redeemable annually for 10 years once the residential units are available for occupancy and calculated as either 4% or 9% of qualifying construction costs. The 4% credit is awarded non-competitively via the Federal Government and does not impact the state Housing Finance Authorities (HFA) annual budget allocation. That 9% credit is awarded through a competitive state allocation process where HFAs set criteria for credit eligibility. The specific criterion for each State is unique. Development projects are monitored for 30 years to ensure compliance with affordability levels. Credits are allocated from the Internal Revenue Service (IRS) to Housing Finance Authorities (HFA) at the state level which use the minimum affordability requirements detailed by the Department of Housing and Urban Development (Stamm & LaJoie 2020). Although the LIHTC is the largest source of affordable housing finance in the United States, it has been criticized as an ineffective method of providing affordable housing Due to difficulties with cost assessment and fraud risk management (Garcia Diaz 2018).

10.2.6 State Historic Income Tax Credits [USA]

By 2019, thirty-seven states have enacted a state historic tax credit that mirrors the federal program. State historic tax credits can be used for owner occupied residential rehabilitation or adaptive reuse projects, unlike federal historic tax credits. State enabled tax credits require

[68] Initiated in Tax Reform Act (1986). Amended Omnibus Budget Reconciliation Act (1993), American Recovery Reinvestment Act (2009), Tax Cuts & Jobs Act (2017), Consolidates Appropriations Act (2018) (Stamm & LaJoie. (2020).
[69] Non-refundable tax credits can only reduce tax liability until it reaches 0. By contrast, a refundable tax credit may result in a refund for the taxpayer if the credit amount is greater than the total liability (Stamm & LaJoie 2020).

publication of annual econometric impact assessment reports to show the impact return on public investment. Depending on state enabling legislation, developers can also avail of additional municipal incentives such as real estate tax abatement, heritage grants, brownfield grants, tax increment financing, low interest urban and rural loan programmes. State Historic Tax credits (income) vary from state to state, but broadly align with the Minnesota example. Many states also enable legislation for state property tax credits for protected structures (certified in a state or municipal register of historic places). For example, in Florida State property taxes are frozen at the assessed value prior to certified rehabilitation improvements for 10 years (S.196.1997, Florida Statutes).

10.2.6.1 Minnesota Historic Rehabilitation Tax Credit [USA]

In 2010 Minnesota passed the Minnesota Historic Rehabilitation Tax Credit. A state income tax credit up to 20% of qualifying expenses is available, if a property meets eligibility requirements. Alternatively, a grant in lieu of the credit, amounting to 90% of the allowable credit, is available to property owners. The tax credit is administered by the SHPO and the Minnesota Department of Revenue. The SHPO is required, by law, to provide an annual economic impact assessment for the tax credit. Based on the FY 2019, 14 properties were approved for the historic tax credit in the Minnesota area, including a mix of residential, mixed use, industrial and commercial properties. The State Tax credit generated an estimated $245.5 million in economic activity, including $76.4 million income and 1,100 jobs. For every dollar of Minnesota Historic Rehabilitation Tax Credit awarded in FY 2019, an estimated $9.78 in economic activity was generated in the state (Tuck 2020). Additional to this, the Federal Historic Tax Credit for Minnesota (FY 2019), generated activity totaled $1,161.7 million including 17,028 Jobs, $815.7 million Income, $1,098.8 million GDP, $2,169.9 Output and Total Tax Revenue $61,002.7 million (including Local $9,073, State $10,264 & Federal $41,665 (Rutgers & NPS 2020).

10.2.7 Art Bonus Tax Credits [Italy]

Since 2014, Art bonus provides a tax credit of 65% for donations that support Italian public cultural heritage. The tax credit is available to individuals, non-profit entities and businesses for charitable contributions supporting maintenance, protection and restoration of public cultural works, including monuments, historic buildings and works of art, and the work of public cultural institutions. A list of projects are published online for donors to choose from[70].

[70] Legislation DL 31.5.2014 n.83 art 1 as amended. https://artbonus.gov.it/

10.2.8 Eco Bonus, Super Bonus and Façade Bonus Tax Credits [Italy]

The National Agency for New Technologies, Energy and Sustainable Economic Development (ENEA) promote 'Eco Bonus' Tax Credits. Although not designed for cultural heritage, historic monuments can benefit. The tax credit is a personal income tax (IRPEF) or corporate income tax (IRES) credit based on a percentage of qualifying costs incurred for energy efficiency projects in existing buildings. The percentage allowance ranges from 50%-70% depending on the type of work undertaken. If a renovation project is carried out in parallel with anti-seismic measures, that qualify for the Seismic incentive, the tax credit can reach up to 85% of incurred costs. The tax credit can be claimed annually over 10 years or alternatively transferred as a single payment to the company carrying out the energy renovation work, providing an upfront payment[71]. In 2020 the Italian Government issued a new temporary tax credit to counteract the economic shock of the pandemic. The tax credit, called 'Superbonus' cover 110% of qualifying energy efficiency and structural seismic improvement expenditures incurred between 1/7/20-31/12/21 on Italian property (Relaunch Decree: Law no. 77/2020).

The 2020 Budget Law introduced a new Façade Bonus (Bonus Facciate) that provides a tax credit of 90% of the cost of building work that has an impact on surface heat retention or involves plastering of a heat loss surface, provided the facade is visible from street level. This new incentive is applicable to structures in designated heritage zones (Italian Revenue Agency Circular 2/E 2020).

10.2.9 Monument Rent Tax [Croatia]

'Monument Rent' is a mandatory tax, prescribed by the national law, on the use of cultural heritage, to leverage state revenue for the protection of cultural heritage. Local government budgets receives 60% of the tax revenue and the state budget receives 40%. The tax is levied based on:

- the net internal area of commercial premises, at a rate set by local government bodies (ranging between 1-4 HRK per square meter) and
- 0.05% of wholesale or retail sales of specified consumer goods.

Production activities and Beneficiaries of the concession are exempt from the tax. The tax has been temporarily suspended during COVID-19. Dubrovnik and Split, coastal UNESCO protected cities, are the biggest collectors of monument rent although, raised tax revenues can also flow to nearby towns[72] (http://www.geoportal.kulturnadobra.hr).

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[71] https://www.efficienzaenergetica.enea.it/detrazioni-fiscali/ecobonus.html
[72] Presentation by Pia Sopta, Ministry of Culture & Media, Croatia, EC workshop on complementary funding for cultural heritage 25-16 January 2021.

10.2.10 Living City Initiative Heritage Tax Incentive [Ireland]

The Living City Initiative (LCI) is a place-led tax incentive scheme, in place from May 2015 to December 2022, to assist and encourage people to live in historic inner-city areas, including pre-defined 'Special Regeneration Areas' (SRA) in Dublin, Cork, Limerick, Galway, Waterford and Kilkenny[73]. That tax incentive allows owners and investors to claim tax relief for qualified expenditure on the refurbishment and/or adaptive reuse of residential property including street level commercial property. The tax relief takes the form of either an income tax relief for owner occupied residential property or a capital allowance (15% per annum for years 1-6 and 10% in year 7) for rented residential or commercial property. The tax incentive is designed to upgrade existing accommodation and to bring derelict and disuse properties back into use. In order to qualify for this scheme, a residential property must have been built before 1915 (the date criteria does not apply to commercial property) And be located in a Special Regeneration Area (SRA). qualifying expenditure requires a minimum spend of €5,000. There is a cap of €200,000 on commercial elements of the adaptive reuse. Initially in 2015 the residential tax incentive only applied to owner occupiers. Due to the poor take up of the incentive, the residential tax incentive was expanded to include the residential investment sector in 2017.

10.3 Patterns of Use: Real Estate Instruments

10.3.1 Repair and Leasing Scheme [Ireland]

That Repair and Leasing Scheme (RLS) has been developed under Rebuilding Ireland programme to assist private property owners to bring derelict and vacant properties back into community use. Where a property requires repairs to bring it up to the standard required for residential use, the RLS will pay for the repairs upfront in return for the property being made available as social housing for a minimum of five years under either a direct lease or Rental Availability Agreement with the Local Authority. The cost of adaptation and repair will be ultimately repaid by the owner, by offsetting it against the rental income over the period of the lease agreement. The maximum fund available is €60,000, inclusive of VAT. Although not directly designed for heritage assets, this scheme can be used for cultural heritage adaptive reuse projects [74].

10.3.2 Social Value Leases [UK]

Access to affordable real estate remains a key challenge for developing community orientated enterprises that underpin a sustainable economy. Local government agencies in the UK are looking at ways public property assets, either at portfolio or individual building level, can add value to local communities. New approaches to real estate management, include enabling property rental levels

[73] https://www.revenue.ie/en/property/living-city-initiative/index.aspx
[74] https://rebuildingireland.ie/repair-and-leasing-scheme/

to reflect the social value and local impact generated by tenants, via Social Value Leases (SVL). For example, Haringey London Borough Council is piloting a Community Wealth Building Lease that quantifies the social value delivered by a tenant and directly relates to a reduction in market rent payable. The discount is only awarded upon proof of delivery which ensures that social value is monitored and appropriately rewarded over the life of the tenancy. To facilitate intentional impact measurement, the Council is funding urban and community regeneration impact assessments (Social Life 2018). London Boroughs of Waltham Forest and Islington are pioneering value-driven approaches to granting community access to public property portfolios on flexible and affordable leases based on developing social impact assessment tools (Community Benefit Assessment Tool)[75].

10.3.3 Re-zoning Land Value Capture via PPP [Australia]

Voluntary Planning Agreement (VPAs)[76] can be created by the rezoning of land by state agencies, including local government agencies, in partnership with beneficiary private developers, who fund infrastructure and public amenity projects in return. A VPA is a form of land value capture that recognizes the added value generated for a developer when a site is rezoned to a more valuable land use. For example, property developer Greenland Australia negotiated a VPA with the City of Sydney Local Government Authority for their 67 storey (235 meter) residential development at 115 Bathurst Street in Sydney CBD. In exchange for planning bonus, the agreement includes the provision of a 2,000 sq/m mixed use Community Creative Hub, valued at Aus$25 million, which is rented back to the city at a nominal rent for 99 years. The Hub will open in 2021. (https://www.cityofsydney.nsw.gov.au/cultural-support-funding/bathurst-street-spaces, accessed 23/2/2021). While VPAs are traditionally created for public infrastructure uses such as civic amenities, open spaces, transport and affordable housing, there is a potential to utilize the concept for cultural heritage adaptive reuse projects. In addition, the City of Sydney Environmental Plan incorporates a competitive sustainable design excellence process at the concept design stage of new developments, and adaptive renewal of existing structures, in return for a planning bonus increasing allowable area or height by up to 10% (NSW 2012).

10.4 Patterns of Use: Capacity Building and Risk Sharing Instruments

10.4.1 Cultural & Creative Spaces PPP in Friuli Venezia Giulia Region [Italy]

In 2020 Friuli Venezia Giulia Region (Regional government office of Culture, Training & Productive Activities) initiated a public private partnership, at the behest of private business

[75] https://www.london.gov.uk/city-hall-blog/how-london-boroughs-are-securing-social-value, accessed 23/2/2021
[76] Created under the Environmental Planning and Assessment Act 1979.

enterprise. A fund of €10.5 million was made available for a competitive public call (2020-2022) for cultural heritage projects that incorporate cultural, creative and educational activities in the region.

10.4.2 Certified Local Government (CLG) Community Partnership Program [USA]

The Certified Local Government (CLG) program is administered by the National Park Service (NPS) and the State Historic Preservation Offices (SHPO), in partnership with Local, State and governments, to build capacity and provide financial assistance to communities to safeguard the historic character of their neighbourhood. Each local community works through a certification process to become recognised as a CLG. Once certified, the CLG becomes an active partner in the Federal Historic Preservation Fund Program. States are required to give at least 10% of their funding to CLGs as subgrants for surveys, National Register nominations, rehabilitation work, design guidelines, training programmes and feasibility studies. State and NPS provide training to CLG's to build their capacity.

10.4.3 Copenhagen Public Assets Corporation via LVC, PPP & JV Scheme [Denmark]

Copenhagen City & Port Development Corporation (By og Havn, n.d.)[77] is a publicly owned privately managed entity, that leverages public assets through Land Value Capture (LVC), Public Private Partnership (PPP) and Joint Venture (JV) schemes. The City and Port authority blends financial instruments of the marketplace, with a statutory mandate to maximize revenues (profits). The revenue yield is used to service the debt on the citywide Metro system.

City & Port Authority uses Land Value Capture to leverage the value of public assets by rezoning development land. In parallel, the City and Port Authority enters into a series of collaborative Public Private Partnerships and Joint Venture schemes with private investors and developers to develop and manage developments. The statutory mandate means that the city in Port Authority is not subject to traditional public sector regulations such as tendering rules and prohibitions against establishing joint venture schemes. The City & Port Authority leveraged investment capital via joint venture schemes with risk averse, capital rich, pension funds such as ATP n.d. and Pension Denmark n.d. in addition to traditional commercial real estate investors such as Nordic Real Estate Partners n.d. (Noring 2019).

In order to forward fund the Metro infrastructure system, the city and Port Authority takes out loans, on favorable terms from the Denmark National Bank, against the future increased value of the rezoned land assets. This debt will be funded by an additional property tax imposed on residential and commercial land-owners (within a 50 meter radius of new Metro stations) to capture land value appreciation on completion of the Metro development. This is a profit-sharing tool in the sense that the City & Port Authority will also receive a portion of the property value increase generated by proximity to the new Metro stations. In addition to tax revenue, the city in Port Authority benefit from

[77] https://byoghavn.dk/

sale and lease revenues stemming from their long-tern regeneration strategy including re-zoned and re-purposed land (land reclamation took place in the North Harbour using surplus soil from underground metro tunnel construction) (Noring 2019).

10.4.4 Hamburg Special Assets Class (SAC) Land Value Capture [Germany]

Hamburg City government created a hybrid version of a Public Asset Corporation to enable the long-term regeneration of the port area (planned 1997-2030). The Corporation for Harbor and City Development (CHC) was converted into 'Hafencity Hamburg GbmH'[78] (HCH) following the transfer of their real estate asset holdings into an autonomous legal entity termed 'Special Asset Class'. HCH overseas the urban regeneration of Hafencity and is the legal managing entity over the special asset class holdings. To create a revenue stream for HCH, the city government transferred ownership of the Hafencity metro construction scheme which is financed by local tax revenues. HCH can draw down loans from commercial banks using the assets of the special asset class holdings as collateral. Land Value Capture (LVC) increases the value of the port assets by rezoning the land to residential and commercial use. The City of Hamburg local government, as umbrella owner of both the HCH and the special asset class holdings, guarantees loans on favorable terms from commercial banks to ensure private capital leverage takes place. Infrastructural investment, such as public realm and civic building development, further increases the value of the assets within Hafencity. HCH operates within a 30 year budget plan, although annual adjustments are made in consultation with local government. HafenCity does not have the legal remit to engage directly in joint venture schemes and can only engage with private developers in an advisory capacity (Noring 2019).

10.4.5 Community Development Financial Institutions Fund [USA]

The Community Development Financial Institutions (CDFI) fund was established by the Riegle Community Development and Regulatory Improvement Act 1994[79]. The mission of the fund is to expand economic opportunity for underserved people and communities by supporting the growth and capacity of a national network of community development lenders, investors and financial service providers (Theodos & Edmonds 2020).

Since inception, the CDFI fund has awarded in excess of $3.9 billion to community development organizations and financial institutions and enabled tax credit allocations of $61 billion. It has also guaranteed over $1.7 billion in bonds through the CDFI bond guarantee programme. The fund incorporates a number of programmes, including:

- Bank Enterprise Award program providing monetary awards two federally insured banks that serve economically distressed communities and CDFIs;

[78] https://www.hafencity.com/en
[79] Riegle Act: P.L. 103-325

- Capital Magnet Fund providing awards to CDFIs and non-profit affordable housing organizations for the development, preservation, rehabilitation and purchase of affordable housing and for related economic development in low-income communities.
- CDFI bond guarantee program providing long term capital for CDFIs by guaranteeing bonds issued to support CDFI investments;
- Community Development Financial Institutions program providing both financial assistance and technical assistance to help certified emerging CDFIs to expand their services and build their technical capacity;
- Native Initiative providing a Native American CDFI assistance program that provides financial and technical assistance to build capacity of CDFIs serving native communities;
- New markets tax credit program providing tax credit allocation authorized by certified community development entities enabling them to attract investment from the private sector and invest the funds in low-income communities (US Department of Treasury 2021).

Community Development Financial Institutions (CDFIs) are community based insured legal entities that provide a 'bottom-up' approach to community investment and revitalization for underserved communities and distressed low-income areas, including:

- Community Development Banks (for profit);
- Community Development Credit Unions (member owned co-operative);
- Community Development Loan Funds (non-profit);
- Community Development Venture Capital Funds (for-profit and non-profit entities that provide hybrid debt/equity social enterprises) (US Department of Treasury 2021).

10.4.6 Community Equity Share, Boston [USA]

In 2016 the Boston Ujima project[80] was created as a pilot Democratic Investment Fund in the form of an Economic Development and Community organization collective. During the pilot phase, the founders used a crowdfunding platform called KIVA to raise $10,000 from community members, which was matched by a collaboration of local impact funding networks.

The fund is currently working to raise$ 5,000,000 in community investment to finance local business owners. The fund has three tiers of investment for equity share notes depending on the level of risk and return timescale:

1. Working class people of colour who can invest as non-accredited investors in Massachusetts with purchases in the region of$ 50 to$ 10,000;
2. Accredited investors from the County and non-accredited investors in the state of Connecticut, Maine, Massachusetts, New York and Rhode Island. They can invest $1000 to $250,000
3. Philanthropic investors who can invest in excess of $5000.

[80] Boston Ujima community Share Project: https://www.ujimaboston.com/

The fund expects 1st tier investors to receive c. 3% per annum after a three-year term although returns are not guaranteed. The 2nd tier investors can expect a target return of 2-3% at maturity after a term of three to seven years. The 3rd tier of philanthropic investors are expected to receive a target return of 1.5% annually after a seven year term. The fund is in the process of establishing a loan loss reserve supported by philanthropic backers to mitigate risk for first tier investors (Theodos &. Edwards 2020).

10.5 Patterns of Use: Investment Funds, Trusts and Foundations

Real estate investment funds, Heritage Trusts and Foundations enable the use of Grant, Tax, Debt (Bonds & Loans), Equity, Risk Mitigation, Capacity Building and Impact Instruments in addition to Co-Giving & Co-Investment Platforms.

10.5.1 Calvert Impact Capital Inc. & Calvert Impact Assets [USA]

- Calvert Impact Capital
    - Bonds, Loans, Capacity Building
- Calvert Impact Assets
    - Donor advised mutual fund

Calvert Impact Capital (CIC) Inc., (www.calvertimpactcapital.org) previously Calvert Social Investment Foundation, evolved from a certified Community Development Financial Institution (CDFI) launched 1995 with a mission to create a more equitable and sustainable world. The non-profit entity, with total assets currently valued at $575 million (CIC 2020), raises capital via i) Calvert Community Investment Note since 1995 and ii) co-lending syndication services since 2017. Calvert Giving Foundation' a donor advised mutual fund launched in 2000 became a separate autonomous fund 'Impact Assets' in 2010.

The Calvert Community Investment (CCI) Note is a bond instrument, launched in 1995, with support from Ford, McArthur and Mott foundations. The Note raises funds from a diverse range of individual (min. $20) and institutional investors to finance a global portfolio of high impact community-based intermediaries and funds that onward finance mission driven social enterprise and community activities, excluded from traditional capital markets.

Community investment notes are sold directly on the Calvert Impact Capital online investment platform (calvertimpactcapital.org/invest), indirectly by brokers and online via MicroPlace. Since inception, the CCI Note has raised $2 billion from circa 18,000 investors and serviced over 500 borrowers with 100% investor repayment rate (CIC 2020). Funds are used for loan capital (micro and bridging finance). Interest earned on the loans covers the interest obligations to investors and makes a contribution towards operating expenses of the foundation, with the remainder being raised from grants and donations. This taxable unrated medium-term note allows investors to select a term of 1 to 15 years with rates from 0.5 to 3.5%. The notes are unsecured (without collateral) in case of default (CIC 2020).

In 2017, Calvert Impact Capital launched a 'syndication service' for institutional co-lenders offering a diverse range of risk/return profiles and competitive financial returns. The syndication service acts as a go-between to reduce friction between the demand and supply of capital. Since inception, the syndication service has collaborated with 44 lenders to leverage $300.08 million in funds (CIC 2020).

Capital leveraged from the Note Programme and Syndication Services is channeled, via loans and investments, to financial intermediaries and funds to enable them to expand equity in the communities they serve, that cannot access traditional financial markets. The strategy of channeling funds through financial intermediaries and funds is that these entities can potentially use Calvert Impact Capital funds to leverage and aggregate additional capital to onward lend to final recipients such as affordable housing developments, community facilities, SMEs and entrepreneurial community projects. CCI assists borrowers to build capacity within their business models to sustain a track record of performance, repayment and positive returns. This capacity building element facilitates borrowers to attract further capital in the future through traditional financial markets. In 2019, Calvert Impact Capital distributed $108 million in loans to financial Intermediaries and funds, which then onward dispersed $5.02 billion in loans to final recipients across the globe. In 2019, 64% of the Calvert portfolio was invested in the US and 36% internationally, across 107 countries (CIC 2020).

10.5.1.1 Calvert Intentional Impact Metrics

Calvert Impact analysis is categorized in relation to investment leverage to underinvested communities addressing social inequality and economic deprivation including funding affordable housing, community development, education, health, microfinance, small businesses. Strategic investment in climate change mitigation and adaptation is analyzed within the categories environmental sustainability, renewable energy and sustainable agriculture. All impact assessment categories within global communities are aligned with the SDGs (www.calvertimpactcapital.org/portfolio/sdgs).

Calvert measures three layers of impact, utilizing both internal and external (IRIS+ & Impact Management Projects - IMP5) data sources, through the investment lifecycle:

- Investor impact: measuring benefits individual & institutional investors & co-lenders;
- Portfolio impact: measuring the value & sustainable growth opportunities that leveraged capital provided to borrowers;
- Community impact: measuring inequality and climate change solutions achieved from capital invested in global communities (CIC 2020).

Investor impact metrics reflect the outputs and outcomes on investors and co-lenders, based on an internal investor survey and metrics on Note sales. Portfolio impact metrics reflect borrower performance, based on internal and external analysis and borrower reporting. Community impact metrics reflect borrowers' outputs and outcomes on the environment and in the communities they serve, based on external analysis. Portfolio and community impact reporting utilizes industry aligned indicators and best practices including IRIS+ and the Impact Management Project (IMP)5 dimensions of impact to collect relevant impact data and alleviate their reporting burden on borrowers. Due to the blending of financial instruments and collaborative pooling of funding initiatives for community-based projects, measured metrics relate to the full community impact, rather than the impact of individual funding enablers.

Calvert Impact Capital (CIC) supports business practices that contribute to biodiversity conservation, the sustainable use of natural resources and climate change mitigation and adaptation in Latin America and the Caribbean. For example, with Finance in Motion, a German based fund manager, CIC co-lends funds to the SANAD fund for MSME, which provides finance to institutions in the Middle East and North America (MENA) for on-lending to micro, small and medium enterprises and low-income households (www.calvertimpactcapital.org/portfolio/list.

10.5.2 Cultural Heritage Finance Alliance (CHiFA) [USA]

CHiFA[81] is a non-profit, public benefit, social enterprise entity that seeks to create a link between the non-profit NGO sector and the for-profit private investment and development sector. In collaboration with the Foundation of Philanthropic Funders (FJC)[82], CHiFA works with public, private and non-profit owners to enable global heritage-led regeneration projects that integrate urban planning, property development, heritage conservation, impact investing and community-based social enterprise. Based on CHiFA's 'Theory of Change' the alliance provides capacity building support to community-based initiatives, incorporating cultural heritage assets, by advising on capital aggregation, land use planning, resource efficiency, carbon reduction, risk management at different stages of development. The alliance acts as a catalyst to encourage other social enterprise ventures in the marketplace tackling social deprivation, climate change and sustainable consumption challenges (CHiFA 2021).

The Cultural Heritage Finance Alliance published a series of in-depth best practice 'Case Studies in Heritage Regeneration' (CHiFA 2021), available online, including Medina of Fez (Morocco), Historic Centre of Mexico City (Mexico), Conservatorio (Panama), Doh Eain, Yangon (Myanmar), Architectural Heritage Fund (UK).

Link: https://issuu.com/bonnieburnham/docs/case_studies_in_hertage_regeneration

81 Cultural Heritage Finance Alliance (CHiFA) https://heritagefinance.org/
82 Foundation of Philanthropic Funders (FJC) https://fjc.org/

10.5.3 IPUT plc. - Unlisted National QIAIF and International AIF [Ireland]

IPUT plc is a commercial property fund, founded in 1967. The investment objective of the Fund is to optimize investment returns for Shareholders by investing in Irish commercial properties and by actively managing the portfolio. The Fund seeks to invest in assets with core income and/or added value prospects and strives to reduce risk by investing in a diverse range of properties and sectors. The Fund comprises approximately 48% international capital with the remainder derived from Irish Institutional Funds, Charities, Universities and Irish Investment managers. The Fund leverages Debt in the market place using Revolving Loans and Bonds, including:

- Institutional shareholder investments;
- US Private Placement Market investments (US Private Bond Market)
- Revolving Credit facility from Wells Fargo Bank of €300 million, including €200 million Green Finance.
    - €75 million at 1.1% repayable by 2030 and €125 million at 1.25% repayable by 2032 (PFW 2020).

The designated company is incorporated[83] as an unlisted, limited liability umbrella investment company with variable capital and segregated liability between its sub funds (IPUT manages one sub fund). The company is authorized and regulated by the Central Bank of Ireland as a Qualifying Investor Alternative Investment Fund (QIAIF) and as an internally managed Alternative Investment Fund (AIF)[84]. The IPUT Property Fund, incorporates a large portfolio of institutional grade commercial real estate, with core income and added value prospects and seeks to reduce risk by investing in a diverse range of property typologies. The portfolio has a net Asset value of €2.7 billion with an annual dividend yield of 3.8% (Q4 2020) (IPUT 2020).

The Fund adopts a prudent approach to debt and may borrow up to 20% of its gross asset value to facilitate investments. From a risk perspective, IPUT maintains a very low Loan to Value (LTV) ratio of 8% (PFW 2020). IPUTs mission focused investment strategy places high emphasis on a long-term focus for shareholder value, in parallel with positive impact for occupiers and local communities, stemming from design, sustainability and digital technology innovation. By sustainably investing in the public realm, adjacent to portfolio properties, the fund makes an additional positive contribution to the social and cultural fabric of Dublin city (IPUT 2019).

10.5.3.1 IPUT plc. Sustainability Strategy & SDG Alignment

The company has adopted a Responsible Investment Strategy in relation to the Fund's portfolio and investment and development activity[85]. As part of the Strategy, the Company developed a detailed programme to implement its Environmental, Social and Governance (ESG) initiatives which include

[83] Companies Act 2014: Part 24, S. 1394 & 1395.
[84] Under the Alternative Investment Fund Managers Directive (AIFMD).
[85] Inputs from Zara Walsh, Head of Valuations and Performance Reporting, IPUT plc. March 2st 2021.

KPIs and targets in the areas of climate change, health and wellbeing, the circular economy, accessibility and disabilities, and education and skills.
The core initiatives within the Strategy include:
1. Climate Action: implementation of a programme to manage the risks and opportunities posed by the transition to a low carbon economy in line with the Intergovernmental Panel on Climate Change (IPCC). Key elements of the programme include:

- establishing scope 1, 2 and 3 targets to align with the Science-Based Targets initiative methodology (up to 2050);
- committing to only owning and developing assets operating at net zero carbon by 2030, in line with the World Green Building Council's (WGBC) Net Zero Buildings initiative;
- aligning Company disclosures with the recommendations of the Financial Stability Board's task force on climate-related financial disclosures;
- maintaining membership with the RE100 and EP100 certifications for renewable energy initiatives by the global non-profit Climate Group organisation.

2. The Circular Economy: consideration of the overall lifecycle of assets within the portfolio from design to disposal. The strategy promotes resource efficiency and innovation to preserve products and materials at their highest use for as long as possible by:

- understand the mechanics of implementing the circular economy design principles for new property developments and major refurbishments;
- setting targets to reduce waste and increase recycling rates across all of the Fund's properties; and
- engage with the Company's supply chain and key stakeholders to consider ways to repurpose, reuse, and disassemble materials.

3. Health and Wellbeing: proactive management the Fund's portfolio to create workspaces with a focus on the health and wellbeing of tenants by:

- engaging with tenants to establish a structured approach, following international best practice, to manage wellbeing programmes across the Properties;
- upgrading amenities that enhance the tenant's experience and enjoyment of a property; and
- improving properties and the surrounding public areas and to create spaces for both tenants and the wider community to enjoy (IPUT 2019, 2020).

The Company has also aligned itself with the United Nations Sustainable Development Goals (SDGs) and 7 of the 17 SDGs (being SDGs 3, 9, 11, 12, 13, 15 and 17) have been incorporated within the Strategy. The Company established a responsible investment steering committee that has overall accountability and oversight for the implementation of the Strategy.

The Company discloses its performance on Environmental, Social and Governance (ESG) issues through annually reports on its policies and practices which incorporate ESG risks and sustainability factors in its investment decision making process. IPUT is a signatory to both the UN Principles for Responsible Investment (PRI) and the World Green Buildings Council (WGBC) with a pledge to operate the portfolio at net zero carbon by 2030 (https://www.worldgbc.org/commitmentsignatories). IPUT is also a member of the INREV European platform which provides sustainability guidelines for Investors in Un-Listed Real Estate Vehicles (https://www.inrev.org/guidelines/module/sustainability#inrev-guidelines).

IPUT plc real estate impact metric instruments relating to new and adaptive reuse developments include:

- GRESB Participant: Global Real Estate Sustainability Benchmark for Real Assets (score 77 in 2020);
- LEED Certification sustainability standards targeting Gold or Platinum rating;
- WELL Certification for health and wellbeing;
- WiredScore Certification;
- RESET Air Certification (IPUT HQ);
- Certification: Building Energy Rating (BER) Certification under Energy Performance Building Directive EPBD Ireland;
- Committed to GHG reporting within RE100 as part of Net Zero Climate Programme of Irish Green Building Council (IGBC);
- Signatory to Net Zero Carbon programme of World Green Building Council;
- Real-time energy performance monitoring (IPUT 2020).

Examples of IPUT engage with global and local communities include:

- Engagement with global research publications, in partnership with ARUP, relating to circularity in the built environment: 'Making Place: The Recalibration of Work, Life and Place' (IPUT & ARUP 2020) and 'Shaping our Cities' (IPUT & ARUP 2019);
- Public realm investment of €3 million to reactivate public places for local communities in Earlsfort Terrace and Wilton Park, Dublin;
- Partnership with Teagasc College of Horticulture supporting city biodiversity projects;
- Provision of capacity building project management services to Simon Community inner city homeless medical treatment facility (IPUT 2019)
- Parton of the Arts:
    - Artist in Residence programme and public augmented reality art exhibition in Wilton Park in partnership with Royal Hibernian Academy (RHA);
    - Patron of Graphic Gallery Studio (60 year old printworks);
    - Patron of Irish Arts Review publication on art, culture and architecture (IPUT 2019).

10.5.4 Hibernia Real Estate Investment Trust - Listed REIT [Ireland]

The Real Estate Investment Trust (REIT) structure in Ireland was enabled by legislation in 2013. Once a REIT meets the conditions of the legislation, it will not be liable to corporate tax on income and capital gains arising from its property rental business though it is obliged to pay out the majority of its rental profits as dividends. This ensures there is no double taxation for shareholders and that their financial returns are similar to those they would gain from investing directly in property. Legislative conditions include:

- 75% of the market value of income and assets must relate to the assets of the property rental business;
- 85% of the property income, in each accounting period, must be distributed to shareholders as a property income dividend;
- Dividend distributions from rental income and gains are subject to withholding tax of 25%;
- The REIT must maintain a loan to value ratio of below 50% and no property within the portfolio can account for more than 40% of the total market value of the portfolio assets;
- Within two years of a disposal of an asset of the property rental business, the sales proceeds must be either reinvested or distributed as income;
- There is no exemption for VAT, property taxes or stamp duty;

At the investor level, individual investors (shareholders) are subject to income tax at normal rates unless tax exempt (e.g. EU pension funds). Corporate investors are liable to 25% corporation tax on income distributions and will be liable to capital gains tax at a rate of 33% on the disposal of shares. [Non-resident investors are not liable to Irish capital gains tax on disposal of shares because the REIT is a publicly listed company].

Hibernia is an Irish Real Estate Investment Trust (REIT) established in 2013. The REIT raised capital by listing on Euronext Dublin and the London Stock Exchange and uses this permanent capital, together with modest levels of financial borrowings to generate long-term returns for shareholders. Hibernia's aim is to grow its recurring income over time and it maintains a balanced portfolio of income-generating assets and assets held for future redevelopment. Periodically it sells assets and recycles the capital into new opportunities to maintain this balance of stable income and redevelopment projects. Hibernia's primary focus is on the Dublin Central Business District office sector and it also has a smaller allocation to residential apartments and industrial units in Dublin. Based on the Annual Report 2020, the Hibernia property portfolio has a value of €1,465 million, showing a total property return of 5.9% and annual dividend per share of 4.75 cent. The portfolio carries a net debt of €242 million with a Loan to Value (LTV) ratio of 16.5% (Hibernia 2020a).

10.5.4.1 Hibernia REIT Sustainability Strategy and SDG Alignment

In 2021 Hibernia REIT launched its Sustainability Statement of Intent out to 2030 entitled Transforming Dublin Responsibly[86]. The statement consists of three key principles which links back

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[86] Inputs from Neil Menzies, Sustainability Manager and Thomas Edwards-Moss, Chief Financial Officer, Hibernia REIT plc. April 12th 2021.

to its business strategy and which are aligned with the United Nations Sustainable Development Goals (SDGs), namely SDGs 3, 4, 7, 8, 11, 12 and 13. The three principles are:

1. Become a net zero carbon and climate resilient business by 2030
    - By 2030 reduce overall carbon emissions by 30% and operational carbon emissions by 40% against a 2019 baseline
    - Set an internal carbon pricing mechanism to drive behavioural change and fund the improvements to transition existing assets towards net zero carbon
    - Offset residual carbon from 2030 onwards once all other feasible measures have been implemented
    - Put climate change resilience at the centre of the business strategy, aligning with the recommendations of the TCFD, and incorporate ESG targets into remuneration
2. Provide spaces that prioritize the environment, health and wellbeing
    - Prioritize health and wellbeing considerations in all spaces
    - Promote initiatives that maintain an exceptional standard of health and safety with employees, occupiers and supply chain partners
    - Send zero waste to landfill and achieve 70% recycling across all of managed assets by 2030
    - Ensure biodiversity net gain for all major developments and refurbishments by 2030
3. Create long-term positive social impact through our operations
    - Better understand the social value that the business brings to local communities by 2025 and then set long-term targets to 2030
    - Partner with and support charity organizations and groups dedicated to resolving issues that directly impact the local communities

Manage employees in an inclusive and fair manner that promotes development, collaboration, creativity and diversity

In 2020 Hibernia carried out a stakeholder assessment to build a materiality impact matrix to align with its key sustainability principles and inform its sustainable investment and risk management strategy, additional to its ESG intention.

Hibernia real estate impact metric instruments relating to new and adaptive reuse investments and developments include:

- EPRA (European Public Real Estate) Sustainability Reporting Metrics
    - EPRA sBPR Gold award for quality sustainability disclosures[87]

[87] In 2020, Hibernia engaged ‘Upstream Sustainability Services - JLL’ to provide independent assurance of its energy, water and waste performance, GHG emissions and social & governance performance measurements relevant to its EPRA disclosure (Hibernia REIT 2020b).

- GRESB Assessment: Global ESG Benchmark for Real Assets, achieving 4 Stars, out of maximum 5 in 2019 (Hibernia REIT 2021)
- LEED Certification sustainability standards targeting Gold or Platinum rating;
- Building Energy Rating (BER) Certification under Energy Performance Building Directive EPBD Ireland;
- Net zero carbon commitment aligned with the Paris Agreement, which is based on pursuing efforts to limit global warming to 1.5°C
- Signatory to Net Zero Carbon programme of World Green Building Council;
- WiredScore Certification;
- Real-time energy and indoor air quality performance monitoring;
- CDP (Disclosure Insight Action) - forthcoming 2021 (Hibernia REIT 2020b, 2021).
- Alignment of annual disclosures with the recommendations of the Taskforce on Climate-related Financial Disclosures (TCFD)

Examples of Hibernia engagement with tenants and local communities include:

- Environmental Working Groups with tenants of all buildings hosted quarterly to drive sustainability improvement measures collaboratively
- Tenants sustainability newsletters issued quarterly to inform tenants on sustainability performance of the portfolio and ESG related topics of interest
- Step Up initiative to promote health and wellbeing rolled out across all managed buildings
- Think Greener initiative rolled out across all managed buildings to drive environmental awareness
- ISO 45001 and ISO 14001 certification for all managed buildings to drive Environmental Health and Safety
- Energy reduction measures in buildings include roll out of LED lighting, solar PV panel installations and mechanical and equipment upgrades to improve efficiency
- Urban honey harvest: Beehives installed on a number of portfolio properties, supporting the All-Ireland Pollination Plan. The bees are a vital part of Dublin's ecosystem, pollinating local plants and encouraging biodiversity. The first harvest in 2019 was shared with tenants.
- Creation of bio-diversity 'Living Wall' on portfolio property (1 Sir John Rogerson's Quay, Dublin);
- Bespoke events of local communities and tenants in portfolio properties including concerts and cultural events in Windmill Quarter Townhall, Dublin (Hibernia REIT 2020b).

10.5.5 Nico Echo Park Community REIT [USA]

Nico Echo Park is a Community Real Estate Investment Trust (REIT) and Benefit Corporation[88], based in Los Angeles. The neighborhood REIT was launched in March 2020 and incorporates a portfolio of three mixed use properties, including low-income apartments and retail units, with a total asset value of circa $30 million.

The neighborhood REIT raises capital by selling community shares (min. $100) on Nico's digital app. The portfolio has two classes of investment shareholder: local and non-local. Local is defined as residents in 10 designated zip codes in the vicinity of Echo Park neighborhood. Local shareholders have better redemption terms. As a public company, Nico Echo Park can raise up to $50 million per annum via a tier 2 Regulation A+ securities offering from qualified investors, such as pension funds. The REIT also raised debt capital on two of the properties from Fannie Mae (Theodos & Edmunds 2020). The neighbourhood REIT published its first impact report in 2021 (Nico Echo Park 2021).

10.5.6 Grangegorman Development Agency (GDA) [Ireland][89]

Grangegorman urban quarter regeneration project incorporates 29 hectares (73 acres) of underutilized land in Dublin's inner city. Grangegorman is located in a part of the city that has experienced historically high levels of social and economic deprivation. The brownfield site was in public institutional use as a psychiatric hospital until its closure in 2013, including a former penitentiary building. A number of protected heritage structures create a distinct sense of place within the site including: Lower House (1810-15), Clocktower building (1812-16), Laundry and Mortuary (1895-1900), Top House (1848-54), Female House (1866), St Laurence Catholic church and Male & Female infirmaries (c.1850), Church of Ireland (1860) chapel, parts of the boundary wall (early 19th century) and an underground tunnel constructed (c.1836) (GDA 2011d).

The Grangegorman Development Agency (GDA) was established, under the Grangegorman Development Act (Irish Government 2005) to procure regeneration of the urban quarter including strong physical links to the city and the integration of protected structures with new buildings and landscape settings. The Grangegorman complex includes health care facilities, university campus, primary school, library and complementary commercial development. Procurement options include a combination of traditional Procurement (based on design and bill of quantities), Design and Build (DB) contracts and Public Private Partnership (PPP) incorporating Design, Build, Finance and Maintenance (DBFM) (GDA 2008a).

The adaptive reuse of onsite protected structures are delivered via traditional procurement, involving GDA heritage-led design and specialist conservation architects. For example, the adaptive reuse of the abandoned Lower House, previously Richmond lunatic asylum (built 1815), designed

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[88] Nico Echo Park is a Community Real Estate Investment Trust (REIT) https://mynico.com/about/
[89] The GDA case study was completed with the assistance of Una Sugrue, Senior Conservation Architect / Project Coordinator and Peter O'Sullivan, Director of Finance, Grangegorman Development Agency, April 15-16th 2021.

by Frances Johnston, incorporates a three storey over basement protected structure. In 2014, Grangegorman Development Agency (GDA) undertook stabilization works including the replacement of the roof structure. With the backing of the Department of Education, the building has been brought back into use as a student focused hub within the TU Dublin campus. The Lower House is connected to the Grangegorman district heating network and is the first building on site to take heat from the recently commissioned energy center, which will overtime provide energy from renewable sources. The Lower House now incorporates a large dining hall, coffee shop, student union offices, dance studio, indoor fitness studio and piano practice rooms. GDA also collaborated with Grangegorman Histories to curate a series of large-scale images of photographs and drawings, revealing the historical context of the building and its setting, for display within the building (GDA 2021).

10.5.6.1 Grangegorman Planning Strategy

Moore Ruble Yudell (MRY) USA and Duffy Mitchell O'Donoghue (DMOD) were appointed by the GDA to prepare a spatial Masterplan for Grangegorman Urban Quarter, following an international design competition. The master planning stage and subsequent development stages include interaction with all key stakeholders including. Local community involvement. The Master Plan won six international design awards since it was completed in 2008 (GDA 2008a) and includes a detailed cultural heritage conservation strategy (GDA 2008b) and environmental sustainability strategy (GDA 2008c).

The site was designated as a Strategic Development Zone (SDZ) including the pre-approval of a Planning Scheme in 2011 (GDA 11a), reviewed in 2018 (GDA (2018), ensuring no planning delays as each aspect of the development rolled out. The Planning Scheme, prepared by the GDA and implemented by Dublin City Council, incorporates detailed strategies relating to cultural heritage conservation (GDA 2011c, 2018) and the retention, repair and adaptive reuse of eleven protected structures on site, the boundary wall and an underground tunnel (GDA 2011d, 2018). New buildings will achieve A3 energy rating, although problems have arisen in funding energy efficiency measures in the protected structures (Prendergast 2014). Full development of the Energy Centre has been delayed due to funding, however phase 1 is now complete. District heating infrastructure installed during the site infrastructure phase means that Lower House, East and Central Quads are now heated from the energy center. The energy strategy is currently being revised to assess future demand. Planned core aspects of the Grangegorman regeneration project include:

- Site Infrastructure and Public Realm (SIPR) of 73 acre site. Phase 1 is complete, including major underground site services, new parkland, paths, roads, green areas, lighting, seating, bike facilities, playing pitches and children's playground. SIPR Project won the International Construction Project Management Association (ICPMA) 2015 award for Excellence in Construction Project Management.

- Adaptive reuse and refurbishment of protected structures, combined with new built to provide TU Dublin education and research university campus, sports, cultural activities, science park and student accommodation (22,000 students and 2,000 staff).
- Community Facilities including public recreational and amenity resource for the north inner city, health facilities, primary school, playgrounds, park and access to sports facilities (funded via local and national government social infrastructure grant aid / PPP).
- Development of purpose built 54 bed state healthcare facility (March 2013).
- Greenway Enterprise Hub – funded through 'Programme for Research in Third Level Institutions' and 'Enterprise Ireland' for the Environmental Health Sciences Institute and TU Dublin Hothouse Hub (October 2015).
- High level of stakeholder engagement since inception.
- Employment Charter for all contracts on the site, committing contractors to a target of 20% of new hires from within the local community.
- Light Rail 'Luas' cross city connection to site.
- Self-funding 2,000 bed student housing, with neighbourhood retail element, planned in 2021 (Irish Government 2019)[90].

10.5.6.2 Hybrid Financial Instruments

Grangegorman urban quarter involves development phases over a long-term time horizon and includes some commercially funded developments (such as student accommodation, retail and science park activities) to be integrated on site, along with core state funded educational and healthcare facilities. The unique initiative in developing shared and co-located community and university spaces opens up the possibility for philanthropic funding for elements of the development. The GDA is utilizing blended hybrid funding tools, for different elements of the regeneration project, including capital grants, PPP government credits (annual unitary PPP payments), joint venture concession schemes and proceeds from sale of property. GDA (2018) acknowledge that government budget constraints mean that GDA will not be in a position to borrow on its own account or offer tax incentives for student accommodation.

Much of the anticipated government investment in the project will feed back to government in the form of direct and indirect taxes (GDA 2011b). For example, provision of government grants will be partly financed by Land Value Capture (LVC) tools, where the Irish government will benefit from VAT inflows, development levies, employment taxes and future real estate taxes. GDA led procurement for adaptive reuse of protected structures is funded by the proceeds of TU Dublin property disposals, savings and philanthropic donations. The Grangegorman regeneration project is leveraging blended hybrid capital inflows as follows:

- Government grants in the form of capital grants and/or annual sums to cover unitary charge of PPP contracts. Grants only finance residual deficit remaining after other fund-raising

[90] Clarifications provided by Una Sugrue, Senior Conservation Architect and Project Coordinator, GDA, April 15th 2021.

activities. This represents a state contribution of circa 54% of costs funded via grant instruments. This percentage includes grant aid for both Health Service Executive (HSE) healthcare facilities & TU Dublin University Campus.

- Proceeds from disposal of eight city center buildings from the TU Dublin property portfolio[91].
- Proceeds from operational efficiencies by consolidating the university campus to one location, exiting existing lease commitments and energy cost savings based on the sustainable energy strategy at Grangegorman.
- Philanthropy from tailored fundraising campaign strategy via TU Dublin Foundation. The Foundation is a registered charity allowing donors to benefit from tax relief measures.
- Micro grants from national Built Heritage Investment Scheme (BHIS) for conservation works (St. Laurence Church and the Clock Tower) to match TU Dublin Foundation funds.
- Sport Centre funding (additional sports facilities) funded via various blended sources:
    - Student Development Fund (collected as percentage of annual student capitation fees);
    - Debt finance (loans) based on future ring-fenced capitation income stream capital (student fees);
    - Sports capital programme funded via National Lottery grant (as part of regional and national sports infrastructure programme).
- Research enterprise buildings funded by grant-aid from Programme for Research in Third Level Institutions (PRTLI) (GDA 2011)
- Self-financing student accommodation and local campus retail development, delivered via third party developers, in concessionary type developments[92] or joint venture with GDA/TU Dublin (GDA 2011b, 2018)[93].

10.5.6.3 Public Private Partnership Funding and Financing

The PPP approach have been used extensively in Ireland for economic and social infrastructure over the last 20 years (O'Shea, Palcic & Reeves 2020). In 2005, the government established a PPP Centre of Expertise within the National Development Finance Agency (NDFA) to consolidate PPP project management and procurement into a single agency. A review of public investment management in Ireland conducted by the IMF concluded that PPPs are regulated by a comprehensive framework of laws and procedural guidelines, aligned with international good practice (IMF 2017) (O'Shea, Palcic & Reeves 2020). IMF (2017) did however point out that

[91] Planned disposal 2013-2017 was delayed due to contract delays in completion of new replacement buildings on site at Grangegorman. Kevin Street achieved €140 million (2019), Cathal Brugha Street achieved €24 million (2018) and Aungier Street guiding €110 million.
[92] A concessionary contract is a negotiated contract that grants rights to a contractor, by a government, local authority or other legal entity. The contractor undertakes and funds works in return for payments through capitalisation on the completion of works.
[93] Clarifications provided by Peter O'Sullivan, Director of Finance, GDA, April 16th 2021.

governance challenges remain in relation to the evaluation and the public disclosure of PPP data, such as cost benefit analysis, selection criteria and ex-post reviews.

Within the TU Dublin University campus, a Public Private Partnership (PPP) agreement is delivering two new buildings, the Central and East Quads, providing 52,000 square meters of academic space at a cost of €220 million. The National Development Finance Agency (NDFA) and PPP Centre of Expertise procured and monitors the PPP on behalf of the Department of Education and Skills (sanctioning authority) and Grangegorman Development Agency (sponsoring agency).

The private partner is the Eriugena Consortium (Award 2015)[94] incorporating Macquarie Capital (100% owner of Eriugena), joint venture construction and engineering partners John Sisk & Sons & FCC Construction, in addition to facilities management & lifecycle services partner Sodexo Ireland (with 25 year contract). The project is funded by the European Investment Bank (loans €110 million), Mitsubishi UFG Financial Group (MUFG), Sun Life Investment managers and Talanx Asset Management. The State will remunerate the consortium via monthly unitary charge payments once the buildings are operational. The GDA support an employment charter for the local community & supply chain opportunities for SMEs (Irish Government 2018).

10.5.6.4 Grangegorman Sustainability Strategy

The Grangegorman Sustainability Strategy, incorporating combined landscaping, adaptive reuse and new build projects, deals with energy, carbon and climate change, water conservation (harvesting and recycling grey water), biodiversity, waste, transport, construction, health and well-being, governance and sustainability, community relations and sustainability education (GDA 2008c) (ARUP 2014). Royal Irish Academy (RIA) Grangegorman Histories is a public history programme of research and share discovery of the Grangegorman site and surrounding communities[95]. The '….lives we live' Grangegorman public art initiative has supported over 30 public art commissions involving artists, groups organizations, including community based projects where artists work with community partners within the Grangegorman project and wider community[96].

10.5.6.5 Risk Management

The regeneration strategy for Grangegorman urban cultural quarter uses a mix of procurement methods and blended hybrid funding tools to meet the objectives of the University campus (TU Dublin), the Health Service Executive (HSE) and local communities. This approach is flexible to allow appropriate risk management strategy within decision making regarding procurement methods and

[94] A high court case was taken by an unsuccessful bidder for the PPP, leading to a two year delay in contract issue. The failed challenge by Netherlands based joint venture (BAM PPP PGGM Infrastructure Co-operative UA) based on European Communities (Public Authorities Contracts Review Procedure) Regulations 2010 related to the late electronic submission of tender documents by the successful bidder due to IT issues (Carolan 2016).
[95] Royal Irish Academy (RIA) https://www.ria.ie/research-projects/grangegorman-histories
[96] https://ggda.ie/launch-of-the-lives-we-live-grangegorman-public-art-book-2

blended funding tools. Phased delivery of the regeneration project allowed further flexibility to align with market conditions. For example, the planned phased delivery schedule of the regeneration project has experienced various delays such as the global real estate and banking crisis in 2008 (impacting the disposal of city center university buildings to fund re-development), the High Court case relating to the PPP contract award procedure in 2015 and the legislative temporary closure of the construction site during the pandemic 2020-2021.

10.5.7 Monument Watch [The Netherlands and Belgium]

MonumentWatch NL (Monument Watch) established in 1973, is the statutory association of Provincial Monuments Guards Netherlands (VPMN) (www.monumenten.nl). In 2019, MonumentenwachtNL and the National restoration Fund agreed a mutual partnership strategy. Monument watch associations, providing inspection, minor repairs, repair & maintenance plans, record keeping and assistance with funding applications, are active in every province under the national umbrella organization including Utrecht, Gelderland, North Holland, Brabant, South Holland, Zeeland, and Limburg.

In 1991, Monumentenwacht Vlaanderen was founded in the Flemish region of Belgium with the support of the King Baudouin Foundation (www.monumentenwacht.be). Since 2014, the umbrella organization is funded combined via Provincial government (2/3) and Flemish government (1/3) funding. The five provincial agencies are incorporated within the Provincial government with 10% to 15% funds provided from membership and inspection fees with the balance from Provincial government budgets[97]. All membership and inspection data is held on a central database called IMAKS (Wu & van Laar 2020).

10.5.8 Hendrick de Keyser Association [The Netherlands]

'Vereniging Hendrick de Keyser'[98] **(**Hendrick de Keyser Association) is a private non-profit association, established in 1918[99]. Hendrick de Keyser depends on donations of money and houses from its 500 members and since 2012 the cultural lottery of the Netherland 'BankGiro Loterij' (www.bankgiroloteroj.nl). In 2020, the association received €1.2 million from the Lottery. The goal of the association is the conservation of architecturally or historically important monuments. The association mainly holds monument houses (protected structures) although they also hold farm buildings, town halls (originally 17th/18th century houses), villas, fishery houses, country estates and warehouses throughout the Netherlands. By 2021 Hendrick de Keyser is the caretaker for 433 houses. The entity aims to take ownership of five to ten properties per year. As the association is non-profit all proceeds are re-invested into purchase, restoration and maintenance projects.

[97] Prior to 2014, 60% funding was provided by the provincial government and 30% from the Flemish government.
[98] Hendrick de Keyser Association www.hendrickdekeyser.nl
[99] The society takes its name from the Dutch sculptor and master builder, Hendrick de Keyser, born in Utrecht in 1565 (deceased in Amsterdam in 1621).

‘Hendrick de Keyser’ is unique among conservation bodies in the Netherlands because it guarantees sympathetic restoration and maintenance of donated property into perpetuity. Property held by the association will never be sold but may be let out to tenants.

Lottery participants can earmark gaming funds specifically for the association with the promise that 40% of investment will benefit Hendrick de Keyser. The BankGiro Loterij makes additional contributions to enable the restoration of holiday rentals ‘Monument en Bed’ (www.monumentenbed.nl) and 17 projects have been completed to date under this funding strategy. In 2017, the lottery also contributed nearly €1 million for Museum houses curated by Hendrick de Keyser (www.museumhuizen.nl)

10.5.9 Stadsherstel Amstel Foundation [The Netherlands]

To halt the decline of the Amsterdam's historic centre, the commission of the City of Amsterdam ‘De Stad Amsterdam’ was founded in 1956 in the form of a limited liability company (Naamloze Vennootschap) independent of the city council. The founding capital of the company came from the shareholders including local communities, business and banking interests based in Amsterdam. In 1970, the City of Amsterdam became shareholder. Stadsherstel has three main goals:

- Buying and restoring threatened historic buildings, in particular listed monuments (the company tries to buy in excess of five houses annually);
- Returning historic dwellings back to residential use with a modern interior quality;
- Maintaining restored dwellings in the long term.

Since 1956, Stadsherstel has rescued, restored or repurposed over 750 monuments within the city and the surrounding region. Stadsherstel has achieved the synthesis of a private profit-making enterprise and an institution serving a common good through public private partnership in restoring the city of Amsterdam. The contradictory nature of a profit making limited-liability company and a non-profit public housing corporation is justified by the fact that the annual dividend to shareholders is fixed at 5%. The low dividend ensures that shareholders invest in the company for social reasons. The 5% dividend is exempt from tax for commercial organizations as long as the upgraded value of a building does not exceed the cost of works. In the case of dissolution, the shareholders only receive their initial capital outlay plus the dividend on it. Any surplus funds go to the Central Fund for Public Housing or to an institution for restoring historic monuments.

In 1957, ‘Stadsherstel Amsterdam’ the Company for City Restoration obtained the legal status of a public housing corporation entailing tax advantages enabling the company to restore monuments for low-income households. Low-income housing rents were fixed at a socially acceptable level and the difference between this rate and market rents was subsidized by the Ministry of Housing or from the City of Amsterdam. At this time, the company received two-thirds of the total restoration costs in grant aid. Central government has now ceased to subsidize such developments on the basis that public housing companies now have amassed sufficient wealth to carry out such developments without subsidies.

The association of Friends of Stadsherstel, established in 1981, is a Public Benefit Organisation (ANBI) making donations tax deductible (income, corporation, inheritance and gift tax). Donations can take the form of a one-off donation, periodic donations, a named family fund, bequeathing a property and/or including the Friends in a will. The Society has more than 2500 friends who provide contributions to assist in particular aspects of restoration that only qualify for a small government grant or no subsidy at all, such as the replacement of historic architectural features. In 1999, Stadsherstel extended its remit to all types of threatened monuments not just dwellings.

Initially, the company only purchased endangered historic buildings in very poor structural condition. Frequently the buildings were almost beyond redemption and, in proportion to their potential income, making them uneconomic for private owners to renew. The company now purchasing buildings whose rehabilitation will contribute to regenerating whole city blocks, in particular corner buildings thereby increasing the impact of the street frontages that have been renovated. Stadsherstel will restore commercial uses at ground floor level on the basis that mixed uses create vivacity of the city.

10.5.10 Building Preservation Trusts [UK]

A Building Preservation Trust (BPT) is a non-profit organization with the goal of re-generating historic buildings or places. Most BPT's are small local organizations, rooted in their local community, with membership of the national umbrella body 'Heritage Trust Network' (HTN)[100]. The dual role of BPTs as registered charities and companies limited by guarantee allows for any surpluses that are created from charitable investment to be rolled over to support future projects. However, the revenue 'clawback' contract clauses for repayment on sale of property, has rendered the traditional revolving fund model (to purchase, repair and immediately sell on heritage structures) unviable (Fenn 2018). BPTs benefit from a range of funding sources including grants from central or local government, trusts, foundations, the National Lottery Fund and local philanthropy. Grants can also be blended with loans, community shares and crowdfunding. For example, as part of a £14 million Heritage Lottery Fund restoration project, Hastings Pier Charity undertook the first ever share issue for a charity in 2014 and raised £590,000 from over 3000 people who are now the pier's owners. A subsequent crowdfunding appeal raised £258,200 from 1,697 investors in 70 days. The restored pier opened in 2016 (Fenn 2018).

[100] Heritage Trust Network was established in 2016, evolving out of the UK Association of Preservation Trusts.

10.5.11 BlackRock and EMF Circular Economy Fund [Luxembourg]

In 2019, Black Rock global fund, the world's largest asset manager, launched its first circular economy fund in partnership with the Ellen MacArthur foundation (EMF). The fund aims to drive investment in companies transitioning to circular economy business models, driven by climate mitigation, resource scarcity, technological disruption and rapid urbanization.

BlackRock (Luxembourg) S.A. Circular Economy Fund is a sub fund of the Blackrock Global Funds (BGF). The fund invests globally at least 80% of its total assets in equity shares of companies, across all industry sectors, that benefit from or contribute to the advancement of circular economy. The fund defines four categories in the advancement of circular economy:

- Adoptors: companies that adopt circularity in their business operations creating a positive impact on company value;
- Enablers: companies that provide new innovative solutions for solving inefficient material use and pollution;
- Beneficiaries: companies that provide alternatives to non-recyclable or non-biodegradable materials or products recycled e.g. natural or plant based circular alternatives within the extended value chain;
- Business Model Innovation: companies that facilitate efficient or more responsible consumption via innovative business models (BGF 2021).

The BlackRock Circular economy fund is rated on the 'Morgan Stanley Capital International' MSCI ESG Index 'AA' [101] linked to a quality score of 85.57% as of 07-Jan-2021, based on holdings as of 31-Jul-2020 (BFG 2021).

10.6 Patterns of Use: Co-Giving & Co-Investment Platforms

10.6.1 Fondation du Patrimoine [France]

A legal framework known as the Fondation d'entreprise (Enterprise Foundation)[102] allows the creation of foundations to carry our for-profit work in the public interest (including cultural heritage) that cannot be funded through donations or bequests. Fondation du Patrimoine (Heritage Foundation) is a private entity with legal and financial autonomy, created in 1996, with corporate endowment funding, to promote regional and local heritage, in particular monuments that are not protected structures. The organization has been crowdfunding for 20 years (donations are tax deductible) and estimates that for every €1 invested by the foundation, an economic multiplier effect

[101] Impact metrics are based on MSCI ESG Index Fund Ratings calculated as a direct mapping of ESG quality scores letter rating categories, where AA = 8.6 to 10 score. Ratings range from leader [AA, AA], average [A, BBB, BB] to laggard [B, CCC].

[102] https://www.fondation-patrimoine.org/fondation-du-patrimoine/notre-organisation

of €21 benefits the economy. The foundation now has 22 regional offices and is sustained by mixed sources of funding of circa €68.7 million per annum (based on 2019 figures), including:

- Subsidies from local government €4.5 million;
- Escheated inheritance €6.2 million;
- Tax deductions €6.4 million (estimate);
- Lottery funds €19.2 million;
- Donations in-kind €4 million;
- Donations from SMEs €5.4 million;
- Donations from major corporations € 7 million;
- Crowd funding €16 million[103].

The foundation provides grants and capacity building assistance, including help to source additional funding, for range of cultural heritage activities by individuals and communities. The foundation has saved over 40,000 heritage assets since inception, at a rate of circa 3,000 per annum with the assistance of citizen, community and corporate volunteers. An example of a funded project is the Climate Observatory at Mount Aigougal, Gard (L-observatoire du Mont Aigoual) with a contract value of €2.6 million, received €750,000 from the French government, €1.4 million from local government and €220,000 from Fondation du. Patrimoine (including €22,000 crowdfunding, €150,000 corporate donations & €48,000 lottery funds) [104].

10.6.2 Loto du Patrimoine [France]

In 2018, French Ministry of Culture and the Fondation du Patrimoine[105] created a Heritage Lottery (voted into law on December 28, 2017) in partnership with Mission Stephane Bern[106] and Group Francais des Jeux (FDJ)[107]. The proceeds from the lottery are administered by Fondation du Patrimoine and funding applications, to subsidize 'at risk' public or private heritage restoration projects, are requested online by the with Fondation du Patrimoine. The Heritage Lottery comprises two separate games where 10% of ticket sales go to the Heritage Fund, including:

- Annual September prize draw offering tickets for €3 with a possible jackpot of €13 million;
- Ongoing scratch-card game that costs €15 per card where participants stand a one-in-three chance of getting their money back. Winners receive cash prizes up to €1.5million.

[103] Presentation by Celia Verot, Director General, Fondation du Patrimoine, EC Workshop on Complementary Funding for Cultural Heritage, 25-26th January 2021.
[104] Presentation by Celia Verot, Director General, Fondation du Patrimoine, EC Workshop on Complementary Funding for Cultural Heritage, 25-26th January 2021.
[105] https://www.fondation-patrimoine.org/fondation-du-patrimoine/notre-organisation
[106] https://www.missionbern.fr/
[107] https://groupefdj.com/en/group.html

The lotteries held in 2018 and 2019 raised €24 million and € 22 million respectively with an estimated 4 million participants per year. Every year, one site is selected per region plus one site per county. Beneficiary sites were selected on their ability to demonstrate the potential for economic impact[108].

10.6.3 FundIT Crowd Funding Platform for Heritage [Ireland]

FundIT (www.fundit.ie) is a digital crowdfunding arm of 'Business to Arts' all Ireland a non-profit entity (CHY NO. 9871). Since inception in 2011, The platform has raised €5 million 4 over 1100 projects , with 85,000 registered donors fun stuff. Potential funders can browse the Creative projects website by category including enterprise, environment and heritage. Following the design & award planning phase (Phase 1), donors engage with media campaign by pledging funds pending achievement of a set target (Phase 2), funds are collected once the target has been achieved (Phase 3) followed by project and rewards delivery (Phase 4). Examples of successful heritage crowdfunding projects include (i) Save the Quiet Man' train station in Ballyglunin Co. Galway (https://fundit.ie/project/save-the-quiet-man-train-station & https://ballyglunin.com (ii) Save Mura's Cross (7th Century) in Fahan, Co. Donegal (http://fundit.ie/project/save-saint-muras-cross).

The Ballyglunin local community restoration project exceeded its €30,000 target by raising €32,444 from 454 crowdfund donors, averaging €71 per donor. This enabled a successful application for a further €100,000 grant from the National Town & Village Renewal Scheme in 2019. An optional menu of rewards offered, relating to donation size, included lapel pins, mugs, calendars (€10-€20) and named shrubs (€40) to the use of the completed project for events and weddings (€500-€2000). The phased approach allowed the project to build credibility and reputation, with the support of celebrity ambassadors[109].

10.6.4 Crowdfunding Portals and Network Synergies of Diazoma [Greece]

Diazoma (www.diazoma.gr) is a non-profit association, founded in 2008, to enhance the sustainable development of regions around their cultural heritage, with particular regard to the protection of ancient theatres and cultural routes. In 2020, Diazoma, initiated a 'Sponsor an Ancient Monument' programme with three layers of complementary funding aggregating investment capital of circa €9.5 million, including €5 million via City & Region funding portal, €1 million via citizen crowdfunding portal and €3.5 million via corporate sponsorship portal (non-tax deductible). Diazoma's partnership synergies have created additional investment leverage of €275 million (including €175 million from business network of the "Cultural Route Network Ancient Theatres"

[108] Presentation by Celia Verot, Director General, EC Workshop on Complementary Funding for Cultural Heritage, 25-26th January 2021.
[109] Presentation by Michelle Reid, FundIT Project Manager, EC workshop on complementary funding for cultural heritage 25-16 January 2021

programme run by the Cultural Route Management Agency (DMO), €60 million from the Polis Urban Development Programme & €40 million from local Theatre sponsorship[110].

10.6.5 Heritage + the Crowd Community Crowd Funding [UK]

A match crowd funding venture was piloted by Heritage + the Crowd in partnership with the Heritage Lottery Fund (HLF) and the Arts Council of England (ACE). The crowd funding venture originally focused on heritage organizations in the Northwest, Southwest and Scotland and offered 25% match funding (Phase 2 increased to 50% and extended geographical boundary to all UK). Projects were required to have at least five backers before being considered eligible for matching funding to prove there was a level of crowd interest. Fifty-nine community workspace, music and theatre projects (out of 294 applicants) met the theme and target eligibility criteria and were approved for ACE & HLF matching funding. Heritage restoration projects included £4,000 crowd funding to clear vegetation from an overgrown hillfort at Castlehill and £20,000 for Restoration to the exterior of Braemar Castle, stained glass and statue repairs at Saint Sidwells and conservation of Bronze Age metal work items from the Coll Hoard collection. Financial impact metrics showed that every 1 pound invested by ACE leveraged £1.79 from the crowd and £1 pound invested by HLF leveraged £1.44 from the crowd (Baeck, Bone & Mitchell 2017).

10.7 Case Studies on Blending Financial Instruments [USA)

This section provides three case study examples of blended financial instruments in the USA including Grant, Debt (Bond & Loan), Equity, Tax, Risk mitigation, Risk performance and Capacity Building Instruments.

10.7.1 No. 17 Alfred Street, Biddeford, Maine, Mixed Use [USA]

17 Alfred Street, built 1860, is a three-storey timber and masonry mixed use residential and commercial building. The adaptive reuse project created two retail units at street level, now trading as a retail unit and food market, with six residential apartments on the upper floors. In 2017, the total project cost of $1,012,000 was funded by blended financial instruments including:

- Low interest loan from a non-profit Community Development Bank $330,000
- Equity Investment part funded by combined Historic Tax Credits $662,300
    - Federal Historic Tax Credit $160,000
    - State Historic Tax Credit $200,000

[110] Presentation by Evdokimos Fregoglou, Diazoma EC workshop on complementary funding for cultural heritage 25-16 January 2021.

- City of Biddeford Facade grant $15,000
- Efficiency Maine Energy Rebates $4,700 (Rutgers 2018).

10.7.2 Robinson Grand Theatre, West Virginia, Community Use [USA]

The Robinson Grand Theater, built 1912, adaptive reduce project to provide local community Performing Arts Center. In 2018, the total project cost of $23,715,605 was funded by blended financial instruments including:

- State bond instrument funded by sales tax revenues $8,507,921
- Local crowdfunding campaign $1,069,268
- Federal Historic Tax Credit $2,322,733
- State Historic Tax Credit $1,128,810
- New Markets Tax Credit $5,039,064
- Equity Investment $1,116,479
- City Stabilization Fund €4,531,330 (Rutgers 2019).

10.7.3 Germania Print Works, Milwauke, Low Income Housing & Retail Use [USA]

Germania Print Works, built 1896, adaptive reuse project to provide mixed retail and low-income housing. In 2017, the total project cost of $22,177,819 was funded by blended financial instruments including:

- WHEDA[111] Bond Loan $10,213,000
- WHEDA City of Milwaukee Tax Increment Financing (TIF) Loan $1,500,000
- WHEDA Low interest Loan $1,400,000
- Low Income Housing Tax Credit (investor equity) $1,909,856
- Federal Historic Tax Credit $3,276,892
- State Historic Tax Credit $2,619,871
- Accrued Interest $51,418
- Deferred Developer Fee $1,206,782 (Rutgers 2018).

[111] Wisconsin State Housing and Economic Development Authority

Section 11: Glossary of Terms for Adaptive Reuse of Cultural Heritage

Agnostic Investment. Investments that do not have an intention of a positive social or environmental impact and consequently do not seek to measure impact performance (GIIN).

B Corporation. For profit company with verified social and environmental performance, public transparency and legal accountability to balance profit and purpose (Elkington 2020). EU (2020d) makes a distinction between 'B Corporations and Benefit Corporations'. A 'B-Corporation' strives for profit and shows high standards for socially and environmentally responsible business practices and accountability. A 'Benefit Corporation' (used in Italy & France) also strives for profit and pursues explicit social aims as specified in statutes. Attention is paid to the impact of their activity on all concerned shareholders.

Beneficiary. A public and/or private body responsible for initiating and implementing operations, including the body which receives the aid or the body that implements the financial instrument or the fund of funds (Article 2(10) CPR) (EC2015).

Black Swan. Unpredictable future events driven by negative exponentials (Taleb xxxx)

Blended Finance. Also termed 'Hybrid Finance' or 'Hybrid Capital'. The strategic use of development finance and philanthropic funds to mobilize private capital flows to emerging and frontier markets. Blended Finance deliberately channels private investment to sectors of high-development impact while at the same time delivering risk-adjusted returns. (WEF/OECD 2015). Monetary contracts that combine features of traditional financial instruments in order to achieve the best possible alignment of risk and impact/financial return for an investment (Gianoncelli & Boiardi 2017).

Bond. Fixed income security, usually subjected to a rating process by a rating agency to provide assurance to potential investors, especially in the social impact investment arena (Salamon 2020).

Business Model. A business model describes. The rationale of how an organisation creates, delivers and captures value in economic, social, cultural and other contexts. The process of. constructing a business model is part of the business strategy (Gianoncelli & Boiardi 2017).

Capacity Building. Process where an individual or organisation assists another individual or organisation in developing a set of skills that can improve its operation and performance (Salamon 2020).

Capital Aggregator. An institution that assembles capital from multiple sources and channels it into different (Salamon 2020).

Capital Stack. See Structured Finance.

Circular Business Model (CBM). A Circular Business Model is a sub-type of a sustainable business model (Bocken 2018). The model entails fundamentally different way of producing and consuming goods and services with the potential to drive the transition towards a more resource efficient and circular economy and, in doing so, significantly reduce the environmental pressure resulting from economic activity (OECD 2018). A circular business model is a rationale of how an organization creates, delivers and captures value to close and slow material loops (Bocken et al 2016).

Circular Design. Development & planning phase of a built asset (ARUP & Bam 2017).

Circular Economy (CE). Circular economy is a production and consumption process that entails minimum natural resource extraction and environmental impact by extending the use of. materials and reducing the consumption and waste of materials and energy. As a sustainability concept, CE promotes human wellbeing within the biophysical limits of the planet earth. The useful life of materials are extended through transformation into new products, design for longevity, waste minimalization, reuse and rethinking consumption to include sharing and services provision instead of individual ownership (Ellen MacArthur Foundation)(Foster 2020).

Circular Use. Operational phase of an asset (ARUP & BAM 2017).

Circular Value Chain. A circular value chain requires all stakeholders to contribute towards an outcome that achieves the best value for all parties, using components that retain the highest value throughout the lifecycle and minimizes losses from the system (ARUP & Bam 2017).

Co-investment. In private equity, Co-investment is the syndication of an investment by other funders alongside a private equity fund (Gianoncelli & Boiardi 2017).

Collateral. Any form of asset used as security for a loan to be surrendered to lenders in whole or in part if the loan cannot be repaid (Salamon 2020).

Conversion Foundation. A charitable foundation formed out of the process of privatising some public or quasi-public asset , such as government owned enterprise, a government owned building or other property , specialised streams of revenue under government control such as lotteries , or the conversion of a non-profit.into a for profit company (Salamon 2020).

Co-Operative. Autonomous association of persons united voluntarily to meet their common economic social and cultural needs and aspirations (EU 2020d).

Corporate Governance. Procedures and processes according to which an organisation is directed and controlled. The corporate governance structure specifies the distribution of rights and responsibilities among the different participants in the organisation – such as the board, managers, shareholders and other stakeholders – and lays down the rules and procedures for decision-making (OECD: statsoecd.org/glossary from ECB 2004)

Corporate Originated Charitable Fund. A public charity established by a mutual fund company or financial services firm through which donors can manage, invest and make distributions from charitable funds or accounts that they set up within the charity, usual ising the vehicle of a donor advised fund (Salamon 2020).

Cost of Capital. The required return necessary to make a capital budgeting project worthwhile (Investopedia)

Debt Instrument. Form of investment such as loans, bonds or mortgages that convey to investors a claim on repayment of both the original principle amount of the investment plus interest (Salamon 2020). Money lent for repayment at a later date, usually with interest, including (i) *Market Rate Debt,* when rates and terms are determined based on capital markets prices and tenors, but can be subordinate to senior debt (i.e. mezzanine) (ii) *Flexible Debt,* with favourable terms or rates for the borrower relative to market pricing (WEF/OECD 2015).

Developer Contributions. Charge imposed on property developers by municipalities for new infrastructure that must be built or increased due to new property development. The charge is typically a one-time payments at planning stage (Investopedia).

EBITDA. Accounting measure Earnings Before Interest expenses, Taxes, Depreciation and Amortisation, as a proxy for a company’s current operating profitability.

Enterprise Broker. An individual or institution that performs the middleman function of helping social-purpose investors identify promising ventures capable of meeting their investment objectives (Salamon 2020).

Equity investment. Form of investment that gives an investor an ownership share of an enterprise and hence a claim on a portion of any profits the enterprise generates, as well as the opportunity to sell these shares for profit at a future date (Salamon 2020). Ownership in a company - value determined at time of investment (WEF/OECD 2015). Provision of capital to a firm, invested directly or indirectly in return for total or partial ownership of that firm and where the equity investor may assume some management control of the firm and may share the firm's profits (Article 2(m) FR) (EC 2015).

Final Recipients. A legal or natural person receiving financial support from a financial instrument (Article 2(12) CPR) (EC2015).

Finance first investor. An investor that seeks to achieve a risk adjusted market rate of return on its investments while still meeting a threshold of social or environmental impact (Salamon 2020).

Financial instrument. The provision of finance to an organisation, enterprise or individual with the expectation of both social and financial returns (OECD 2015). FIs provide financial discipline for resource-efficient and sustainable revenue generating flows of capital to maximise private investment and relieve the financial burden of governance authorities by providing 'Financial Citizenship' to disadvantaged people (EIB 2016a). Basic financial instruments include debt, equity, grants and guarantees, all of which are familiar to and applied regularly by development and philanthropic users (WEF/OECD 2015).

Financial Intermediaries. An institution that facilitates the channelling of funds between investor and investee company or project and between lenders and borrowers (WEF/OECD 2015).

Foundation. Nonprofit organization that supports cherishable activities either through grantmaking or buy operation funding programs (Gianoncelli & Boiardi 2017).

Fund. Vehicle created to enable pooled investment by a number of investors, usually managed by a dedicated organization (Gianoncelli & Boiardi 2017).

Fund of Funds. An investment fund that owns a number of separate funds, each with its own risk and return focus (Salamon 2020). Where financial instruments are implemented through a fund of funds, the body implementing the fund of funds shall be considered to be the only beneficiary (Article 2(27) CPR) (EC2015).

Funding collaborative. A network that offers either groups of individuals or institutional donors and investors mechanisms for collective grant making or social purpose investing (Salamon 2020).

Governance. See Corporate Governance.

Grant. A financial award with no expected repayment or compensation over a fixed period of time (WEF/OECD 2015).

Greenwashing or impact washing. An unsubstantiated claim to environmentally or socially impactful outcomes (Salamon 2020].

Green Swan. Exponential progress in the form of economic, social and environmental wealth creation, catalyzed by changing paradigms, values mindsets, politics, policies, technologies and business models (Elkington 2020).

Guarantee. A guarantee is a promise by one party (the guarantor) to assume the debt obligation of a borrower if the borrower defaults. A guarantee can be limited or unlimited, making the guarantor liable for only a portion or all of the debt (Gianoncelli & Boiardi 2017). Protection from various forms of risk intended against capital losses for investors (WEF/OECD 2015).

Hybrid Finance. See Blended Finance.

Hybrid Financing Mechanisms. Financing schemes developed on a deal-by-deal basis to increase the resources brought to impact oriented investments by reducing the risks associated with achieving impact or financial goals (Gianoncelli & Boiardi 2017).

Impact first investor. An investor that seeks to maximise the social or environmental impact of its investments, while still meeting a threshold of financial return (Salamon 2020).

Impact investment. Investments made with the intention to generate positive, measurable social and environmental impact alongside a financial return. Impact investments can be made in both emerging and developed markets (GIIN 2020). Investments that drive social, environmental and economic progress (WEF/OECD 2015).

Impact Measurement. Impact can be measured through various output metrics encompassed by different impact themes e.g. poverty alleviation, affordable housing units created or retained; jobs created or retained; and number and diversity of beneficiaries reached. Impact investors commitment to measure and report the social and environmental performance and progress of underlying investments, ensuring transparency and accountability while informing the practice of impact investing and building the field (GIIN).

Impact Return. Impact investments are expected to generate a financial return on capital or, at minimum, a return of capital (GIIN 2020), in addition to social and environmental gains.

Institutional investor. A company or organisation that invests money on behalf of other people (Investopedia).

Internal Rate of Return (IRR). Metric used in financial analysis to estimate the profitability of potential investments. The internal rate of return is a discount rate that makes the net present value (NPV) of all cash flows equal to zero in a discounted cash flow analysis. That IRR is the annual rate of growth an investment is expected to generate (Linneman & Kirsch 2020).

Investment Value / Worth. The value of an asset to a particular owner or prospective owner for individual investment or operational objectives. Also termed 'Investment worth' (IVS 104 p22 60.1) (ivsc.org).

Joint Venture. A real estate transaction made with one passive investor and one sponsor.

Junior Equity. Investment accepting higher risk for lower financial returns in exchange for social, environmental and economic impact, typically in a position to take the first losses (WEF/OECD 2015).

Leverage. Use of development finance and philanthropic funds to attract private capital into deals (WEF/OECD 2015).

Limited liability company. A flexible form of enterprise that blends elements of partnership and corporate structures, providing limited liability to its owners without the regulatory provisions

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applicable to corporations (Salamon 2020). A legal entity created to invest in real estate and shield the underlying investors from some types of liability (Cook 2016).

Limited partnership agreement. The legal document governing the mechanics of how a specific limited partnership entity will operate (Cook 2016).

Limited partnership. Like a limited liability company, a legal entity created to invest in real estate and shield the underlying investors from some types of liability. The term can be used to refer to either the legal entity or to the underlying passive investors (Cook 2016).

Loan to value ratio. Measure commonly used by lenders and equity investors as a measure of risk. The LTV is the loan amount divided by the value of the property. The higher the LTV, the higher the leverage used in the transaction and the riskier the deal (Cook 2016).

Loan. An agreement which obliges the lender to make available to the borrower an agreed sum of money for an agreed period of time and under which the borrower is obliged to repay that amount within the agreed time (Article 2(k) FR) (EC 2015).

Market Return. See Risk adjusted market rate of return.

Market Value. Estimated amount for which an asset or liability should exchange on the valuation date between a willing buyer and a willing seller in an arm's length transaction, after proper marketing and where the parties had each acted knowledgeably, prudently and without compulsion. (IVS 104 p18 30.1 (ivsc.org)

Maturity. The date on which a loan must be repaid.

Mezzanine Finance. Hybrid financial tool that bridges the gap between debt and equity through a form of revenue participation (Gianoncelli & Boiardi 2017).

Micro finance investment vehicle. An investment fund serving as the conduit for capital flowing into micro finance investment institutions for ultimate distribution to micro enterprise entrepreneurs (Salamon 2020).

Mutual Fund. Type of investment vehicle made up of a pool of money collected from many investors to invest in securities like stocks, bonds, money market instruments and other assets (Investopedia).

Non-Profit Organisation. Legal entity that has been granted tax exempt status because it furthers a social cause and provides public benefit (Salamon 2020). Organisations that do not earn profits as all money earned by or donated to a non-profit organisation is used in pursuing the organization's objectives and keeping it running (Investopedia).

Note. Un-rated bond termed 'Promissory Note', typically used in social impact investment arena.

Operating income. The income organisations use to run their ongoing annual operations.

Opportunity Cost of Capital. Foregone benefit when choosing one investment strategy over another.

Philanthropic & Development Funders. Development and philanthropic funders include donor agencies, development finance institutions and public and private philanthropic foundations (WEF/OECD 2015).

Pooled funds. Funds in a portfolio with many individual investors that are aggregated for the purpose of investment mutual funds, hedge funds, exchange traded funds, pension funds and unit investment trusts are examples of professionally managed pooled funds (Investopedia).

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Price discovery. The price at which the market values a financial instrument (Salamon 2020).

Private equity. An equity investment that is made in a company that is not listed on a regular public Stock Exchange (Salamon 2020).

Private Equity. An equity investment that is not publicly traded (Gianoncelli & Boiardi 2017).

Private foundation. Charitable organisation that, while serving a good cause, might not qualify as a public charity. By government standards. A private foundation is a non profit organisation (Investopedia).

Private Sector. Diversified financial institutions and intermediaries, institutional investors, such as, pension funds, insurance companies, sovereign wealth funds) and high net worth individuals (WEF/OECD 2015).

Public Equity. An equity investment that is made through a registered public Stock Exchange (Salamon 2020).

Public Private Partnerships. Collaboration between a government agency and a private sector company that can be used to finance, build and operate projects. PPP often involved concessions of tax or other operating revenue, protection from liability or partial ownership rights over normally public services and property to private sector, for profit entities. (Investopedia).

Public Procurement. EU Public Procurement Rules (2014/24 EU) encourage the evaluation of bids on the basis of the best price - quality ratio.

Public Sector. State authorities and state agencies including National, Regional, Municipal & Quasi Government entities.

Quasi equity investment. A form of equity investment that allows an investor to benefit from the future revenues of an organisation through a royalty payment geared to income rather than a share of any profits earned and often includes an advisory role in the management of the organisation rather than an ownership share (Salamon 2020). A type of financing that ranks between equity and debt, having a higher risk than senior debt and a lower risk than common equity. Quasi-equity investments can be structured as debt, typically unsecured and subordinated and in some cases convertible into equity, or as preferred equity (Article 2(n) FR) (EC 2015).

Rated security. A bond that is rated as creditworthy by a quasi-official bond rating agency (Salamon 2020).

Real Estate Investment Fund (REIF). Pooled real-estate investment vehicle traded either publicly or privately.

Real Estate Investment Trust (REIT). Pooled real estate investment vehicle, usually (but not always) traded publicly on stock exchanges.

Regenerative Capital. Enablement of global systems change in the context of achieving Responsibility, Resilience and Regeneration in addition to the Triple Bottom Line (Elkington 2020).

Regenerative Economy. The application of nature's laws and patterns of systemic health, self-organization, self-renewal and regenerative vitality two socio economic systems (Fullerton 2015).

Return on Investment. Performance measure, profit or loss resulting from an investment, used to evaluate the efficiency of an investment or compare the efficiency of a number of different investments. Return on investment is usually expressed as an annual percentage return.

Risk adjusted market rate of return. Financial return or earnings on investments equivalent to those available in the market for investments with similar risk exposure for the investor (Salamon 2020). Financial returns for private investors in lin 2015e with market expectations, based on real and perceived risk (WEF/OECD 2015).

Risk Sharing Instrument. A financial instrument which allows for the sharing of a defined risk between two or more entities, where appropriate in exchange for an agreed remuneration (Article 2(o) F) (EC 2015).

Risk Underwriting. Risk reduction tools that fully or partially protect the investor against various forms of risk, effectively reducing their risk of capital losses (WEF/OECD 2015).

Secured Debt. Debt that is backed by an asset that the lender can seize if a loan is not paid.

Securitization. A financial process that involves assembling bundles of loans such as mortgage loans, into packages and using them as collateral for a bond issue on the capital markets, with the proceeds of the bond sales used to pay for the purchase of the bundles of loans (Salamon 2020).

Senior Debt. A loan or debt that has a first call on payment or collateral in the event of a borrower defaulting.

Social Finance. The pursuit of double or triple bottom line returns on investment - financial, social, and environmental - is alternatingly referred to as social finance, impact investing, or shared value investing, the terms are used interchangeably (Dadush 2015).

Seed Funding. Capital used for the initial investment in a start-up company, project or initial product development (Gianoncelli & Boiardi 2017).

Social Impact Bond. Contract with the public sector or governing authority, whereby it pays for better social outcomes in certain areas and passes on the part of the saving achieved to investors. As social impact bond is not a bond, per say, since repayment and return on investment are contingent upon the achievement of desired social outcomes. If the objectives are not achieved, investors receive neither a return nor repayment of principle (Investopedia).

Social Investment. See ‘Social Finance’.

Social Return on investment. A method of measuring values that are not traditionally reflected in financial statements, including social economic and environmental factors. The purpose of issuing social return on investment is for corporations to be able to look at their social impact in financial terms (Investopedia).

Social Stock Exchange. A regulated trading platform through which dispersed social purpose investors can locate and invest in social purpose enterprises and through which social purpose enterprises can secure capital they need to expand and grow (Salamon 2020).

Socially Responsible Investment. Ethical investments that encourage corporate practices that promote environmental stewardship, consumer protection, human rights and diversity. Socially responsible strategy also includes the avoidance of investing in industries or products that can be socially harmful (Gianoncelli & Boiardi 2017).

Socio-technical Systems Change. Human engineered artifacts embedded in society, linked to economies and connected with nature (IPCC 2019). Examples of socio-technical systems include national economies, cities, land use, infrastructure and maritime systems.

Soft loan. A loan with flexible terms to assist start-up firms to become profitable.

Sponsor. A generic term used to describe a general partner. This is the individual, or company in charge of putting together a real estate investment and dealing with ongoing operations after it is purchased (Cook 2016).

Structured finance. An arrangement in which different layers of investment capital, each with its own risk-return characteristics, are pooled within a deal. Also referred to as 'Capital stack') (Salamon 2020).

Subordinated debt. A loan, or other debt, that is paid off only after other Senior lenders or investors are paid, in the event of a borrower defaulting (Salamon 2020).

Supra national organisation. Multi-national union or association in which member countries cede authority and sovereignty on some internal matters to the group, whose decisions are binding to its members. Member state sshare in decision making on matters that will affect each country's citizens e.g. European Union, United Nations, World Trade Organisation (Invespodedia).

Sustainable Business Model (SBM). Sustainable business models go beyond defining value as profit, embracing a wide array of value propositions, value creation and capture for stakeholders in addition to macro-level goals such as community, national, and global sustainability (Bocken et al., 2013; Rizos et al., 2016; Upward and Jones, 2015; Foster et al 2020). Sustainable business models our innovations that create significant positive and or significantly reduce negative impacts for the environment and or society, to changes in the way the organization and its value network create, deliver value and capture value (Bocken 2013).

Syndicate or Syndication. A single real estate transaction made with multiple passive investors and one sponsor (Cook 2016). The process of enlisting multiple funders in an investment tranche, such as a bond sale (Salamon 2020).

Tailored Finance. Choosing from a range of financial instruments, such as grant, debt, equity and hybrid instruments, depending on the risk/return and impact profile of the recipient (Gianoncelli & Boiardi 2017).

Technical Assistance. Advisory or preparatory services, assistance, and training to facilitate private investment in high-impact projects and enterprises in order to supplement the capacity of investees and more generally lower the transaction costs (WEF/OECD 2015).

Transformation Capital. Systemic investment logic designed to accelerate mission-driven sustainable transitions in the real economy (Hofstetter 2020).

Triple (double) Bottom Line investment. An investment that seeks returns along three (or two) different dimensions: financial, social, and environmental (Salamon 2020).

Ugly Duckling. Early-stage concept, mindset, technology or ventures with the potential to become either a future Green Swan driven by good exponentials or a Black Swan driven by bad exponentials (Elkington 2020).

Underwriting. The process whereby a lender determines whether a borrower meets the lenders criteria for making a loan (Salamon 2020).

Unsecured debt. Debt that is not backed by collateral that could be seized in the event of default.

Virtuous Investment Circles. Circular revolving regenerative capital investment flows. See 'Regenerative Capital'.

Venture Capital. An enterprise approach to support the creation and expansion of commercially sustainable enterprises to maximize social and financial returns. An individual or organisation that makes equity investments in start-up or early stage for-profit companies and secures a role in the management of recipient companies in an effort to maximise the return on its investment (Salamon 2020). See Venture Fund.

Venture Fund. See Venture Capital.

Venture Philanthropy. Application of principles of traditional venture capital financing to achieve philanthropic endeavours (Investopedia). A high engagement and long term approach two generation social impact via tailored financing, organizational support and impact measurement and management (Salamon 2020).

Waterfall. A description of how cash distributions from operations or the sale of a property will be made (Cook 2016).

Weighted Average Cost of Capital. Cost of Capital derived from the cost of blended debt and equity, weighted according to an individual or firm's capital structure.

Section 12: References

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Section 13: Acronyms

[AIF]	[Alternative Investment Fund]
[AHF]	[The Architectural Heritage Fund]
[ARCH]	[Adaptive Reuse of Cultural Heritage]
[BER]	[Building Energy Rating]
[BGF]	[Blackrock Global Funds]
[BHIS]	[Built Heritage Investment Scheme]
[BoP]	[Bottom of the Pyramid]
[BPT]	[Building Preservation Trust]
[CapEx]	[Capital Expenditure]
[CBM]	[Circular Business Model]
[CCB]	[Climate Change Bank]
[CDFI]	[Community Development Financial Institutions]
[CE]	[Circular Economy]
[CEF]	[Connecting Europe Facility]
[CEB]	[Council of Europe Development Bank]
[CF]	[Cohesion Fund]
[CHEG]	[Cultural Heritage Expert Group]
[CIC]	[Calvert Impact Capital]
[CHN]	[Climate Heritage Network]
[CLG]	[Company Limited by Guarantee]
[CSR]	[Corporate Social Responsibility]
[DAF]	[Donor Advised Fund]
[DAFNE]	[Donors and Foundations Network in Europe]
[DCF]	[Discounted Cash Flow]
[DJSI]	[Dow Jones Sustainability Index]
[DNSH]	[Do No Significant Harm]
[EAFRD]	[European Agricultural Fund for Rural Development]
[EBRD]	[European Bank for Reconstruction and Development]
[ECB]	[European Central Bank]
[ECF]	[European Cultural Foundation]
[ECN]	[European Crowdfunding Network]
[EEA]	[European Economic Area]
[EEB]	[European Environmental Bureau]

[EEML]	[Energy Efficiency Mortgage Label]
[EFC]	[European Foundation Centre]
[EFF]	[European Flagship Fund]
[EFSI]	[European Fund for Strategic Investments]
[EHA]	[European Heritage Alliance]
[EHHA]	[European Historic Houses Association]
[EIAH]	[European Investment Advisory Hub]
[EIB]	[European Investment bank]
[EIT]	[European Institute of Innovation & Technology]
[EL]	[European Lottery]
[EEML]	[Energy Efficiency Mortgage Label]
[EMF]	[Ellen MacArthur Foundation]
[EMFF]	[European Maritime and Fisheries Fund]
[ENEA]	[Energy and Sustainable Economic Development]
[EPDV]	[Energy Performance Buildings Directive]
[EPRA]	[European Public Real Estate Association]
[ERDF]	[European Regional Development Fund]
[ESIF]	[European Structural and Investment Funds]
[ESF]	[European Social Fund]
[ESG]	[Environmental, Social and Governance]
[EVPA]	[The European Venture Philanthropy Association]
[EYCH]	[European Year of Cultural Heritage]
[FHSF]	[Future High Streets Fund]
[FI]	[Financial Instrument]
[FoF]	[Fund of Funds]
[GDA]	[Grangegorman Development Agency]
[GEO]	[Grantmakers for Effective Organization]
[GHG]	[greenhouse gas]
[GIIN]	[Global Impact Investment Network]
[GLMC]	[Global Lottery Monitoring System]
[GRI]	[Global Reporting Initiative]
[GRY]	[Gross Redemption Yield]
[HFA]	[Housing Finance Authorities]
[HFI]	[Hybrid Financial Instruments]
[HLF]	[UK Heritage Lottery Fund]
[HNWI]	[High Net Worth Individual]
[HPF]	[Historic Preservation Fund]
[HSE]	[Health Service Executive]

[HSHAZ]	[High Street Heritage Action Zones]
[HTN]	[Heritage Trust Network]
[HUL]	[Historic Urban Landscape]
[ICOMOS]	[International Council of Monuments and Sites]
[IMM]	[Impact Measurement and Management]
[IP]	[Implementing Partners]
[IPCC]	[The Intergovernmental Panel on Climate Change]
[IRR]	[Internal Rate of Return]
[IRS]	[Internal Revenue Service]
[JICE]	[Joint Initiative on Circular Economy]
[JTF]	[Just Transition Fund]
[JVS]	[Joint Venture Scheme]
[KIC]	[Knowledge and Innovation Community]
[LAP]	[Local Area Plans]
[LCI]	[The Living City Initiative]
[LLC]	[Limited liability Company]
[LLP]	[Limited Liability Partnership]
[LTV]	[Loan to Value]
[LVC]	[Land Value Capture]
[MGI]	[McKinsey Global Institute]
[MUFG]	[Mitsubishi UFG Financial Group]
[MSCI]	[Morgan Stanley Capital International]
[NECP]	[National Energy and Climate Plans]
[NGO]	[Non Government Organisation]
[NIRP]	[Negative Interest Rate Policy]
[NPBI]	[National Promotional Banks and International Financial Institutions]
[NPS]	[The National Park Service]
[NPV]	[Net Present Value]
[OCC]	[Opportunity Cost of Capital]
[OECD]	[Organisation of Economic Co-operation and Development]
[OpEx]	[Operational Expenditure]
[QIAF]	[Qualifying Investor Alternate Investment Fund]
[QUANGO]	[Quasi-Autonomous Non-Governmental Organisations]
[PAC]	[Public Asset Corporation]
[PEIM]	[Preservation Economic Impact Model]
[PLL]	[Public Liability Company]
[PPP]	[Public Private Partnership]
[PPPP]	[Public Private People Partnership]

[PRF]	[Performance Risk Financing]
[PRI]	[Principles of Responsible Investment]
[PRTLI]	[Programme for Research in Third Level Institutions]
[PSUP]	[Participatory Slum Upgrading Program]
[QIAIF]	[Qualifying Investor Alternative Investment Fund]
[RAIF]	[Retail Investor AIFs]
[REIF]	[Real Estate Investment Fund]
[REIT]	[Real Estate Investment Trust]
[RIA]	[Royal Irish Academy]
[RSV]	[Residual Site Value]
[SAC]	[Special Assets Class]
[SBI]	[Social Business Initiative]
[SDGs]	[Sustainable Development Goals]
[SE]	[Social Enterprise]
[SHPO]	[State Historic Preservation Offices]
[SPV]	[Special Purpose Vehicles]
[SROI]	[Social Return on Investment]
[TBL]	[Triple Bottom Line]
[TCI]	[Transformation Capital Initiative]
[TCFD]	[Taskforce on Climate-related Financial Disclosures]
[TDR]	[Transfer Development Rights]
[TEG]	[Technical Expert Group]
[TIF]	[Tax Increment Financing]
[TSI]	[Technical Support Instrument]
[UCITS]	[Undertakings for Collective Investment in Transferable Securities]
[UN FCCC]	[UN Framework Convention on Climate Change]
[VIC]	[Virtuous Investment Circles]
[VPP]	[Venture Philanthropy Partners]
[WACC]	[Weighted Average Cost of Capital]
[WEF]	[World Economic Forum]
[WLA]	[World Lottery Association]

Annex 1: Discounted Cash Flow (DCF) Investment Appraisal

Financial investment appraisal relies on Discounted Cash Flow (DCF) analysis, to determine and benchmark investment returns of different investment opportunities by asset class (Cash Deposits, Government Bonds, Equity Stocks, Real Estate). Cultural heritage corporate / community enterprise activities and real estate investment and development appraisal project activities differ in relation to finance appraisal methodologies. The following table provides a comparison of financial appraisal methodologies for cultural heritage real estate projects compared to real estate community and corporate enterprise ventures.

Table 23 Financial Appraisal Methodologies: Real Estate Projects vs Enterprise Ventures

	Real Estate (RE) Investment & Development Projects	**Corporate & Community Ventures (including Special Purpose Real Estate vehicles)**
Appraisal Methods **(Cost of Equity)**	• Discounted Cash Flow (DCF) Analysis solving for IRR & NPV	Capital Asset Pricing Model (CAPM)
Finance Models: **Debt/Quasi-Equity Loans or Equity Share Funding Criteria**	Project Finance relating to: • Debt service assessment via projected project cashflows (DCF appraisal) • Ratio of loan(s) to project asset value (collateral); • Track record	Corporate Finance relating to: • Debt service assessment via company cashflow projections (balance sheet) • Ratio of loan(s) to company value (credit rating) • Track record
Investment Time Horizon	• Short term finance for re-development period • Restructured medium/long term finance (if held as investment)	Medium / long term finance horizon
Growth	• Annual rental growth rate • Capital Growth	• Annual company growth rate • Capital Growth
Terminal Value	• Market Value (MV) of completed RE Investment • Gross Development Value (GDV) of completed RE Development	Nominalised final year cashflow / (Weighted Average Cost of Capital WACC - Growth Rate)
Cost of Debt	Interest Rate: • Senior Debt • Mezzanine Quasi Equity Debt • Set up fees	Interest Rate: • Senior Debt • Mezzanine Quasi Equity Debt • Set up fees
Cost of Equity	Equity Share (% of profits)	Equity Share (% of profits)
Capital Structure	% Debt to Equity Ratio	% Debt to Equity Ratio

Benchmark for Risk Free Rate (RFR)	Long-term (10 year) Government guaranteed Bond Yield	Long-term (10 year) Government guaranteed Bond Yield
Discount Rate: Target / Hurdle Rate	Risk Free Rate (RFR) + Risk Premium (Property & Market risk)	Risk Free Rate (RFR) + Weighted Average Cost of Capital (WACC)
Equity Premium	n/a	Beta multiplier (stock volatility relative to market)

Source: Author

Note: (i) Cultural heritage projects are typically structured within a legal entity, such as a Limited/Public Liability Company, Partnership structure or Special Purpose Vehicle (SPV) (ii) Since interest on debt is tax-deductible, the real cost of debt is calculated after marginal tax (1-t)

Annex 2: Summary Funding Instrument Checklist

Table 24 Summary Hybrid Financial Instrument Checklist

Traditional Grant Instruments	**Grant & Endowment Instrument Enhancements**
-Direct or matching philanthropic grant-aid including in-kind volunteer contributions -Mortgage subsidy in lieu of grant	-Philanthropic grants and endowments combined with capacity building mentoring -Grants funded by crowd funding ventures -Prize and competition grant awards

Traditional Tax Instruments	**Tax Instrument Enhancements**
Tax Deductions, Exemption, Freeze: -Income / Corporation tax credits including tax deductible sponsorship -Property Tax -Value Added Tax (VAT) / Sales Tax -Transfer Tax (Stamp Duty) -Capital Gains Tax & Inheritance Tax -Land Value Capture (LVC) Instruments	-Place-Led, Community-led, Housing-led, Typology-led tax credit incentives -Tax Increment Financing (TIF) bond instruments (form of Land Value Capture) -Art-Bonus, Eco-Bonus, Super Bonus & Façade Bonus Tax Credits

Traditional Debt Instruments	**Debt Instrument Enhancements**
Loans (Debt) -Commercial bank loans -Government loan (0% or low interest)	***Loans (Debt)*** -Venture capital loan -Quasi-equity venture capital loan (equity share option) -Micro Finance investment vehicles -Revolving loan funds -Green finance loans -Energy efficiency mortgage label
Bonds (Debt) -Government bond issue (tax exempt) -Private placement bonds	***Bonds (Debt)*** -Social Impact government bonds -Social impact corporate bond Issue (Long term Bond / -Tax Exempt' Short term Note)

	-Tax Increment Finance (TIF) Bond Instrumenst (form of Land Value Capture) -Human Capital Performance Bonds (Risk Performance Instrument)

Traditional Equity Instruments	**Equity Risk Capital Instrument Enhancements**
Self-Finance (1-100%)	-Equity Share Instruments -Quasi Equity Share Instruments -ESG & social / environmental impact stock exchange

Risk Mitigation Instruments	**Risk Mitigation & Performance Instrument Enhancements**
-Government loan guarantee	-Corporate or philanthropic loan guarantee -Risk Performance Instruments (Human capital performance bonds) -Micro Insurance

Traditional Impact Metric Instruments	**Impact Metric Instrument Enhancement**
Financial Metrics -Internal Rate of return (IRR) -Net Present Value (NPV) -Investor Target Rate of Return (Discount Rate) -Capital Asset Pricing Model (CAPM) ***Real Estate & Construction Market Metrics*** -GRESB: Global Real Estate Sustainability Benchmark (ESG Integration) -Wired Score Certification -LEED Certification	***Governance Metrics*** -Global Reporting Initiative (GRI) -Environmental, Social and Governance (ESG) compliance incorporating SDGs mapping and UN -Principles of Responsible Investment (PRI) -EU Taxonomy Compliance -B Corporation Certification ***Intentional Impact Metrics*** *(Community, Portfolio, Investor, Tenants)* -IRIS Catalogue of Metrics (GIIN) -IRIS+ Core Metric Sets (GIIN)

-BREEAM Certification -WELL Certification -RESET Air Certification -nZeb Certification (EPBD) -Net Zero Carbon Standard (World Green Building Council) -National Green Building Council Standards	-Impact Management Projects (IMP) Financial Markets (GIIN) -Compass Benchmarking (GIIN) -Task Force on Climate-related Financial Disclosures (TCFD) ***Informal Real Estate Benchmarking*** -CE Transitioning -Public Realm & Community Project Provision -Tenant wellbeing -Green Tariff energy price structures for using renewable resources -Reducing portfolio greenhouse gas emissions -InTime live monitoring of energy consumption

Heritage Regulation & Real Estate Instruments	**Heritage Regulation & Real Estate Instrument Enhancement**
Investment Structures -Public Private Partnership (PPP) -Quasi Development Agencies -Master Planning -Strategic Development Zones	***Direct Investment Structures*** -Public Private Partnership (PPP) -Public Private People (or community) Partnerships -Joint Ventures Schemes (limited time horizon) -Public Asset Corporations (PAC) - publicly owned & privately managed RE assets ***Indirect Investment Structures*** -Revolving Funds -B Corporation -Real Estate Investment Trusts (REITs) (listed or unlisted) -Real Estate Investment Funds (REIFs) and companies (listed or unlisted) -Partnerships
Real Estate Regulatory Instruments: -Transfer Development Rights (TDR) -Planning Bonus -Easement Donations	***Real Estate Regulatory Instruments:*** -Land Value Capture (LVC) -Betterment Levies and Taxes -Developer Contributions -Leveraging public land assets

	-Renovation lease -Social value lease -Energy efficiency mortgage label (EEML)

Direct Service Provision & Advisory Instruments (Cultural Heritage)	**Capacity Building & Resilience Instruments**
-Government advisory service	-Networking, mobilising & mentoring -Technical business mentoring (Angel Investors) -Education & Skills Training -Technical Repair & Maintenance Support

Digital Pathfinding Tools:
-Cultural Heritage Portals -Environmental Portals -Philanthropic & Impact Investment Portals -Stock Exchange Portals -Crowd Funding Portals -Lottery Funding Portals