

Circular models Leveraging Investments in Cultural heritage adaptive reuse

D6.6 First Series Scientific Publications









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# **Deliverable D6.6**

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#### **Dissemination Level**

$\boxtimes$	PU:	Public
	PP:	Restricted to other programme participants (including the Commission
	RE:	Restricted to a group specified by the consortium (including the Commission
	CO:	Confidential, only for members of the consortium (including the Commission Services)



#### Disclaimer

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#### **Abstract**

As required by Art. 29 of Grant Agreement and indicated in our "C&D&E Plan" (D 6.1 see Section 5 "Obligations of CLIC beneficiaries"), each beneficiary must — as soon as possible — 'disseminate' its results by disclosing them to the public by appropriate means (other than those resulting from protecting or exploiting the results), including in scientific publications (in any medium).

The Deliverable provides metadata and abstracts of the first series of scientific publications produced by the CLIC Consortium during the first year of project activities. In particular, the deliverable includes both scientific products that have already been published in journals, monographs or conference proceedings as well as scientific products that, despite having passed all stages of review and being approved, are still unpublished. Therefore, for the latter it has not been possible to provide all data (i.e. range of pages and weblink).





# Partners involved in the document

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5	TECHNISCHE UNIVERSITEIT EINDHOVEN	TU/e	
6	UNIVERSITY OF PORTSMOUTH HIGHER EDUCATION CORPORATION	UOP	Х
7	UNIVERZA V NOVI GORICI	ETCAEH	Х
8	WIRTSCHAFTSUNIVERSITAT WIEN	WU	
9	UNIWERSYTET WARSZAWSKI	UNIWARSA W	
10	ICLEI EUROPEAN SECRETARIAT GMBH	ICLEI	Х
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13	GRAD RIJEKA-GRADSKO VIJECE	RIJ	
14	COMUNE DI SALERNO	SA	
15	STICHTING PAKHUIS DE ZWIJGER	PAK	



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# 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 cultural 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.

# 1.1 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.



# 2. Introduction

The Deliverable 6.6, *First Series Scientific Publications*, falls within the project work package focused on Dissemination, exploitation and communication (WP6) and, precisely, within the Task 6.3 *Implementation of communication and dissemination activities envisaged* (M1-M36).

The Deliverable provides metadata and abstracts of the first series of scientific publications produced by CLIC Consortium during the first years of project activities.





# **Annex 1. First Series Scientific Publications**



METADATA	
Year	2018
Title	Creative adaptive reuse of cultural heritage for urban regeneration
Author(s)	Gaia Daldanise, Stefania Oppido, Imma Vellecco (IRISS CNR)
Journal	Urbanistica Informazioni - INU
Volume	Special Issue
Number	278 s.i.
Editor	Francesco Domenico Moccia, Marichela Sepe
Pages range	6 – 10
Keywords	Cultural heritage; adaptive reuse; creative production
Type (scientific paper,	Scientific paper in Conference Proceedings
book, working paper)	
Weblink	http://www.urbanisticainformazioni.it/IMG/pdf/ui278si sessione speciale 4.pdf

The creative and collaborative cultural production is a strategical focus in the European political agenda. Culture is as a pillar for sustainable development, able to generate both economic and social values (CHCfE consortium, 2015). Community, cooperation, creativity are also the key words of several bottom up experiences in which cultural and creative productions are the drivers of adaptive reuse, with impacts in terms of socio-cultural empowerment and territorial improvement.

In Italy, many cases highlight these relationships among built heritage, cultural production and social innovation, evidencing the need of a systemic approach to adaptive reuse, able to make together built, cultural, social and economic components in order to trigger new local development. Starting from the analysis of these initiatives, the paper evidences some questions that can also represent the main challenges for success and sustainability. Have been the initiatives able to interpret and to answer to local demands for economic, cultural and social services? Have alliances, partnership and financial support transformed informal initiatives into economically viable activities? How management decisions and activities could find solutions to turn new ideas into successful services?





METADATA		
Year	2018	
Title	Cultural Heritage Adaptive Reuse: the role of connective civic infrastructures	
Author(s)	Luigi Fusco Girard, Gabriella Esposito De Vita, Antonia Gravagnuolo (IRISS CNR)	
Journal	Urbanistica Informazioni - INU	
Volume	Special Issue	
Number	278 s.i.	
Editor	Francesco Domenico Moccia, Marichela Sepe	
Pages range	15 - 17	
Keywords	Cultural Heritage, adaptive reuse, civic infrastructure	
Type (scientific paper,	Scientific paper in Conference proceedings	
book, working paper)		
Weblink	http://www.urbanisticainformazioni.it/IMG/pdf/ui278si sessione speciale 4.pdf	

With the CLIC project we aim to contribute to the "paradigm-shift" proposed in the United Nations Agenda 2030 for Sustainable Development (through Sustainable Development Goals) and in New Urban Agenda, towards the "humanization" of our cities (see paragraph 26).

This is the real challenge of our time. It means in particular to contribute to:

Regenerate the "connective infrastructure" of our city/society, going beyond the hyper-individualism and embracing interdependencies

Regenerate community bonds, through regenerating the collective memory

Helping subjects to move from I to US: to cooperate each other

The Circular Economy is the co-evolutive economy, the economy of synergies, cooperation, collaboration, which is put in relationship with the circular city model and with cultural heritage, that have not been put in relationship before.

The objective of this contribution is to identify tools and experiences that contribute to the regeneration of the European "connective infrastructure" through the creation of "heritage communities".





METADATA		
Year	2018	
Title	Circular models for the city's complexity	
Author(s)	Gabriella Esposito De Vita, Antonia Gravagnuolo, Stefania Ragozino (IRISS CNR)	
Journal	Urbanistica Informazioni - INU	
Volume	Special Issue	
Number	278 s.i.	
Editor	Francesco Domenico Moccia, Marichela Sepe	
Pages range	10 - 14	
Keywords	Circular cities, urban regeneration, urban metabolism	
Type (scientific paper,	Scientific paper in Conference proceedings	
book, working paper)		
Weblink	http://www.urbanisticainformazioni.it/IMG/pdf/ui278si sessione speciale 4.pdf	

The project CLIC - Circular models Leveraging Investments in Cultural Heritage adaptive re-use, funded within the European FP Horizon 2020 and led by the CNR IRISS, aims at using evaluation tools to develop and test innovative circular financing, business and governance models for adaptive reuse of cultural heritage and landscape. This paper investigates "circular models" to be adapted to the city in order to connect the complexity of the city with its several dimensions (social, human, cultural, political and entrepreneurial) – an issue still open to the international debate.

Authors will study this topic through the analysis of literature review and practices regarding green economy, industrial ecology, industrial eco-systems, industrial symbiosis, industrial eco-park, eco-efficiency, cradle-to-cradle design, biomimicry and closed loops; examples of cities declared "circular" by EUROCITIES; and examples of cultural cities (Kea, Unesco Creative Cities, European Capitals of Culture).





METADATA	
Year	Expected date of publication April 2019
Title	ECONOMIE CIRCOLARI PER IL PATRIMONIO CULTURALE: PROCESSI SINERGICI DI RIUSO ADATTIVO
Author(s)	Gaia Daldanise, Stefania Oppido, Stefania Ragozino, Antonia Gravagnuolo (IRISS CNR), Maria Cerreta, Gabriella Esposito De Vita (IRISS CNR)
Journal	Planum the Journal of Urbanism
Volume	
Number	
Editor	
Pages range	10 pp.
Keywords	Circular city, adaptive reuse, urban regeneration
Type (scientific paper,	Scientific paper in Conference proceedings
book, working paper)	
Weblink	http://www.planum.net/

In the current scientific debate, the city represents the contexts in which resources, capital, skills and talents are concentrated and, at the same time, places where multiple urban challenges are condensed. These challenges concern the environmental dimension (pollution, waste, climate change), the socioeconomic dimension (unemployment, social exclusion, well-being), the political dimension (instability in governance processes, lack of strategic planning), and the cultural dimension (training, creativity and innovation). The city is, therefore, the ideal place to experience the paradigm shift from a linear to a circular economy, and to promote synergistic, equitable and inclusive processes capable of activating new forms of urban metabolism.

The European Commission identifies cultural heritage as the main driver of development for the city and supports strategies in which it is considered one of the founding elements of possible transformations, which can be activated through mixed top-down/bottom-up approaches, developed in the short and long term. Recent urban history has shown that, in case of scarcity of resources due to underutilization of materials and waste, the linear economic model "take-make-dispose" is not able to guarantee equity, effectiveness and efficiency. Consequently tackling the current urban challenges requires a systemic approach capable of managing complexity and making it productive for urban settings and communities, but above all of transforming critical issues into regenerative opportunities, activating environmental, social, economic, political and cultural synergies. In this perspective, adaptive reuse of cultural heritage can play a decisive role not only in terms of increasing the "life-cycle" of heritage, but also as an urban strategy capable of generating new economic, cultural and social values, supporting innovative dynamics of local development.

Starting from this scenario, the article explores some experiences of "circular cities" in which approaches to adaptive reuse of cultural heritage have been experimented. The selected experiences are examined through a multidimensional evaluation approach careful to the complexity determined by the multiple components (spatial, environmental, social, political, economic and cultural) and to identify the significant impacts of the processes activated and verifying their transferability and / or scalability in different geopolitical contexts.





METADATA	
Year	2018
Title	Towards an evaluation framework to assess Cultural Heritage Adaptive Reuse impacts in the perspective of the Circular Economy
Author(s)	Antonia Gravagnuolo, Ruba Saleh, Christian Ost, Luigi Fusco Girard (IRISS CNR)
Journal	Urbanistica Informazioni - INU
Volume	Special Issue
Number	278 s.i.
Editor	Francesco Domenico Moccia, Marichela Sepe
Pages range	5 pp
Keywords	Cultural heritage, Adaptive reuse, Evaluation methods, Assessment, Circular Economy
Type (scientific paper,	Scientific paper in Conference Proceedings
book, working paper)	
Weblink	http://www.urbanisticainformazioni.it/IMG/pdf/ui278si sessione speciale 4.pdf

The evaluation key role in cultural heritage adaptive reuse choices for identifying the best relationship between the "intrinsic value" and new use values.

This paper investigates the relationships between Circular Economy, Circular City and Cultural Heritage Adaptive Reuse through evaluation tools based on criteria and indicators of circularity.

The Horizon 2020 CLIC project (Circular models Leveraging Investments in Cultural heritage adaptive reuse) develops integrated evaluation tools to support choices for cultural heritage adaptive reuse, taking into account the "intrinsic value" and thus the Social Complex Value of heritage in the perspective of the Circular Economy (Fusco Girard et al., 2018). The Circular Economy is the economy of relationships and efficiency (Ellen MacArthur Foundation, 2013, 2015; Wijkman and Skånberg, 2015; Ghisellini, Cialani and Ulgiati, 2016; Kirchherr, Reike and Hekkert, 2017), which conserves the "intrinsic value" over time, through new use values / functions (Fusco Girard and Gravagnuolo, 2017; Fusco Girard et al., 2018). The Social Complex Value (Fusco Girard, 1987; Fusco Girard and Nijkamp, 1997) of cultural heritage can orient evaluation processes to identify good practices.

# Objectives

This work is focused on the structuring of a systemic evaluation framework based on criteria to assess Cultural Heritage Adaptive Reuse impacts in the perspective of the Circular Economy. Pilot applications in Belgian and Italian case studies are presented.





METADATA	
Year	Expected date of publication 2019
Title	Identifying Cultural Heritage within Smart Specialisation strategies
Author(s)	Stanojev, Jermina, Gustafsson, Christer (UU)
Journal	Regional Studies
Volume	
Number	
Editor	
Pages range	
Keywords	cultural heritage, culture, sustainable development, economic and scientific domains, policy objectives, smart specialisation strategies and Eye@RIS3, integrated policy approach
Type (scientific paper,	Scientific paper
book, working paper)	
Weblink	

According to developments regarding implementation of cohesion policy after 2020, Smart Specialisation approach shall remain as very meaningful for Cohesion policy implementation. Prior to that, for the 2014-2020 programming period national and regional authorities were advised to harness investments into cultural heritage for the development and support of creative industry clusters. The paper examines the presence of cultural heritage and culture in smart specialisation approach through mapping European regions that are recognising cultural heritage and culture as an integrated part of their strategies for development and offers a comparison in approaches per economic, scientific domain and policy objectives.





METADATA	
Year	2017
Title	Evaluation criteria for a circular adaptive reuse of cultural heritage
Author(s)	Gravagnuolo, Antonia, Fusco Girard, Luigi (IRISS CNR), Ost, Christian, Saleh, Ruba (ICHEC)
Journal	BDC Bollettino del Centro Calza Bini
Volume	
Number	2
Editor	
Pages range	31
Keywords	Adaptive Reuse, Cultural Heritage, Circular Economy
Type (scientific paper,	Working paper
book, working paper)	
Weblink	

This article aims to develop a structured reasoning and a first proposal of evaluation criteria to assess the impacts of cultural heritage adaptive reuse projects in the perspective of the circular economy model.

Adaptive reuse of cultural heritage can be key in the implementation of circular economy and circular city/territory models. The article explores and clarifies why and how cultural heritage adaptive reuse is key to implement a circular economy in cities and regions, stressing the 'multidimensional productivity' of

heritage reuse and its contribution to the achievement of a "human sustainable development". The article addresses first the theoretical aspects comparing and discussing the literature on circular economy and its applications, while proposing a first set of evaluation criteria able to express what can be interpreted / chosen as relevant in this context.





METADATA	
Year	2018
Title	New Paradigm for Cultural Heritage in Europe
Author(s)	Christian Ost (ICHEC) and Francis Carpentier
Journal	CARTADITALIA, Journal of Contemporary Italian Culture
Volume	
Number	
Editor	Istituto Italiano di Cultura, Brussels
Pages range	3
Keywords	Cultural Heritage
Type (scientific paper,	Working paper
book, working paper)	
Weblink	

This paper aims to develop a new paradigm for cultural heritage in times of economic and social transitions. The authors analyze the post-WWII social and economic context that presented culture as a fresh domain for modern analysis, and a form of resilience towards the international expansion of uniform ways of life. Economic conditions have remained important for heritage conservation, and sometimes a catalyst for changes in practices for heritage management and financing. The paper selects some major trends and structural changes that characterize the current long-wave context of economic transition, and proposes a new paradigm aimed to better integrate cultural heritage in our society today.





METADATA		
Year	2018	
Title	Inclusive Economic Development in the Urban Heritage Context	
Author(s)	Christian Ost (ICHEC)	
Book	World Heritage and Sustainable Development: New Directions in World Heritage Management (Key Issues in Cultural Heritage)	
Volume		
Number		
Editor	Routledge	
Pages range	53-67	
Keywords	Cultural Heritage, Sustainable Development	
Type (scientific paper,	Chapter in a book	
book, working paper)		
Weblink		

The paper aims to define inclusive economic development and how it may contribute to sustainability, in particular in urban context. The framework is UNESCO's policy for the integration of a sustainable development perspective into the processes of the world heritage convention. As threats towards cultural heritage are growing fast in many cities around the world, the need for a paradigm shift in heritage conservation is increasingly felt. The paper will suggest to better integrate heritage conservation with new urban development, and to develop some 'up-stream' model where cultural policies should be considered as the best decisions to achieve sustainable economic development. The paper will also analyze inclusive economic development in terms of economic opportunity cost of historic conservation, with examples of mass-tourism, transportation issues,or urban investments in infrastructures. The objective is to demonstrate that inclusive economic development, or balanced integration between conservation and new investments, is more adapted to current opportunities and threats faced in historic cities.





METADATA	
Year	2018
Title	Conservation Dynamics. A New Paradigm for Cultural Heritage in Times of Economic Changes
Author(s)	Christian Ost (ICHEC)
Book	Innovative Built Heritage Models. Reflections on Cultural Heritage Theories and Practices
Volume	3
Number	
Editor	CRC Press
Pages range	
Keywords	Conservation, Cultural heritage, Cultural Capital, Schumpeter
Type (scientific paper,	Chapter in a book
book, working paper)	
Weblink	

This paper aims to develop a paradigm shift for cultural heritage in a time for economic and social changes. The authors analyze historic social and economic context that makes culture a continuous catalyst for changes and innovations, in a true meaning of Schumpeter-based long- wave rationale. Also it explains how culture is a fresh domain for modern analysis, and a form of resilience towards the international expansion of uniform ways of life. The paper identifies trends and structural changes that characterize periods of economic transition, and presents a tentative for new paradigm shift aimed to better integrate cultural heritage and sustainable development.





METADATA	
Year	2018
Title	A Macroeconomic and Strategic Perspectives on Historic Conservation
Author(s)	Christian Ost (ICHEC)
Book	Historic Cities: Issues in Urban Conservation (J.Cody & F.Siravo, editors)
Volume	
Number	
Editor	The Getty Publications
Pages range	
Keywords	Cultural Heritage, Macroeconomics, Long-Wave Theory
Type (scientific paper,	Chapter in a book
book, working paper)	
Weblink	

The macroeconomic investment is a key-variable for long-term growth and development. Conservation achieves similar objectives in re-using heritage buildings for modern activities, in developing sustainable tourism, and in promoting and diffusing state-of-the-art techniques of restoration. The long wave theory of economic changes can specifically address the issue of parallel trends in conservation and economic growth. Globalization, which is a long-wave explicit driver, is not an economic feature but a cultural revolution and goes beyond everything that we have know in history of preservation. A theoretical and empirical guide for town planning in historic cities using indicators, maps, and strategic devices as SWOT analysis, is intended to help the decision-making process of town planners, architects and local authorities. The global macroeconomic framework sets the stage for a new paradigm of conservation, based on multi-disciplinary tools, and modern concept as the historic urban landscape.





METADATA	
Year	Expected date of publication 2019
Title	Bukhara, a living central Asian silk roads city
Author(s)	Christian Ost (ICHEC), Ona Vileikis, Rand Eppich, Sanjarbek Allayarov
Book	Reshaping Urban Conservation: The Historic Urban Landscape Approach in Action
Volume	
Number	
Editor	Springer Nature Singapore Pte Ltd. Series 'Creativity, Heritage and City'
Pages range	
Keywords	Historic Urban Landscape, Cultural Capital
Type (scientific paper,	Chapter in a book
book, working paper)	
Weblink	

Bukhara, an ancient city along the Silk Roads in Uzbekistan, is undergoing dramatic change – an increase in visitation, an introduction of new materials and construction techniques along with an awareness of the need for protection. It has been recognized, in Bukhara and other historic cities, that there must be a new approach to urban heritage, balancing conservation along with development and change. The UNESCO Recommendation on Historic Urban Landscape (HUL) proposed just such an approach, taking into account diversity of stakeholders, management and planning tools. With this vision, the World Heritage property of the Historic Center of Bukhara has been preparing its Integrated Management Plan. The preparatory process has prioritized and integrated cultural heritage into the urban planning agenda. The process is not yet complete, but, despite its own challenges, it has already achieve success by bringing together for the first time different partners to envision a heritage city as cultural living capital on the path of protecting while developing this outstanding Central Asian medieval city.





METADATA	
Year	2018
Title	A decision support system for preservation and reuse of the cultural heritage
Author(s)	Maria Barbati, José Rui Figueira, Salvatore Greco (UOP), Alessio Ishizaka and Simona Panaro (UOP)
Journal	Urbanistica Informazioni – INU
Volume	Special Issue
Number	278 s.i.
Editor	Francesco Domenico Moccia, Marichela Sepe
Pages range	23 - 24
Keywords	Decision support system, cultural heritage
Type (scientific paper,	Scientific paper in Conference proceedings
book, working paper)	
Weblink	http://www.urbanisticainformazioni.it/IMG/pdf/ui278si sessione speciale 4.pdf

The present work regards the development of a decision support system for aiding municipalities in making decisions on complex urban regeneration policies such as the reuse of cultural sites (historical building or urban spaces).

For most European cities, with a centuries-long history, this issue is very important but also extremely complex. Indeed, on one hand, the urban needs and uses change over time, on the other hand, in order to preserve the city's identity, the cultural sites can only be transformed within an eligibility threshold. In addition, today, many other factors, such as climate change or the globalization, can have a strong impact on the cultural heritage and its preservation. Furthermore, although the European Union has identified the cultural heritage as a key economic resource, the available financial resources are rather limited.

In this perspective, it is very important to support the decision makers that have increasingly limited resources for a non-renewable heritage (as the cultural sites), clarifying opportunities and reducing risks of the transformations.

In this short paper, we will present a methodology for the selection of sustainable uses or projects by considering both the constraints of cultural heritage and the preferences of stakeholders.





METADATA	
Year	Expected date of publication May 2019
Title	The Circular Economy in Adaptive Reuse: respecting Authenticity and Integrity
Author(s)	Marco Acri, Saša Dobričić, Jukka Jokilehto (ETCAEH)
Journal	
Volume	Il patrimonio culturale in mutamento: le sfide dell'uso
Number	2019
Editor	Arcadia Ricerche
Pages range	
Keywords	Industrial Heritage, Adaptive Reuse, Sustainability, Authenticity
Type (scientific paper,	Scientific – Proceedings of international conference Bressanone 2019
book, working paper)	
Weblink	http://www.arcadiaricerche.it/editoria-2.html

One of the main topics of discussion and research at present in the building sector is related to the principles of circular economy in a new global scenario of resilience and sustainability. Given that most of European urban areas and landscapes are considered as cultural, it derives that the circular economy should be also applied to the actions and processes of conservation and valorisation, giving thus new emphasis on the concept of adaptive reuse. Thus it is not merely an issue of retrofitting historic buildings to respond to energy efficiency parameters, or to adapt them for the climate change threats, but much more: it is about rethinking adaptive reuse of cultural heritage (adaptive in both directions) within and overall sustainable process which intakes reflections on materials, techniques, technologies, praxes, but also policies, businesses, management and governance. This is the effort of the CLIC project, Circular Models leveraging investments in Cultural heritage adaptive reuse, in the Horizon2020 research framework, where the University of Nova Gorica is a partner.

This new approach in a global market economy perspective is strongly looking backwards to the traditional building site mechanisms, techniques and procedures, as matured in logistic and technological constraints. In history though, prior of the enforcing of the conservation theory principles, the aspects of authenticity and integrity were not a reference for the builders as the materials and the technologies were usual, repetitive for centuries, while today they are essential criteria for conservation and reuse. But what does it mean today looking at circular models in adaptive reuse? Adaptive reuse refers to the need to adapt cultural heritage to new needs and uses, but circularity ask also to adapt to the cultural heritage peculiarities and fragilities. May this mean we have an additional ally for the preservation of the integrity and the authenticity, as well as for a new wave in preservation of objects, urban and cultural landscapes?

The paper, taking advantage of the researches carried out within the CLIC project, but also in the URBINAT Horizon2020 project on NBS solutions for urban regeneration, will associate sustainable circular adaptive reuse of cultural heritage to appropriate conservation and maintenance, showing how new trends in societal governance may favour a better preservation attitude by specialists, users and owners of cultural heritage, with a positive impact also on the local cultural, environmental and economic context.





METADATA	
Year	Expected date of publication 2019
Title	The Circular Character of Building Tradition: Which Challenges for the HUL Approach?
Author(s)	Marco Acri, Saša Dobričić, Jukka Jokilehto (ETCAEH)
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Number	2019
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Keywords	Authenticity, Circular Economy, Sustainability, HUL, Building Tradition
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The lifespan of built environment is radically longer than the one of other goods. Buildings and cities are under permanent challenge and pressure of changing needs, lifestyles, services of society. Hence any consideration of circular economy within built environment needs different approaches and models that refer to continuity, adaptability, resilience and intrinsic quality. In history of architecture, urban centers were built by using sustainable techniques and resources and were constantly maintained with the intention to make best use of the available material, by reusing what was possible and thus reducing waste. The use of local materials, techniques, crafts and competences has been shaping the built environment for centuries, generating testimonies of local cultural authenticity in different forms (Acri, Dobričić 2017). Such local cultural authenticity that characterizes each place has been evolving by being resilient and strictly connected to its environmental context. Indeed, considering the historic urban landscape as an approach to urban management of change, we refer to the city in its capacity to represent its development in time, to put in common different urban "facts" in time, as well as nourish a genius loci that made it different from others, fully breaking the obsolete idea of identity. This process has been dominant until some of the means of linear economy, namely the mechanization of transport and production, developed so as to eliminate limits in the building sector. The absence of barriers in many senses changed the previous rules and slowly imposed new models for urban regeneration, which included new materials, new technologies, new skills, new competences, becoming more and more globalized.

The treatments of historic buildings and the development of the built environment were slowly standardized at different scales. Often this resulted in the loss of construction details and of the continuity of the place that were an expression of past human creativity and of the genius loci.

The recent trends that have put circular economy at the core of discussions on sustainability are moving in favor of the preservation of historic cities, opening interesting economic and cultural scenarios that will not let "preservation" being considered as a burden. Suddenly, local qualities and resilience are again becoming important and there is a run in giving back to the built environment its partly (or even totally) lost integrity and authenticity (Jokilehto 2017). Even tourism is contributing to this trend by developing new models based on experience, direct feedback and taste.

The paper will reveal the strict relationship between the built environment in cities and circular economy. In specific, through the preservation perspective, it will address the concept of HUL as the relationship between urban morphology and building typology jointly with the specific genius loci, highlighting the







needs to understand the qualities of global knowledge in local contexts. Taking into account the forces of development in the historic territory, HUL is intended as a context for living and a place where individuals have the capability to recognize the qualities of their environment and act through responsible attitudes.







METADATA	
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Title	Piccola guida per la manutenzione dell'architettura austro-ungarica a Gorizia
Author(s)	Marco Acri (ETCAEH), Alessandra Biasi
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Number	
Editor	Giavedoni, Pordenone
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Keywords	Authenticity, Sustainability, HUL, Building Tradition
Type (scientific paper,	
book, working paper)	
Weblink	

The theory of architectural restoration has had a strong development since the nineteenth century thanks to the contribution of philosophers, architects, archaeologists all over Europe, in light of the diffusing connection between national identities and historic heritage. It was indeed starting from the industrial revolution and revolutionary revolts that the need to preserve the memory of one's own common past began to be widely felt referring to monuments as tangible expression of this past. Monuments that, together with works of art and all those fragments of concrete facts of history, they were partially lost in the course of the various conflicts that have occurred in the world since the nineteenth century, producing movements everywhere in favor of the process of protection and conservation: UNESCO, for example, well known today for the list of World Heritage, it is a direct consequence of international movements after the war. In time, the theory of restoration has refined, always widening its horizons including other witnesses of human culture, like the landscape, the historical center, but also the traditions and the know-how as "immaterial" manifestation of humanity.

Today, if in some countries like Italy the restoration of monuments has few technical and procedural secrets for the progress of the last 60 years, there still exist the obstacle of giving value to details, mostly products of traditional knowledge and skills. The famous text of the German philosopher Walter Benjamin entitled "The work of art in the era of his technical reproducibility ", was also an anticipation of this problem, or the disappearance of tradition for the diffusion of an often insane globalizing trend to flatten local richness: this is true for objects, as well as for the ways of life and the thoughts.

This volume is an essay, an attempt to display the richness of a specific architecture in Gorizia that is present in most parts of the city and is thus often object of renovations voted to the cheapest and easiest solutions, without appropriate knowledge on the real effects. This volume is a manual for awareness raising, both within buildings' owners and professionals, as architects, workers, local administrators, to avoid the loss of useful and efficient technical and material solution of the past that may constitute a fundamental asset for the future values of the site, of the local Genius Loci, of the sense of place.





METADATA	
Year	2018
Title	Circular governance models for cultural heritage adaptive reuse: the experimentation of Heritage Innovation Partnerships
Author(s)	Cristina Garzillo (ICLEI), Antonia Gravagnuolo, Stefania Ragozino (IRISS CNR)
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Volume	Special Issue
Number	278 s.i.
Editor	Francesco Domenico Moccia, Marichela Sepe
Pages range	17 - 22
Keywords	Cultural Heritage, Adaptive Reuse, Circular Governance, Partnership
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book, working paper)	
Weblink	http://www.urbanisticainformazioni.it/IMG/pdf/ui278si sessione speciale 4.pdf

The project CLIC - Circular models Leveraging Investments in Cultural Heritage adaptive re-use, funded within the European Research and Innovation programme Horizon 2020 and led by the CNR IRISS, aims at developing and testing innovative circular governance models for the adaptive reuse of abandoned and underused cultural heritage.

The Circular Economy is defined as a "regenerative" model based on the reduction of wastes and the optimization in the use (and reuse) of natural resources. The experiences of early circular economy applications show that cooperative models are key to success, since they are able to create the necessary linkages and synergies to "close loops" and create new value from economic, social, cultural and environmental resources.

This paper investigates how circular governance models based on the recognition of cultural heritage as "common good" can support multi-actor partnerships aimed at "taking care" of cultural heritage as a resource for economic, social, cultural and environmental development.

This work is focused on the role and responsibilities of HIPs to facilitate the process of the proposed adaptive reuse blueprints for culturally, socially and economically inclusive societies in selected cities across Europe as well as to identify the stages of their exchanges shaping and influencing sustainable development both locally and in the wider European context.

It draws on ICLEI's extensive experience in moderating collaboration between researchers and policy-makers as part of European projects and seeks to support universities and cities in the assessment of Heritage Commons in pilot cities. This facilitation will allow addressing the participatory mapping and assessment of cultural heritage resources in pilot cities, the selection of specific heritage properties / sites for circular models implementation as well as the choice of financing, business and governance models for adaptive reuse.

The experimentation of Heritage Innovation Partnerships will be held in Amsterdam (Netherlands), Rijeka (Croatia), Salerno (Italy), and Västra Götaland (Sweden) as multi-actor partnership processes based on a quadruple helix cooperation model (research, public sector, private sector, community actors). Focusing on the context of Salerno, stakeholders include associations, foundations, private companies, research institutions and the municipality of Salerno.

