



Circular models Leveraging Investments
in Cultural heritage adaptive reuse



D6.22

CLIC Platform for Pilot
Cities



This project has received funding from
the European Union's Horizon 2020
research and innovation programme
under grant agreement No 776758





HORIZON 2020

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CLIC Platform for pilot cities

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Type	Websites, patents filling, etc
Author list:	Gabriella Monteleone, Giuseppe Milani, Claus Ring (FacilityLive)

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Abstract

The document describes the results of the activities related to **Task T3.3 – Innovative management of information: development of the CLIC Knowledge and Information Hub for integration and smart visualization of sectorial databases** (M1 to M24), and **Task T6.2 Communication, dissemination and exploitation strategy preparation** (M1 to M42).

Scope of the activities was 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.

The result, the Knowledge and Information Hub developed by FacilityLive is an open digital platform organizing and making available information related to best practices (for example from many EU projects), experiences ongoing in a city / territory, organizations active in heritage regeneration in a city / territory, etc.

According to the project workplan, in **WP5 - Implementation in pilot cities and region** the platform has been tested for the creation of a digital and social innovation “ecosystem” in the city of Salerno as a pilot experimentation, exploring the opportunities for transferring the models in Rijeka, Amsterdam, Västra Götaland.

The CLIC Knowledge and Information Hub is available at www.clicplatform.eu and its demo is available for all stakeholders across Europe.

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 - ISFSC	ICHEC	
5	TECHNISCHE UNIVERSITEIT EINDHOVEN	TU/e	
6	UNIVERSITY OF PORTSMOUTH HIGHER EDUCATION CORPORATION	UOP	
7	UNIVERZA V NOVI GORICI	ETCAEH	X
8	WIRTSCHAFTSUNIVERSITÄT WIEN	WU	
9	UNIWERSYTET WARSZAWSKI	UNIWAR SAW	
10	ICLEI EUROPEAN SECRETARIAT GMBH	ICLEI	
11	FACILITYLIVE OPCO SRL	FacilityLive	X
12	VASTRA GÖTALANDS LANS LANDSTING	VGR	
13	GRAD RIJEKA-GRADSKO VIJEĆE	RIJ	X
14	COMUNE DI SALERNO	SA	X
15	STICHTING PAKHUIS DE ZWIJGER	PAK	
16	INIZIATIVA CUBE	INI	
17	TECHNOLOGICAL UNIVERSITY DUBLIN	TU Dublin	

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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

Linked with the CLIC Survey developed in WP1, the CLIC Knowledge and Information Hub platform provides a common space for researchers and practitioners to share and exchange the knowledge generated in the project, in terms of “best practice” knowledge and sharing, linking with survey results, and it develops a pilot function suited to the city of Salerno to showcase local best practices and “present” the abandoned heritage as assets / opportunities for adaptive reuse investments towards the implementation of a “circular city” model. The application in the city of Salerno is replicable in the other 3 CLIC European cities/territories representative of different geographic, historic, cultural and political contexts as well as in any European city.

2.1 Document structure

This document is structured as follows:

- Ambition
- Concept and Approach
 - Aims
 - Methodology
 - Development
- Technological Innovation
 - FL Technology
 - User Experience
 - Cloud Platform
- The Platform
 - Best Practices in Adaptive Reuse
 - Opportunities of cultural heritage adaptive reuse from European cities and regions
 - Literature and Regulations
 - Back-Office

3 Ambition

Data on cultural heritage in European countries are not easily available.

Sectorial databases directly and indirectly related to cultural heritage resources have been developed by different bodies: EU Institutes for Statistics (e.g. Eurobarometer for extensive surveys), Central governments, National Institutes for Statistics, Religious bodies (e.g. the Catholic Church), Municipal institutions; Foundations, Universities and Research centres, local Professionals associations and Civil Society Organizations (CSOs). Additional databases are provided by past and ongoing EU funded projects. Data gathering, access and use / management pose many difficulties to potential end-users / producers of data.

A data revolution is taking place in our world (Habitat III, 2016). More data are produced today than ever before, from a multitude of sources. Geo-spatial monitoring, citizen-generated and crowd-sourced data, and big data, are increasingly available in real time and complement official statistics. The data is no longer structured and in relational formats, but *unstructured and heterogeneous* and the nature of these heterogeneous data has no limits. Access to relevant data has become a non-trivial task for the user. The private sector, academia, and civil society are using this growing variety of data to make profits, inform research, drive innovation, and support advocacy. In this scenario an effective and precise search solution is required that ensures knowledge of what information is available, and provides a quick retrieval of that information. The solution should provide a quality user experience that is naturally intuitive and the entire process effortless.

Enhancing accessibility and capacity to use data for decision-making is strongly advocated in the New Urban Agenda for sustainable urban / territorial development (see Habitat III events on Data Revolution). Integrated and coordinated data generated through collaborative, participatory processes are essential to planning and monitoring cities in the 21st Century, and empowering citizens. Partnering across sectors to harness the explosion of available data, technologies, skills, and opportunities to connect multiple data sources is essential to unlocking data for evidence-based decision making (U.S. Department of State, 2016).

One of the objectives of the CLIC project is to strengthen efforts to harness data for heritage management in EU regions, developing participatory mapping, unified access to heritage-related databases, data visualization, citizen-generated data.

New technology for information management can empower local governments and citizens, enabling cooperation processes based on trust, transparency and engagement in decision-making. Citizens become “prosumers”: heritage prosumers, data prosumers, decision prosumers (Ritzer and Jurgenson, 2010).

Technology can boost local heritage-led economies reducing costs of adaptive re-use processes and creating new markets for useful services that enhance the quality of life.

Facility Live is committed in creating an impact in the market of information technology by providing methodologies, expertise, a novel patented technology and an enabling platform for heritage-related data management, delivering this impact in the city of Salerno through a pilot implementation. The pilot application will be available on the CLIC Knowledge and Information Hub and its demo will be available for stakeholders across Europe.

The ambition is to use and further develop highly innovative data and information technology to enable cooperation between multiple stakeholders and inform their investment and management choices.

4 Concept and Approach

The CLIC Knowledge and Information Hub, developed in an innovative way, testing and exploiting the FacilityLive semantic-based web technology, will serve as work tool for researchers to engage and cooperate with local stakeholders for co-producing information, knowledge and collective wisdom.

4.1 Aims

FacilityLive data and information management technology has been employed in the CLIC Knowledge and Information Hub for two main aims:

1. Empower researchers providing an open platform for cataloguing, presenting and sharing their research findings, from best practice analysis to indicators to financing, business and governance models, enabling a rich and effective knowledge sharing / transfer and empowering the transdisciplinary research process, that is the key strength of CLIC;
2. Develop a pilot application for heritage-related data and information management in the city of Salerno, which will serve as a final heritage data platform where data from different sources will be visualized to provide useful information to a wide range of stakeholders who will be involved in the HIPs: policy-makers, entrepreneurs, investment funds managers, owners of heritage goods, professionals, civil society organizations.

4.2 Methodology

In the implementation of the Knowledge Information Hub, FacilityLive used a methodology based on co-creation, an approach that focuses on making stakeholders and users constructive and active participants in the definition and construction of the platform. FacilityLive, all CLIC partners and final users in the Pilot cities worked alongside each other sharing knowledge whilst interacting with FacilityLive Human-centric Technology, therefore creating a fertile ground for innovation and cross-disciplinary research and communication. The methodology developed and implemented by the FacilityLive research team is based on the widely recognized innovation cycle process. The latter articulates itself around four concurrent phases: co-creation, exploration, experimentation, and evaluation.

The fundamental concept at the base of the work is to gain direct and unfiltered access to end users' ideas, experiences, and knowledge, based on their daily needs and desire of feeling supported by a Knowledge Information Hub. Users are directly involved in co-creating, exploring, experimenting and evaluating new ideas, concepts and technological artifacts.

The users are all involved from the early stage of the development process and throughout its duration. Insights are gathered directly from the users in order to define and implement realistic, useful, desirable and effective artifacts by using a number of tools and techniques (focus groups, interviews, brainstorming sessions and questionnaires).

4.3 Development

Starting from the WP1 work done in T1.1 related to the Survey on best practices of cultural heritage adaptive reuse, and using the knowledge collected and stored in the database of best practices, deliverable D1.4 Database of best practices (to be updated based on the midterm review report), FacilityLive studied a first concept design of the CLIC Knowledge and Information Hub

platform providing the Best Practices. Then a Proof of Concept (PoC) demonstrator of the platform has been developed to bring the idea to life and then refined according to the users' feedbacks.

The result is a knowledge sharing platform to learn from and share information on the best circular practices of cultural heritage adaptive reuse in Europe and beyond. The platform allows to search, collect and compare the characteristics and impacts of more than hundred cultural heritage and landscape reuse projects and highlight additional projects and information to enrich the platform in a collaborative way.

The platform is also intended to be a repository of data related to cultural heritage in the pilot cities / landscapes involved (T5.2) , open to new territories who will join during and after the project.

The CLIC Knowledge and Information Hub has been implemented to manage and visualize in an innovative way the sectorial information related to heritage assets (databases, technology systems, GIS maps...) to inform investors, policy-makers, entrepreneurs and civil society organizations on the opportunities and costs related to available heritage assets to start heritage regeneration actions.

The Platform organizes and makes available information related to best practices, experiences ongoing in a city / territory, organizations active in heritage regeneration in a city / territory, etc.

Public administrations can benefit of the platform by becoming aware of local heritage, bottom-up initiatives and their impacts for better decision-making and public support. Moreover, the platform:

- enables institutional communication of adaptive reuse objectives in a city
- facilitates stakeholders' cooperation and access to information
- allows the launch of adaptive re-use strategic projects testing the proposed circular models

5 Technological Innovation

The platform is based upon the proprietary technology of FacilityLive, a search driven next generation software platform for the organization and management of information, with patents granted in 46 countries worldwide. FacilityLive's disruptive technology finds exactly what you are looking for, thinking and treating information in the same way humans do. This allows people and organisations to have a compelling user experience in information search.

5.1 FL Technology

FacilityLive is an innovative software platform using a patented revolutionary semantic search engine. Abandoning the full text retrieval approach, including statistics and analytic algorithms, of the traditional search engines has allowed FacilityLive to have a higher level of precision compared to other existing search engines.

The platform is designed and built using a “human centric” approach to the management of information. The semantic search engine is extremely effective in linking information from disparate sources stored either in a structured or unstructured way. It is able to collect results and order them precisely in a contextualized and personalised way.

FacilityLive technology has the following advantages:

1. **Organisation of the information** - The platform organises digital *unstructured* and *heterogeneous* content (even of *poor quality*) through:
 - a. An accurate catalogue of all the information stored in any available information sources.
 - b. Recognition of different kinds of data and information, regardless of its origin, size, its format, and physical location.
 - c. The organisation of data and information from all sources based on the principle of its **relevance** with an indexing that is precise using a semantic approach which is typical to the human approach to organising information.
2. **Search** - The platform assists the user in an *intuitive* way when searching for information through the semantic interpretation based on the search text and returns the results with a high level of relevancy, identifying the most significant and precious information.
3. **Result presentation** - The platform returns the available information to the users in a simple and effective way that is highly intuitive, achieving maximum user experience. The information is aggregated, correlated and presented to the user in a workspace that represents a cogitative approach to information and its use.

5.2 User Experience

When users access the platform on the web or on the mobile and begin to enter their search text in the search box, immediately they are presented with several suggestions for composing the rest of the search text. The search engine intelligently interprets what the user is writing and then guides the user further, showing the reasonable search paths for their needs based on the existing information sources it already knows about. The user at this point interacts with the search box to perfect and complete the search text.

Once the search text is composed and executed, the search engine is able to detect and associate the *semantic content* to different *concepts*. It can resolve complex search texts as it understands and associates the meaning of what the user is looking for even if it is written with different terms or languages. Therefore, the search text provided by the user should not be a list of words but a complete sentence from which then the search engine is able to extract the most relevant concepts, disambiguate them if necessary and return the most appropriate and accurate results quickly.

The FacilityLive technology uses a search model unlike the other search engines and similar to human methods. It is based upon **concepts**. The human mind is directed when searching information using a “knowledge domain”. This is the set of all the terms that the cerebral system connects to the desired information. The memorised terms are elaborated in the mind by cognitive processes that create the ties between them. “Linguistic capability” is the instrument that allows these cerebral connections to be made.

The FacilityLive search engine simulates the capacity of the human brain to organise the connections between the terms being searched and other terms that a person creates. These connections are related using the concept of *semantic similarity* in the search engine by which sets of words are similar in meaning or content. The engine creates an ontological model that allows it to simulate the linguistic abilities of humans, thereby able to search for all documents present within an information repository by identifying analogies with the real meaning of the searched terms.

Once the user completes the input of the search text and submits it, based on the information sources available, the semantic engine searches for results simultaneously from all the different information sources available and returns only the most significant ones, correlating and integrating them in a logical manner.

The results are organised and presented to the user in an intuitive and personal workspace that facilitates human interaction. This innovative workspace provides the user with *conceptual* and *visual tools* that provide easy navigation through the results returned by the search engine and creates a *mental model* on which the user can work to perform further duties.

The search engine creates the user's workspace dynamically based upon the search performed. It organises the visual representations using methodologies that are close and similar to the human cognitive approach. The search engine divides the visualisation of the returned results in **conceptual areas** to promote detail in a *contemporary manner* instead of the usual sequential manner. The use of these presentation areas allows the returned results to be easily interpreted and satisfy the *associative logic* of the user more effectively than the traditional visualisation as lists. Finally, collections of results that are complimentary each other are aligned in various areas of the workspace to facilitate access to the information and the decisional process.

Due to the immediate visibility of the most relevant results and their relationships, the user has a simple and evident visual representation at their disposal that provides access to results including their physical and logical locations that are most relevant to their search. This is done through instruments that enable the *simultaneous vision of multiple levels of information*. Clicking on a result provides accessibility to that result without needing to leave the workspace: The **Hyperlens®** component implements a patented feature of FacilityLive that allows navigation locally and remotely directly from the result on the results page. The user is never forced to leave the results page and therefore does not have to toggle between the search result page and the actual source of the user activated result.

The user can easily interact with the results, choose and save them by simply dragging the results around the workspace. The **Infobag®** component is designed to collect and save a selection of the results chosen by the user creating an information pack. From the results page you can then email

or download the entire contents of the Infobag. This allows the user to create a personal and individual information package containing all the selected artefacts from the search. The user can then review these results later or share them with others.

5.3 Cloud Platform

FacilityLive's technology is available on Cloud as "software as a service". Making and upkeeping Web and Mobile solutions is made easy and intuitive thanks to its smart components-based platform. FacilityLive Cloud platform generates a digital Platform, that gives the end user access to information within the complete and intuitive experience. Specifically, for this purpose FacilityLive studies, designs and develops new and innovative technological components.

The FacilityLive Cloud Platform allows the creation of platforms that offer an innovative user experience when it comes to the fruition of information. This experience is enabled by an innovative search engine that provides precise answers to complex questions. That's how the platforms created with FacilityLive's technology allow humans and machines to run searches and get a dynamic composition of data and information, within a specific domain.

The architecture of the platform is a microservices model, that proved effective over the past years, because it allows a keen evolution when it comes to:

- *Scalability*: if compared to an omni-comprehensive enterprise solution, usually called "monolite" in literature, the microservices model simplifies the assessment of resources or instances to a single service based on the usage load;
- *Fault-tolerance*: in the event of a single service being unavailable, it is possible to isolate it through patterns such as a circuit-breaker;
- *Resilience*: the platform can adapt to internal changing conditions (such as: system partitions, network issues, malfunctioning or offline nodes and/or services) while still making data available for end users.

FacilityLive Cloud Platform is developed according to the pillars of a Cloud technology:

- *Data security*: it is very important in Cloud architectures to prevent the risk of system penetration, tampering or theft of precious information;
- *Data management*: in a Cloud architecture, where client's information are stored in third party systems, it is very important to manage data related issue, specifically retrieval, availability and integrity;
- *Performance*: to grant an adequate performance level, it can prevent consequences such as client loss, productivity reduction and revenue decrease;
- *Dependability and availability of the service*: Cloud architecture must grant the client that the services it offers are always operating, easily managed and working according to the defined specifics;
- *Legal aspects*: Cloud architecture is inherently distributed over several geographical areas that abide different laws and rules, thus an in-depth study of legal and administrative aspects for the correct protection of clients and their data is performed.

6 The Platform

The CLIC Knowledge and Information Hub platform provides a common space for researchers and practitioners to share and exchange knowledge about cultural heritage adaptive reuse, in terms of “best practice”. Furthermore, it develops a pilot function based on requirements from the cities of Salerno, Rijeka, Amsterdam and Västra Götaland Region to showcase local reuse practices and “present” the abandoned heritage as assets/opportunities for adaptive reuse investments towards the implementation of a “circular city” model. The application in the four cities/territories, representing different geographic, historic, cultural and political contexts is replicable in any other European (and not only European) city. The platform provides also a knowledge base of all existing literature on Adaptive Reuse and Circular Economy topics.

The CLIC Knowledge and Information Hub is available at www.clicplatform.eu and its demo is available for all stakeholders across Europe.

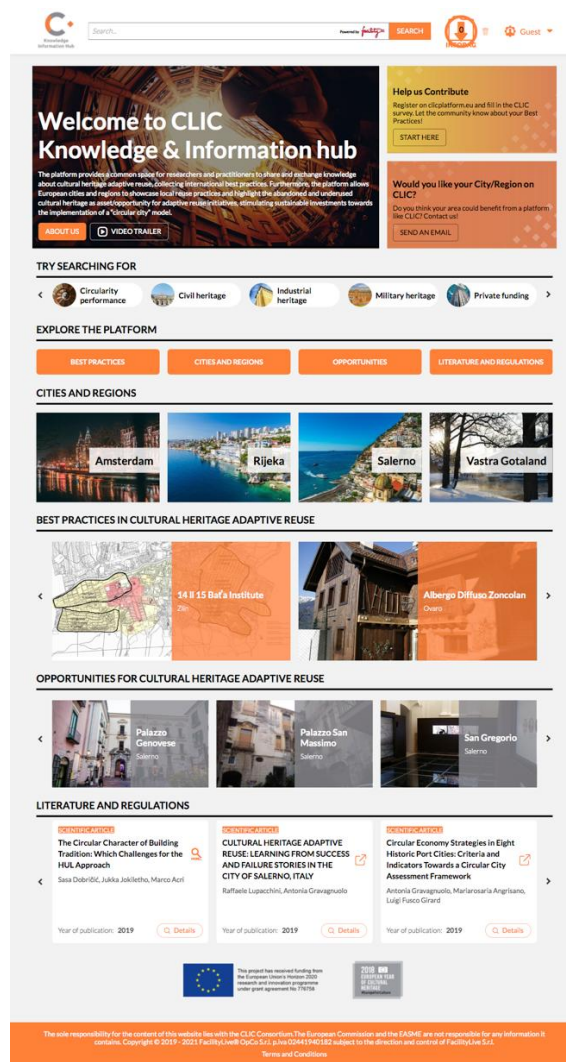


Figure 1 - Home Page

The user can find the information he/she needs by using the search bar at the top of the page. Some suggestions of search are presented below the search bar, divided by topics.

The User can find information regarding:

- projects of **cultural heritage adaptive reuse** from European countries, provided by respondents to the CLIC Survey (“Best Practices” button);
- **opportunities of cultural heritage adaptive reuse** from European **cities and regions** (“Cities and Regions” and “Opportunities buttons”);
- all existing literature on Adaptive Reuse and Circular Economy topics (“Literature and Regulations”).



There is also an **About us** section, a **Help** page and the possibility to contribute to the **survey** and/or add a **city/region** to the platform.

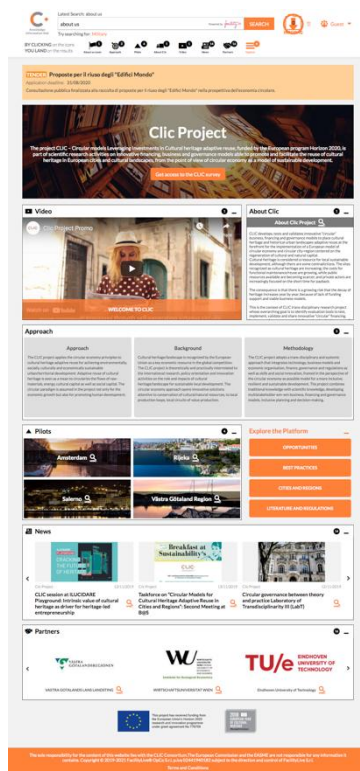



Figure 2 – About Us Page.



Figure 3 - Help Page

The Hyperlens allows you to see any type of content, without ever leaving the page.

Clicking on the icon , the user can see more details, information and data about the content he/she is interested in or remote websites or documents without leaving the page he/she is on.

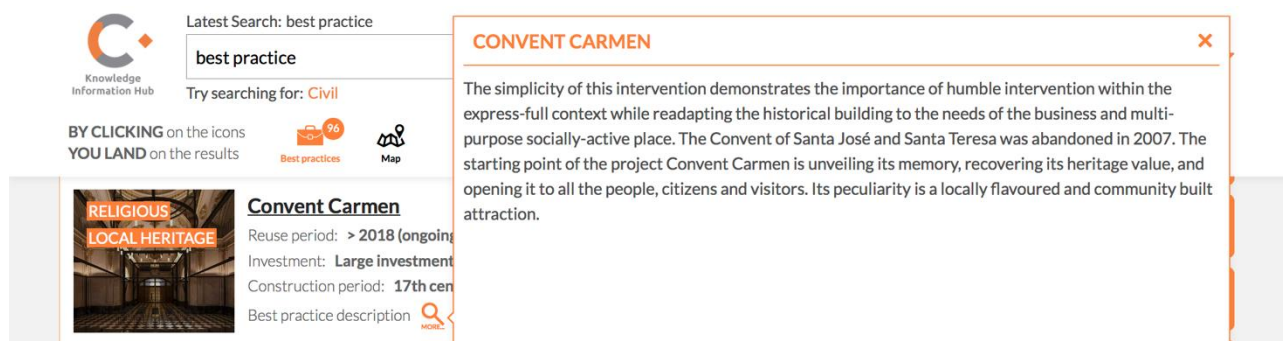


Figure 4- The Hyperlens

The infobag is a smart folder. Inside the Infobag® the user can save and organize his/her search results. To add items to the Infobag the user can drag-and-drop them in the designated area. The user can view the content of the Infobag by clicking on this icon. - .

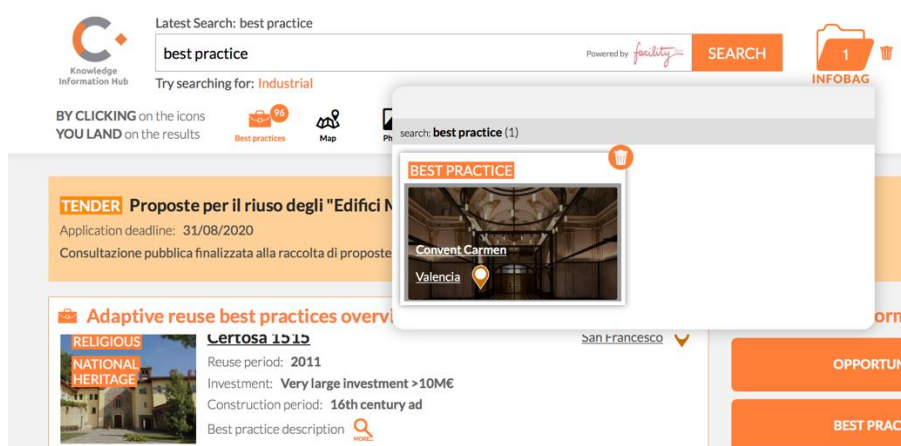
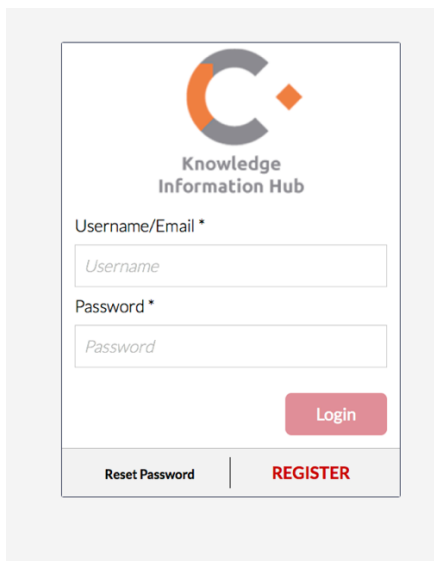


Figure 5 – The Infobag

The user can freely browse the contents of the Knowledge Information Hub platform as a guest user. If he/she wants to save the content of the Infobag, he/she needs to register and log in to create an account.



The form is titled 'Knowledge Information Hub' and features the CLIC logo. It includes input fields for 'Username/Email *' and 'Password *'. Below these fields is a pink 'Login' button. At the bottom, there are two links: 'Reset Password' and 'REGISTER'.

Figure 6 – Login/Registration

By logging into his/her account on other devices he/she will find the items he/she has previously saved in the Infobag.

The user can access the Knowledge Information Hub web app from tablet and mobile too:

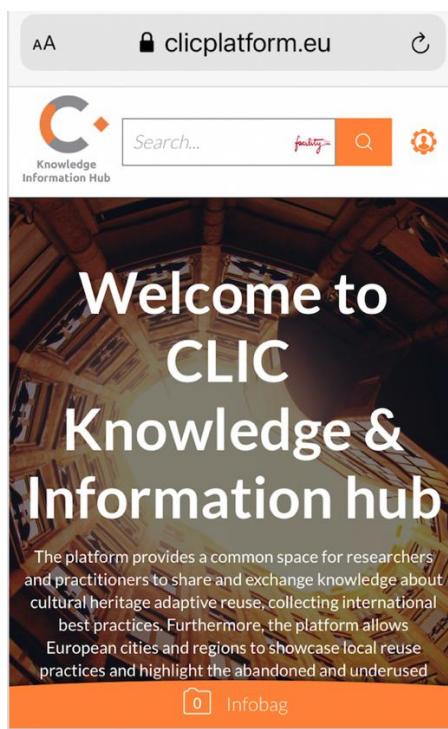
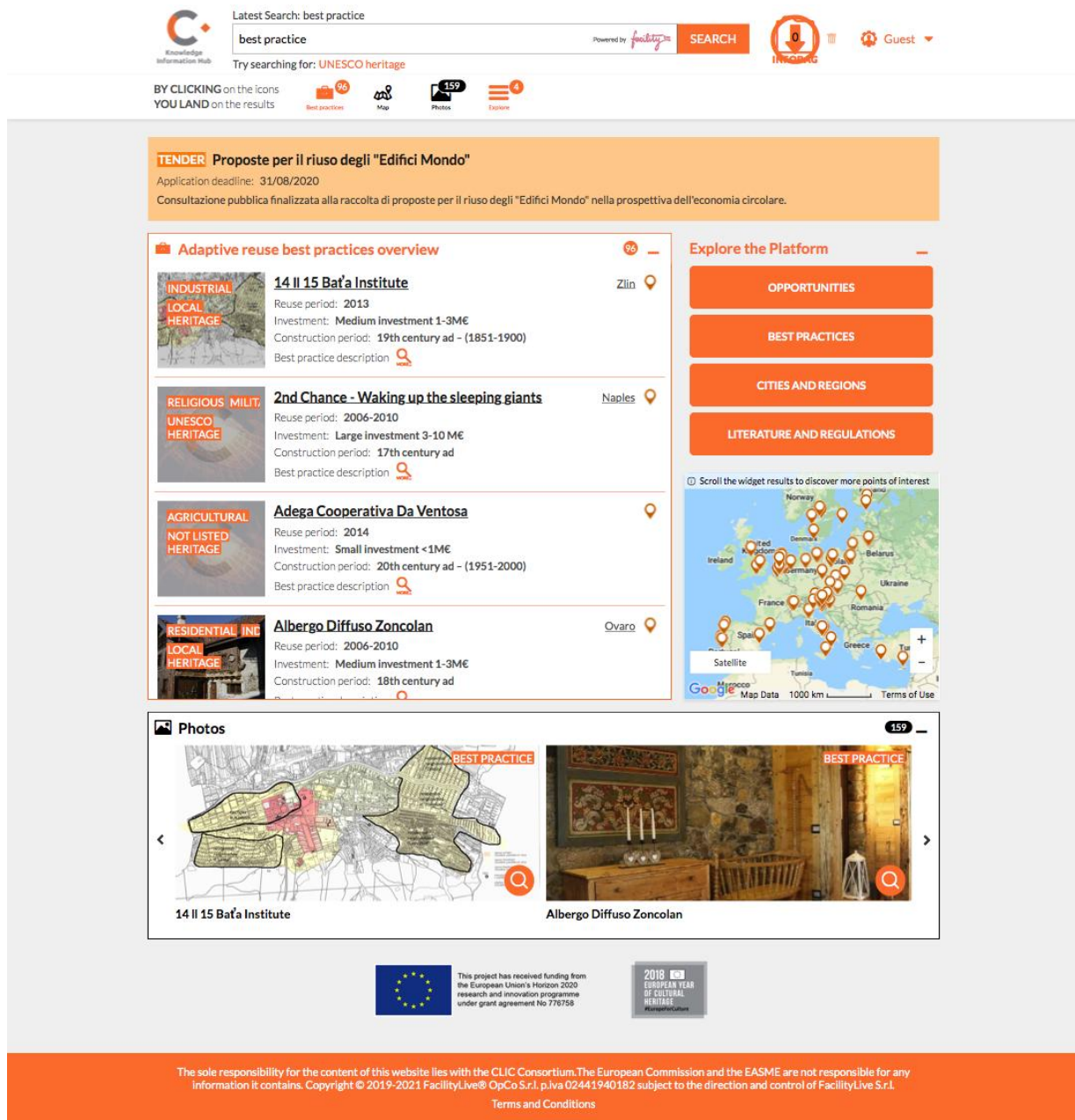


Figure 7 – Mobile Version

6.1 Best Practice of cultural heritage adaptive reuse

By clicking on “Best Practices” the user can access to the knowledge of the platform about the best circular practices of cultural heritage adaptive reuse in Europe and beyond.



TENDER Proposte per il riuso degli "Edifici Mondo"
Application deadline: 31/08/2020
Consultazione pubblica finalizzata alla raccolta di proposte per il riuso degli "Edifici Mondo" nella prospettiva dell'economia circolare.

Adaptive reuse best practices overview

- 14 Il 15 Bat'a Institute**
Reuse period: 2013
Investment: Medium investment 1-3M€
Construction period: 19th century ad - (1851-1900)
Best practice description
- 2nd Chance - Waking up the sleeping giants**
Reuse period: 2006-2010
Investment: Large investment 3-10 M€
Construction period: 17th century ad
Best practice description
- Adega Cooperativa Da Ventosa**
Reuse period: 2014
Investment: Small investment <1M€
Construction period: 20th century ad - (1951-2000)
Best practice description
- Albergo Diffuso Zoncolan**
Reuse period: 2006-2010
Investment: Medium investment 1-3M€
Construction period: 18th century ad
Best practice description

Explore the Platform

- OPPORTUNITIES
- BEST PRACTICES
- CITIES AND REGIONS
- LITERATURE AND REGULATIONS

Scroll the widget results to discover more points of interest

Photos

- 14 Il 15 Bat'a Institute
- Albergo Diffuso Zoncolan

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 776758

2018 EUROPEAN YEAR OF CULTURAL HERITAGE

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Figure 8 – Best Practices

The platform allows to search, collect and compare the characteristics and impacts of more than a hundred cultural heritage and landscape reuse projects facilitating the enrichment of the platform with new projects in a collaborative way. The platform not only empowers researcher and practitioners providing an open platform for cataloguing, presenting and sharing reuse projects but

it is also of interest to anyone who wishes to look into the adaptive reuse practices and learn from their experiences such as citizens interested in seeing the projects of their city, local officials interested in possible new uses of buildings in their area of competence or be inspired by virtuous behaviour on other territories, investors interested in being able to evaluate the economic impacts of projects on the territory. The aim is to make accessible the information on cultural heritage adaptive reuse projects collected within the CLIC research.

The platform contains information on projects of **cultural heritage adaptive reuse** from European countries, provided by respondents to the CLIC Survey. It presents general information on the adaptive reuse project and its location, its structural characteristics and management aspects, and its uses / functions. The platform includes also aggregated data on different potential impacts of cultural heritage adaptive reuse in the perspective of the circular economy.

The user can find the information he/she needs by using the search bar at the top of the page. Some suggestions of search are presented below the search bar, divided by topics

Through the platform, the user can consult information on single project and he/she can search specific groups of projects according to their characteristics for instance **typology** of the heritage building / site / landscape, type of **owner** before the adaptive reuse intervention (public, private, ecclesiastical, other), type of **managing body** (public, private for profit, private non-profit, public-private-partnership, mixed), and type of **funding** (public, private foundation, private donations, owner's investment, manager's investment, crowdfunding campaign, other).

When the user starts typing, the search assistant, containing further search suggestions, appears.

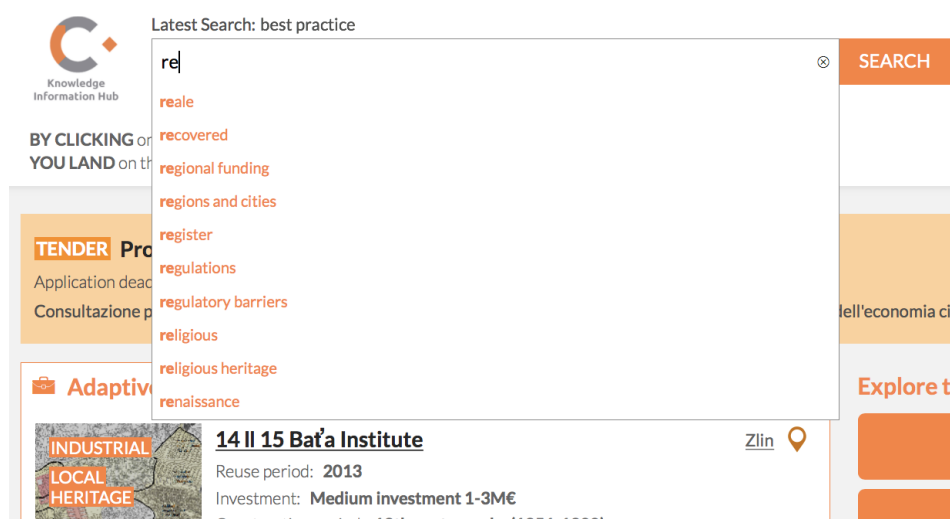
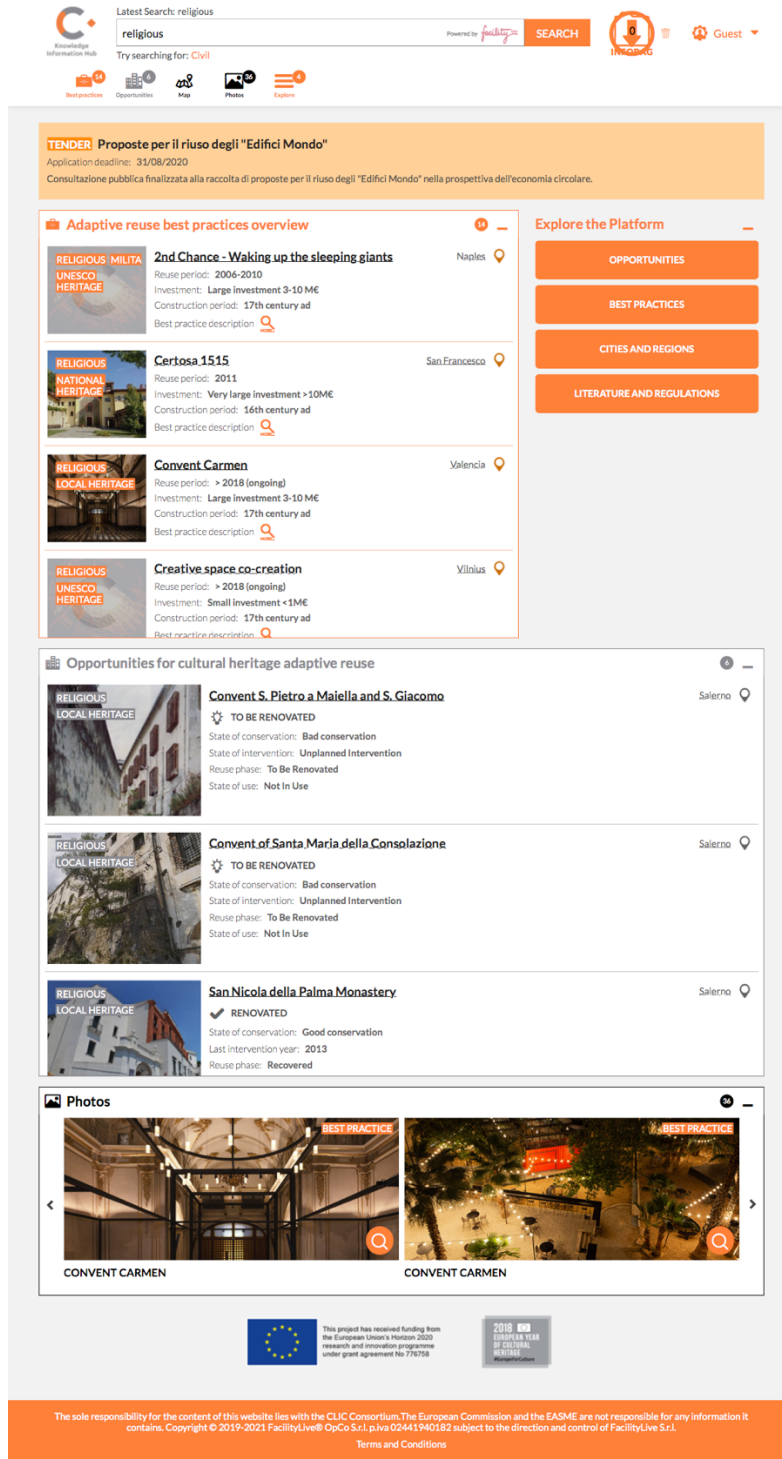


Figure 9 – Search Assistant

If none of the suggestions satisfies his/her search, the user can add more details in the search bar.

By selecting “religious”, the refreshed page displays the widgets containing search related results, all projects related to religious heritages.



The screenshot displays the CLIC Platform interface with the search term 'religious'. The top navigation bar includes the CLIC logo, a search bar with 'religious' entered, and a 'SEARCH' button. Below the search bar, there are icons for 'Best practices', 'Opportunities', 'Map', 'Photos', and 'Explore'. The main content area is divided into several widgets:

- TENDER Proposte per il riuso degli "Edifici Mondo"**: A banner for a tender with an application deadline of 31/08/2020.
- Adaptive reuse best practices overview**: A list of four best practices:
 - 2nd Chance - Waking up the sleeping giants** (Naples): Reuse period: 2006-2010; Investment: Large investment 3-10 M€; Construction period: 17th century ad.
 - Certosa 1515** (San Francisco): Reuse period: 2011; Investment: Very large investment >10M€; Construction period: 16th century ad.
 - Convent Carmen** (Valencia): Reuse period: > 2018 (ongoing); Investment: Large investment 3-10 M€; Construction period: 17th century ad.
 - Creative space co-creation** (Vilnius): Reuse period: > 2018 (ongoing); Investment: Small investment <1M€; Construction period: 17th century ad.
- Explore the Platform**: A sidebar with buttons for 'OPPORTUNITIES', 'BEST PRACTICES', 'CITIES AND REGIONS', and 'LITERATURE AND REGULATIONS'.
- Opportunities for cultural heritage adaptive reuse**: A list of three opportunities:
 - Convent S. Pietro a Maiella and S. Giacomo** (Salerno): TO BE RENOVATED; State of conservation: Bad conservation; State of intervention: Unplanned intervention; Reuse phase: To Be Renovated; State of use: Not In Use.
 - Convent of Santa Maria della Consolazione** (Salerno): TO BE RENOVATED; State of conservation: Bad conservation; State of intervention: Unplanned intervention; Reuse phase: To Be Renovated; State of use: Not In Use.
 - San Nicola della Palma Monastery** (Salerno): RENOVATED; State of conservation: Good conservation; Last intervention year: 2013; Reuse phase: Recovered.
- Photos**: A gallery of two photos of the Convent Carmen, both labeled 'BEST PRACTICE'.

At the bottom, there is a footer with the European Union flag, a statement of funding from the European Union's Horizon 2020 research and innovation programme, and a copyright notice for 2019-2021 FacilityLive® OpCo S.r.l. The footer also includes a disclaimer and a link to 'Terms and Conditions'.

Figure 10 - Search "Religious"

The interface of the Knowledge Information Hub platform is composed of **Widgets**. Widgets are containers that organize results based on search pertinence. The page displays a number of Widgets divided by information type. They contain all the information regarding the search.

Each new search displays new results and new widgets. For example, the user can access the information of a specific project clicking on the name of a single project.

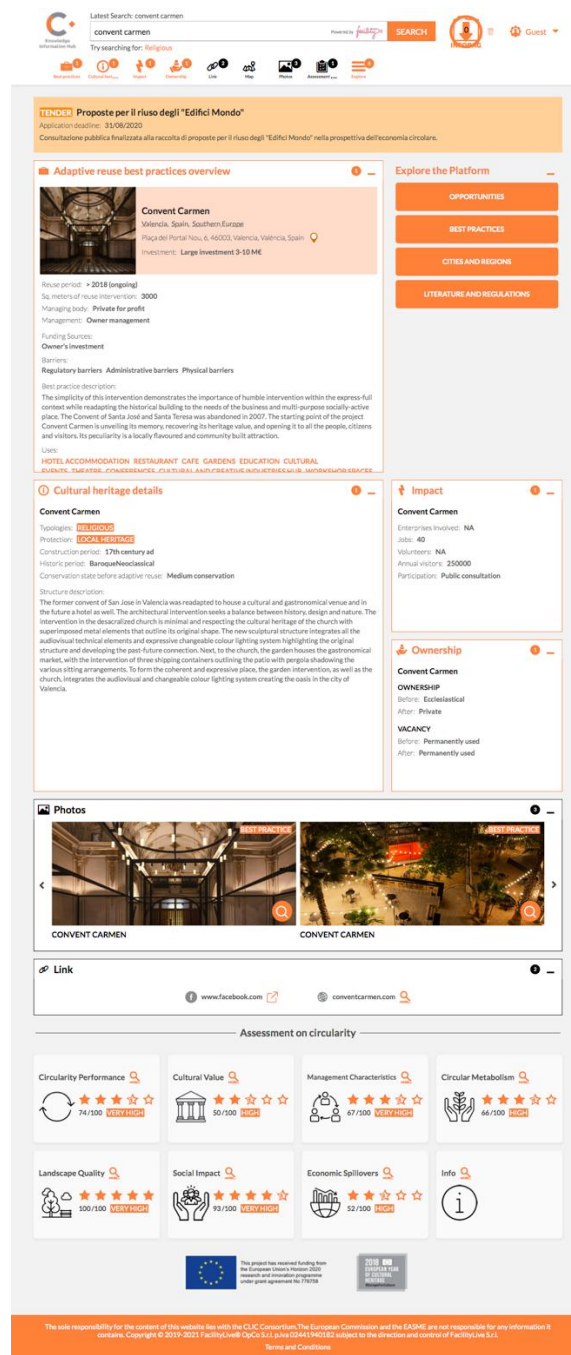


Figure 11 - Result Page

The user can modify the visualization of the page by minimizing widgets you're not interested in. To do so, he/she has to click on the top right “_” button on the individual widget he/she wants to hide. The widget is now hidden.

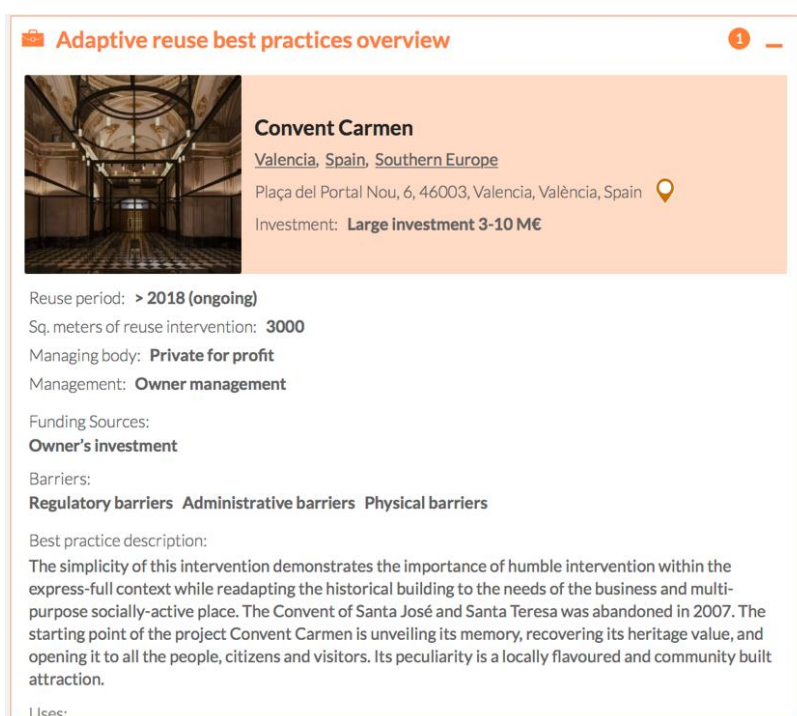
To visualise it again, the user can simply click on its icon in the widgetbar. The widgetbar is a tool displayed beneath the search bar. It shows the icons representing the widgets. It shows the number of items in each widget. It allows the user to see which widgets are visible and which are hidden.



Figure 12 - The Widgetbar

By clicking on the icon of a widget in the widgetbar, the page scrolls to that widget's position.

Adaptive Reuse Best Practice Overview Widget



The widget provides the Project description:

- **Project Name:** Project Name
- **City:** City in which the project is located
- **Country:** Country
- **EU geographical regions,**
- **Localization:** Specific localization of the project

- **City size:** Size of the city in which the project is located
- **Investment:** Approximate amount of the investment realized
- **Reuse Period:** Year of realization of the adaptive reuse intervention
- **Sq meters of Reuse Intervention:**
- **Management structure:** How the building / site / landscape is managed
- **Managing body:** Type of managing body
- **Funding Sources:** How the adaptive reuse has been funded
- **Barriers:** Barriers and constraints experienced in the realization of the adaptive reuse intervention
- **Best Practices Description:** Brief description of the economic, social and environmental impacts of the project
- **Uses:** the final uses in the adaptive reuse intervention.

Culture Heritage Details Widget

📄 Cultural heritage details

Convent Carmen
 Typologies: **RELIGIOUS**
 Protection: **LOCAL HERITAGE**
 Construction period: **17th century ad**
 Historic period: **BaroqueNeoclassical**
 Conservation state before adaptive reuse: **Medium conservation**
 Structure description:
 The former convent of San Jose in Valencia was readapted to house a cultural and gastronomical venue and in the future a hotel as well. The architectural intervention seeks a balance between history, design and nature. The intervention in the desacralized church is minimal and respecting the cultural heritage of the church with superimposed metal elements that outline its original shape. The new sculptural structure integrates all the audiovisual technical elements and expressive changeable colour lighting system highlighting the original structure and developing the past-future connection. Next, to the church, the garden houses the gastronomical market, with the intervention of three shipping containers outlining the patio with pergola shadowing the various sitting arrangements. To form the coherent and expressive place, the garden intervention, as well as the church, integrates the audiovisual and changeable colour lighting system creating the oasis in the city of Valencia.

The widget provides the characteristics of the cultural heritage building/site/landscapes

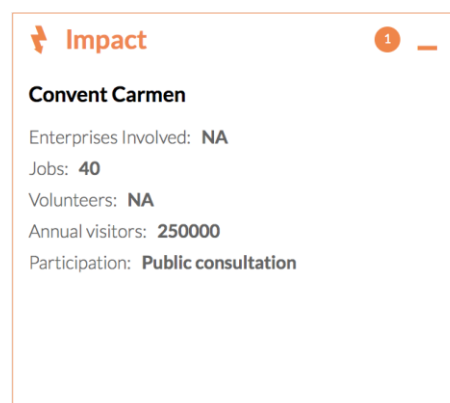
- **Typologies:** Typology of the original building / site / landscape
- **Protection:** Level of protection of cultural heritage or recognition of its value by the local community
- **Construction period:** Period of construction of the oldest part of the building / site / landscape elements
- **Historic period:** Historic Period
- **State of conservation:** State of conservation of the heritage building / site / landscape before the adaptive reuse intervention
- **Structure Description:** Brief description of the heritage.

Map Widget



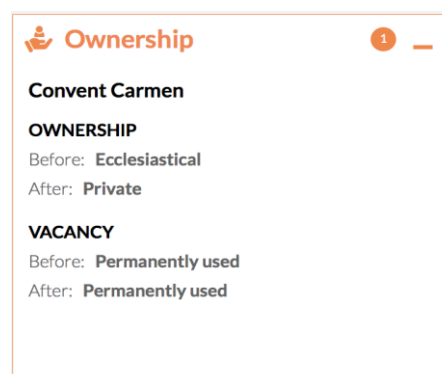
The widget provides the specific localization of the project on Google Map.

Impact Widget



The widget provides information about the Impacts in the area due to increased attractiveness or impacts on social inclusion, wellbeing and health to which the reuse process has contributed.

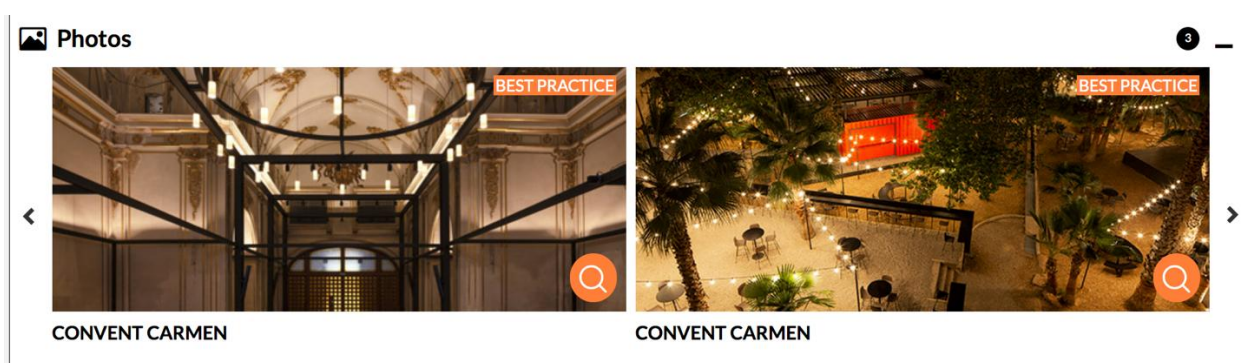
Ownership Widget



The widget describes the type of owner and the state of use of the cultural heritage building/site/landscapes before and after the adaptive reuse intervention.

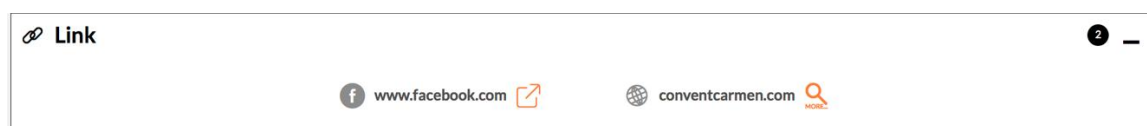
- **Ownership before:** Type of owner before the adaptive reuse intervention
- **Ownership after:** Type of owner after the adaptive reuse intervention
- **Vacancy before:** State of use of the heritage before the adaptive reuse intervention
- **Vacancy after:** State of use of the heritage after the adaptive reuse intervention

Photo Widget



The widget provides images of the cultural heritage building/site/landscapes

Link Widget

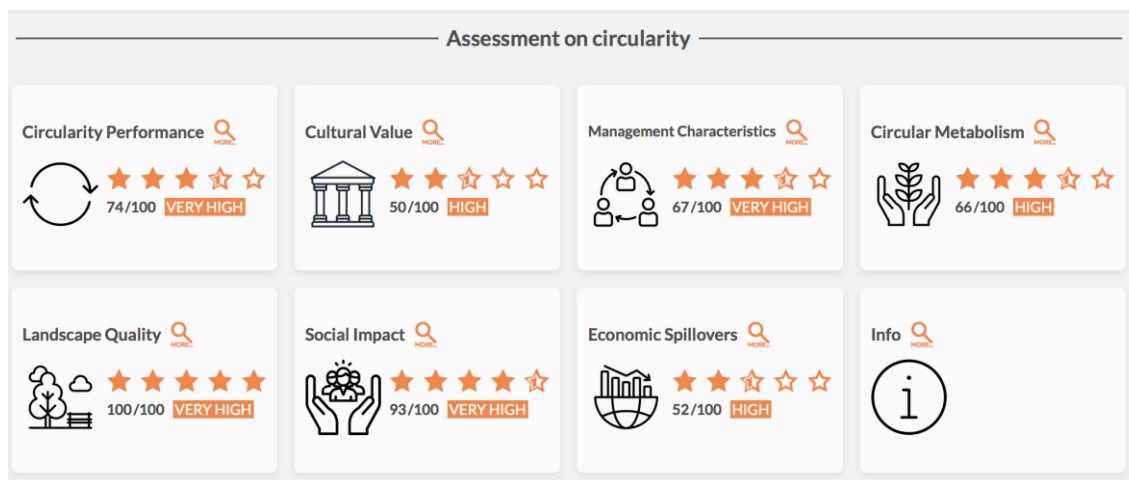


Weblinks: Additional sources for more information

Assessment on circularity Widget

The Platform contains also specific data on different aspects of circularity in the adaptive reuse of cultural heritage. They include, for example, information on energy efficiency, water recovery and materials reuse, information on the conservation of the cultural value of the building / site / landscape through the adaptive reuse intervention, as well as information on the economic, social, cultural, and environmental impacts generated by the adaptive reuse project in the local context.

The widget reports the assessment on circularity in the adaptive reuse of the cultural heritage.



- **Circularity Performance:** the overall evaluation of “circularity performance” expresses the global level of circularity in the adaptive reuse practices, according to factors that directly influence it (circular metabolism realization, landscape quality enhancement, social impact and economic spillovers) and factors that indirectly influence it (cultural value enhancement and management characteristics oriented to economic-financial self-sustainability and stakeholders’ involvement in decision making).
- **Circular Metabolism:** it reflects the degree of reduction in the consumption of resources in terms of renewable energy sources and low energy consumption systems, water recycling systems, reduction of GHG emissions and construction wastes, recycling of materials, use of local traditional materials, bio-materials and/or reuse materials as well as recovery/increase of biomass/green spaces and adoption of nature-based solutions.
- **Landscape quality:** it represents the ability to improve the general landscape visual quality and the state of maintenance of buildings / sites, enhancing the cleanliness of the area, reducing the presence of low quality architecture and of abandoned spaces.
- **Social Impact:** social impact is referred to the re-generation of relationships driven by the adaptive reuse of cultural heritage. It is linked to the creation of “heritage communities”, the increase of cultural activities and events, the degree of enhancement of social cohesion in the area, of safety, place attachment and local identity. It represents also the ability of the reuse project to increase cultural life in the area, increasing citizens’ involvement and participation and the inclusion of marginalized groups (such as elderlies, low income groups, migrants, etc.), linked to an improvement of wellbeing as well as psychological and physical health. Furthermore, it also expresses the possibility of enhancement of the awareness raising for cultural heritage as a consequence of the reuse process.
- **Economic Spillovers:** it is linked to net positive economic externalities in the local context considering different sectors, in terms of attractiveness of the area for commercial activities, cultural and creative industries, visitors and residents, start-ups and enterprises activation and jobs creation. Spillover effects refer also to the impacts of the cultural heritage adaptive reuse project on the real-estate market in the surrounding area, influencing rental and market prices.
- **Cultural value** is linked to the preservation of the authenticity and integrity of historic, architectural and artistic character and of the tangible and intangible cultural values, as well as to the awareness raise of local communities for cultural heritage adaptive reuse and circular economy.

- **Management Characteristics:** It is linked to the economic-financial self-sustainability of the reuse project, and to the capability of generating different revenue flows for longer-term projects through a mix of uses/functions. Effective management characteristics are also related to the involvement of diverse stakeholders and eventually third sector actors in the decision process and to the reinvestment of profits into new activities for long-lasting impact.

The Assessment on Circularity aims to analyse the best practices of cultural heritage adaptive reuse in the perspective of the circular economy.

The scores are derived from 31 evaluation criteria assessed on a 1 to 4 scale. Data on each project was collected through the CLIC Survey and analysed through the statistical method of Structural Equation Model in order to identify the most relevant ‘concepts’ underlying the overall circularity performance of cultural heritage adaptive reuse projects.

A Global Circularity Performance Index has been calculated for each project. The scores were transformed into a 0-100 scale to provide a finer measurement and allow comparisons between different practices. Six “**building blocks**” express in statistical terms the relationships between specific determinants of the overall Circularity Performance:

- **Cultural value enhancement**
- **Management characteristics and economic-financial self-sustainability**
- **Closed metabolism realization** (environmental impact in a lifecycle perspective)
- **Landscape quality enhancement**
- **Social impact**
- **Economic spillover effects**

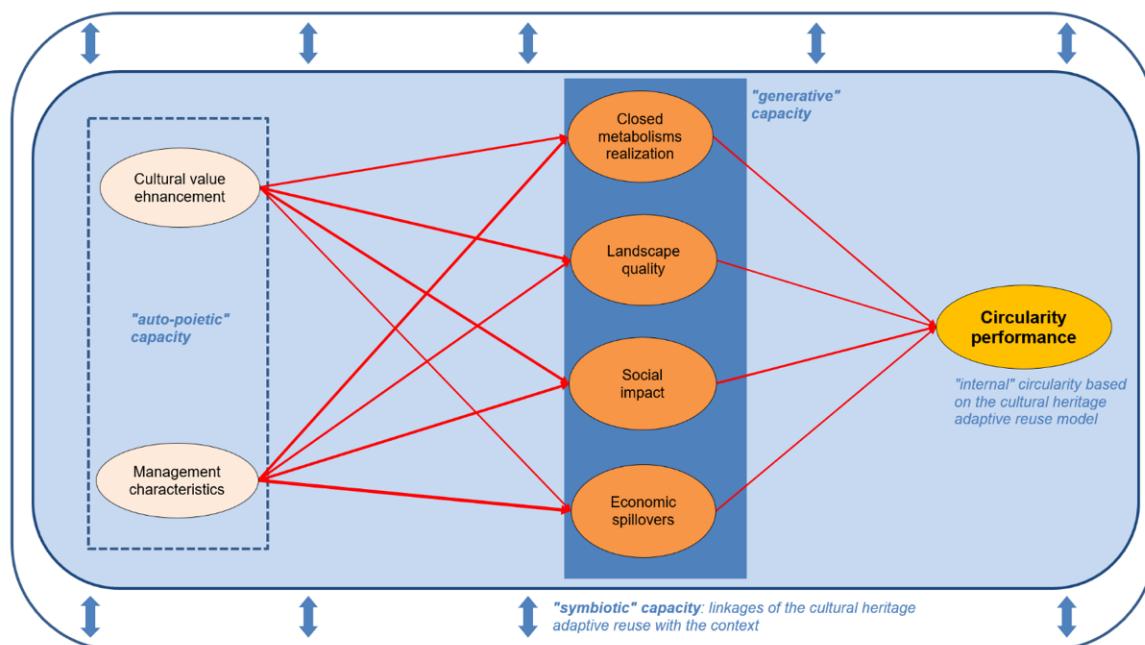


Figure 1 - The Structural Equation Model used to assess circularity performance

A specific score was calculated for each “building block” of circularity, considering the groups of evaluation criteria related to each block.

Cultural value enhancement

- Conservation of tangible and intangible heritage values
- Awareness raise for circular economy

Management characteristics and economic-financial self-sustainability

- Economic and financial self-sustainability
- Generation of diverse revenue flows
- Involvement of third sector and “mission-driven” businesses
- Stakeholders’ involvement
- Profits reinvestments for heritage conservation and social initiatives
- Mix of uses

Closed metabolism realization

- Low energy consumption systems
- Renewable energy sources
- Water storage and reuse systems
- Traditional / bio / reuse materials
- Reduction of construction waste

Landscape quality enhancement

- Increase of green spaces
- Quality of public spaces
- Safety enhancement in the area
- Landscape visual quality enhancement

Social impact

- Awareness raise for cultural heritage
- Place attachment
- Social cohesion
- Inclusion of marginalized groups
- Heritage community
- Cultural activities
- Wellbeing and health

Economic spillover effects

- Jobs creation
- Innovative start-ups localization
- Creative industries localization
- Commercial activities
- Cultural visitors
- Attractiveness for new residents
- Real estate values

6.2 Opportunities of cultural heritage adaptive reuse from European cities and regions.

The understanding and reuse of Cultural Heritage involves the collection, storage and processing of all forms of relevant information pertaining to it. The heterogeneous sets of data help understanding the heritage building or site and their management is an essential task for the dissemination and reuse of the assets. The aim of the CLIC Knowledge Information Hub is to integrate the dispersed available information, facilitate the retrieval of information and making the information available for decision-making.

The platform has been implemented to manage and visualize in an innovative way the information related to heritage assets to inform investors, policy-makers, entrepreneurs and civil society organizations on the opportunities and costs related to available heritage assets to start heritage regeneration actions.

The platform allows a city/region to showcase local reuse practices and present the abandoned heritage as assets/opportunities for adaptive reuse investments towards the implementation of a “circular city” model. Detailed data and information for the reuse of a building/site are provided as well as the communication of eventual calls for tender. The application, based on requirements from four cities/territories, the CLIC pilot cities of Salerno, Rijeka, Amsterdam and Västra Götaland Region, representing different geographic, historic, cultural and political contexts is replicable in any other European (and not only European) city.

The platform:

- enables institutional communication of adaptive reuse objectives and opportunities in a city/region
- facilitates stakeholders' cooperation and access to information
- allows the launch of adaptive re-use strategic projects testing the proposed circular models

The platform not only empowers city and regions providing an open platform for cataloguing, presenting and sharing reuse opportunities but it is also of interest to anyone who wishes to look into the adaptive reuse practices of European cities and regions and learn from their experiences as well as citizens interested in seeing the projects of their city, investors interested in being able to find opportunities on a territory.

The pilot application is available on the platform and its demo is available for all stakeholders across Europe.

The ambition is to use and further develop highly innovative data and information technology to enable cooperation between multiple stakeholders and inform their investment and management choices.

The platform organizes, manages and provides innovative access to all the information on opportunities of cultural heritage adaptive reuse from European cities and regions. It collects and presents specific information on the adaptive reuse opportunity and its location.

Through the platform, the user can consult information on all opportunities across Europe, search specific groups of opportunities (available spaces, to build and reuse, to design and reuse) or according to their characteristics. For instance, typology of the heritage building/site/landscape (Civil, Residential, Religious, Military, Industrial, Commercial, Leisure, Agriculture), state of conservation, state of intervention, etc.

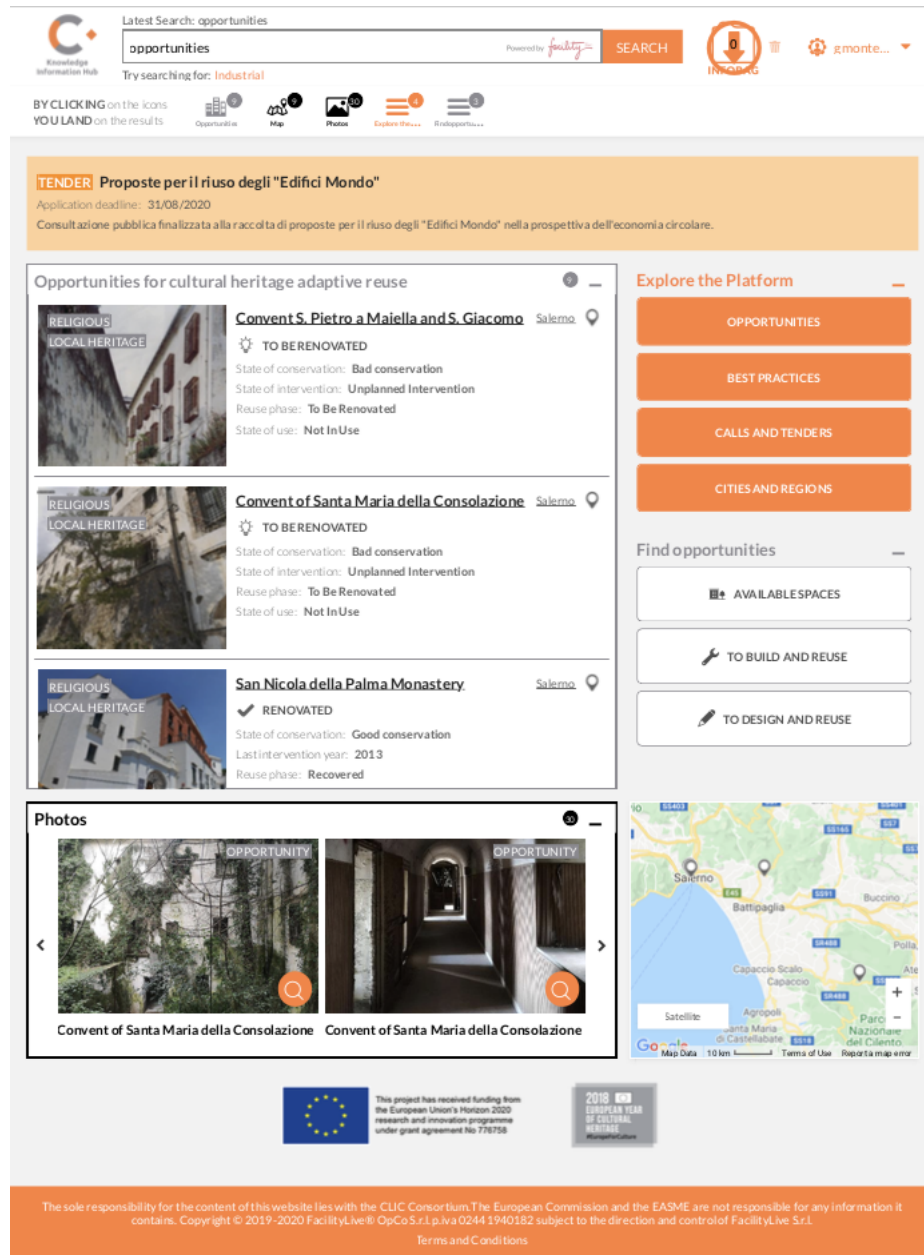
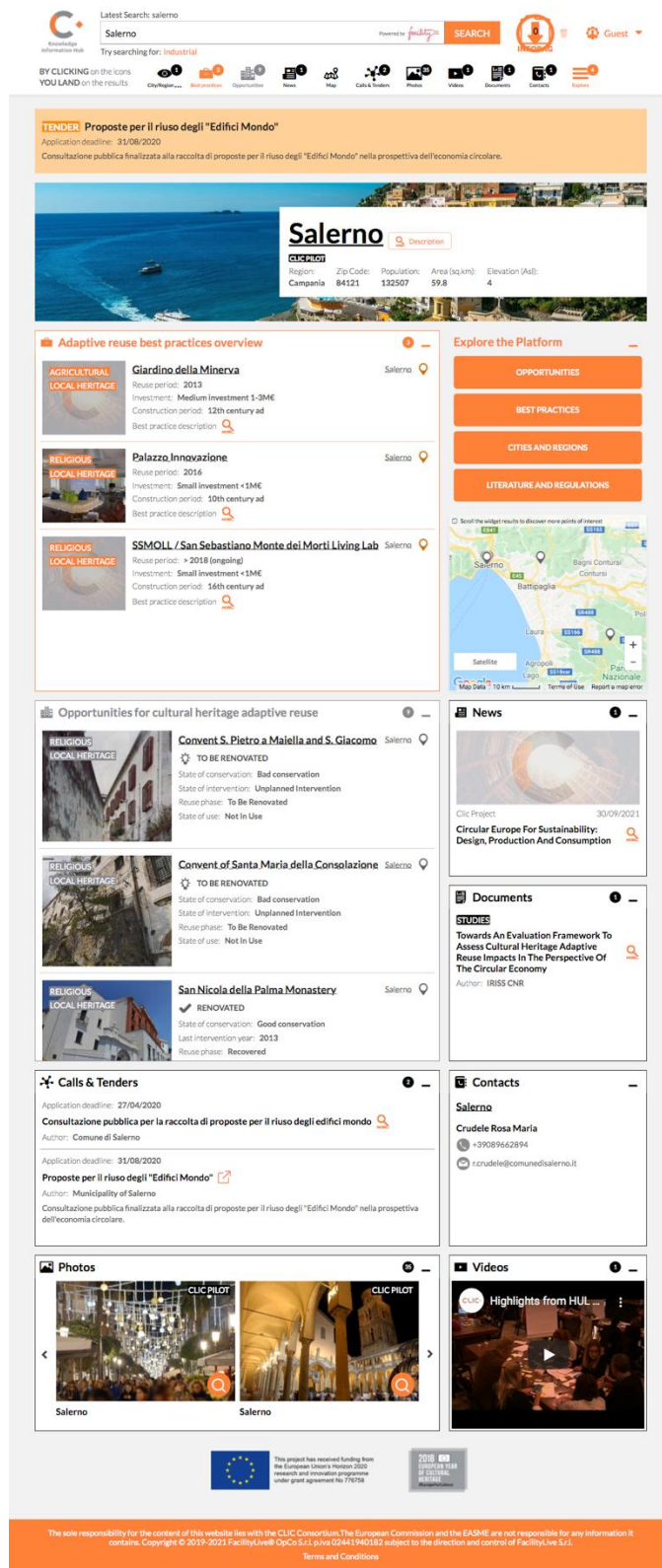


Figure 12 - Opportunities Page

The user can consult information about **local reuse practices** and **opportunities** for adaptive reuse investments in a specific city/region as well find **call and tenders** published by the local administrator, **news, documents** and **contacts**.



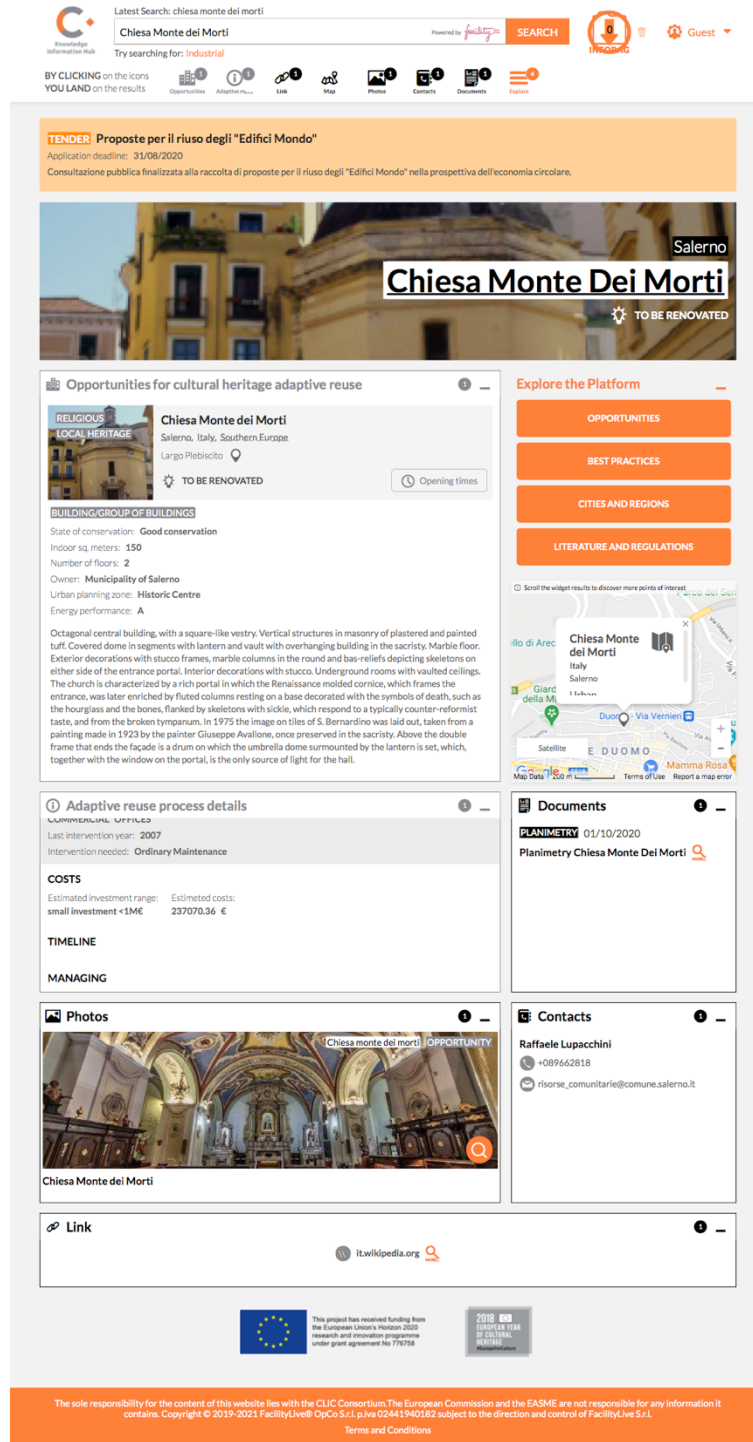
The screenshot displays the CLIC Platform interface for the city of Salerno. The header includes the CLIC logo, a search bar with 'Salerno' entered, and navigation icons for various platform features. The main content area is divided into several sections:

- TENDER**: A section titled 'Proposte per il riuso degli "Edifici Mondo"' with an application deadline of 31/08/2020. It includes a brief description of the public consultation process.
- Salerno Overview**: A large image of the city with a sidebar containing key statistics: Region (Campania), Zip Code (84121), Population (132507), Area (59.8 sq.km), and Elevation (4m).
- Adaptive reuse best practices overview**: A list of three best practices:
 - Giardino della Minerva**: Reuse period: 2013, Investment: Medium Investment + SME, Construction period: 12th century ad.
 - Palazzo Innovazione**: Reuse period: 2016, Investment: Small Investment + SME, Construction period: 10th century ad.
 - SSMOLI / San Sebastiano Monte dei Morti Living Lab**: Reuse period: >2018 (ongoing), Investment: Small Investment + SME, Construction period: 16th century ad.
- Opportunities for cultural heritage adaptive reuse**: A list of three heritage sites:
 - Convent S. Pietro a Maiella and S. Giacomo**: TO BE RENOVATED, State of conservation: Bad conservation, State of intervention: Unplanned intervention, Reuse phase: To Be Renovated, State of use: Not In Use.
 - Convent of Santa Maria della Consolazione**: TO BE RENOVATED, State of conservation: Bad conservation, State of intervention: Unplanned intervention, Reuse phase: To Be Renovated, State of use: Not In Use.
 - San Nicola della Palma Monastery**: RENOVATED, State of conservation: Good conservation, Last intervention year: 2013, Reuse phase: Recovered.
- Calls & Tenders**: A section with two entries:
 - Consultazione pubblica per la raccolta di proposte per il riuso degli edifici mondo**: Application deadline: 27/04/2020, Author: Comune di Salerno.
 - Proposte per il riuso degli "Edifici Mondo"**: Application deadline: 31/08/2020, Author: Municipality of Salerno.
- Photos**: A gallery of images showing the interior of the CLIC PILOT building in Salerno.
- Documents**: A section titled 'Towards An Evaluation Framework To Assess Cultural Heritage Adaptive Reuse Impacts In The Perspective Of The Circular Economy' by IRISS CNR.
- Contacts**: A section for 'Salerno' with contact information for Crudele Rosa Maria: +39089662894 and email: r.crudele@comunedisalerno.it.
- News**: A section titled 'Circular Europe For Sustainability: Design, Production And Consumption' dated 30/09/2021.
- Videos**: A section titled 'Highlights from HUL'.

The footer includes logos for the European Union and the CLIC Consortium, along with a disclaimer and copyright information.

Figure 12 – City/Region Page

The platform presents a detailed description of an opportunity.



The screenshot displays the 'Opportunity Page' for the 'Chiesa Monte dei Morti' project. The page is structured as follows:

- Header:** Includes the CLIC logo, a search bar with 'Chiesa Monte dei Morti' entered, and a 'SEARCH' button. Below the search bar, there are icons for various categories: Opportunities, Adaptive Reuse, Link, Map, Photos, Documents, and Contacts.
- Main Content Area:**
 - Tender Section:** A banner for 'TENDER Proposte per il riuso degli "Edifici Mondo"' with an application deadline of 31/08/2020.
 - Chiesa Monte dei Morti:** A large image of the church facade with the title 'Chiesa Monte Dei Morti' and a 'TO BE RENOVATED' tag.
 - Opportunities for cultural heritage adaptive reuse:** A section with a 'RELIGIOUS LOCAL HERITAGE' tag, a 'TO BE RENOVATED' tag, and a 'Opening times' button. It lists details: State of conservation: Good conservation, Indoor sq. meters: 150, Number of floors: 2, Owner: Municipality of Salerno, Urban planning zone: Historic Centre, Energy performance: A. A detailed description of the church's architecture and history follows.
 - Adaptive reuse process details:** A section with a 'Last intervention year: 2007' and 'Intervention needed: Ordinary Maintenance'. It includes 'COSTS' (Estimated investment range: small investment <1ME, Estimated costs: 237070.36 €) and 'TIMELINE'.
 - Photos:** A gallery of images showing the interior of the church, with a 'Chiesa monte dei morti OPPORTUNITY' tag.
 - Link:** A section with a 'Link' button and a URL to 'it.wikipedia.org'.
- Right Sidebar:**
 - Explore the Platform:** A vertical list of buttons: OPPORTUNITIES, BEST PRACTICES, CITIES AND REGIONS, and LITERATURE AND REGULATIONS.
 - Documents:** A section with a 'PLANIMETRY 01/10/2020' and a 'Planimetry Chiesa Monte Dei Morti' button.
 - Contacts:** A section with contact information for Raffaele Lupacchini, including a phone number (+089662818) and an email address (risorse_comunitarie@comune.salerno.it).
- Footer:** Includes the European Union flag, a statement about funding from the European Union's Horizon 2020 research and innovation programme, and a '2018 EUROPEAN YEAR OF CULTURAL HERITAGE' logo.

Figure 13 – Opportunity Page

The user can find specific data related to the involved heritage:

Opportunities for cultural heritage adaptive reuse

RELIGIOUS
LOCAL HERITAGE

Chiesa Monte dei Morti
Salerno, Italy, Southern Europe
Largo Plebiscito

TO BE RENOVATED **Opening times**

BUILDING/GROUP OF BUILDINGS

State of conservation: **Good conservation**
Indoor sq. meters: **150**
Number of floors: **2**
Owner: **Municipality of Salerno**
Urban planning zone: **Historic Centre**
Energy performance: **A**

Octagonal central building, with a square-like vestry. Vertical structures in masonry of plastered and painted tuff. Covered dome in segments with lantern and vault with overhanging building in the sacristy. Marble floor. Exterior decorations with stucco frames, marble columns in the round and bas-reliefs depicting skeletons on either side of the entrance portal. Interior decorations with stucco. Underground rooms with vaulted ceilings. The church is characterized by a rich portal in which the Renaissance molded cornice, which frames the entrance, was later enriched by fluted columns resting on a base decorated with the symbols of death, such as the hourglass and the bones, flanked by skeletons with sickle, which respond to a typically counter-reformist taste, and from the broken tympanum. In 1975 the image on tiles of S. Bernardino was laid out, taken from a painting made in 1923 by the painter Giuseppe Avallone, once preserved in the sacristy. Above the double frame that ends the façade is a drum on which the umbrella dome surmounted by the lantern is set, which, together with the window on the portal, is the only source of light for the hall.

its **typology**, **protection**, the **typology** of construction, the indoor and outdoor **Sq meters**, number of **floors**, the **owner**, the **urban planning zone**, the **energy performance** as well as specific **documents** as planimetries.

Documents

PLANIMETRY 01/10/2020
Planimetry Chiesa Monte Dei Morti

PLANIMETRY CHIESA MONTE DEI MORTI

Images, **contacts**, **news**, **links** to websites or social where find further information, **opening times** to visit the building/site are also provided.

Furthermore, the platform provides all the details related to the adaptive reuse process:

i Adaptive reuse process details

Chiesa Monte Dei Morti

TO BE RENOVATED

PLANNED INTERVENTION

IN USE

Allowed uses:

COMMERCIAL OFFICES

Last intervention year:

2007

Intervention needed:

Ordinary Maintenance

COSTS

Estimated investment range:

small investment <1M€

Estimated costs:


237070.36 €

TIMELINE

The user can find details about the **reuse status** of the heritage building/site (to be renovated or renovated) and the **current reuse phase**, its **state of use**, the **allowed uses**, the **last intervention year** and the **intervention needed**, the estimated or actual **investment range** and **costs** for the reuse project, its **intervention timeframe** timeline and **managing aspects** as the governance model, **management** type and manager.

6.3 Literature and Regulations

The platform provides a knowledge base of all existing literature and regulations on Adaptive Reuse and Circular Economy topics.



Latest Search: literature and regulations

literature and regulations

Try searching for: Residential

Powered by facility

SEARCH

INGEG

Guest

BY CLICKING on the icons

YOU LAND on the results

Literature

Explore

TENDER

Proposte per il riuso degli "Edifici Mondo"

Application deadline: 31/08/2020

Consultazione pubblica finalizzata alla raccolta di proposte per il riuso degli "Edifici Mondo" nella prospettiva dell'economia circolare.

Literature and regulations

CULTURAL HERITAGE ADAPTIVE REUSE: LEARNING FROM SUCCESS AND FAILURE STORIES IN THE CITY OF SALERNO, ITALY

Raffaele Lupacchini, Antonia Gravagnuolo

SCIENTIFIC ARTICLE

Year of publication: 2019

Details

Circular Economy Strategies in Eight Historic Port Cities: Criteria and Indicators Towards a Circular City Assessment Framework

Antonia Gravagnuolo, Mariarosaria Angrisano, Luigi Fusco Girard

SCIENTIFIC ARTICLE


Explore the Platform

OPPORTUNITIES


BEST PRACTICES

CITIES AND REGIONS

LITERATURE AND REGULATIONS



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 776758



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Figure 14 – Opportunity Page

It provides information about:

35

Project: CLIC
Deliverable Number: D6.22 CLIC Platform for pilot cities
Date of Issue: May 31, 2021
Grant Agr. No: 776758

- Report (ICOMOS, ICCROM, UNESCO, CoE, OWHC, Etc.)
- Convention (UNESCO, CoE, ICCROM, etc.)
- Recommendation (UNESCO, CoE, ICCROM, etc.)
- Legislation (Directives, Regulations, etc.)
- Manuals and Guidelines
- Monographic publication
- Serial publication
- Scientific Article

The user can search and consult the documents:



Figure 15 – Document Page

The main information about the document are presents and the user can visualize its content.

6.4 The Back-Office

Once logged in the platform the user can open a drop down menu to access the platform back-office.

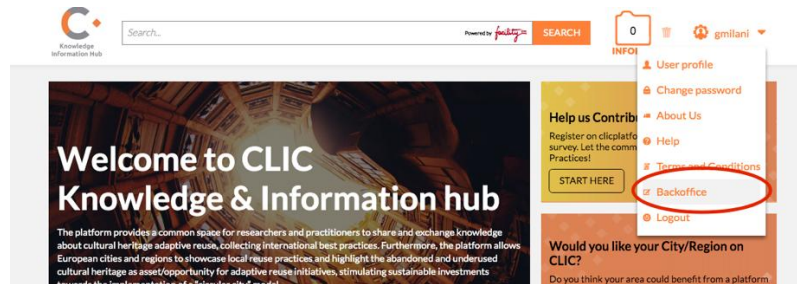


Figure 16– User menu

Through the back-office is possible to:

- Add, modify, delete a **best practice**
- Add, modify, delete information about a **City/Region**
- Add, modify, delete an **opportunity** related to a City/Region

The administrator can:

- Review, approve and publish a Best Practice
- Add a City/Region
- Add, modify, delete a publication
- Modify information in the platform Home Page and related to About Us, Help, News sections

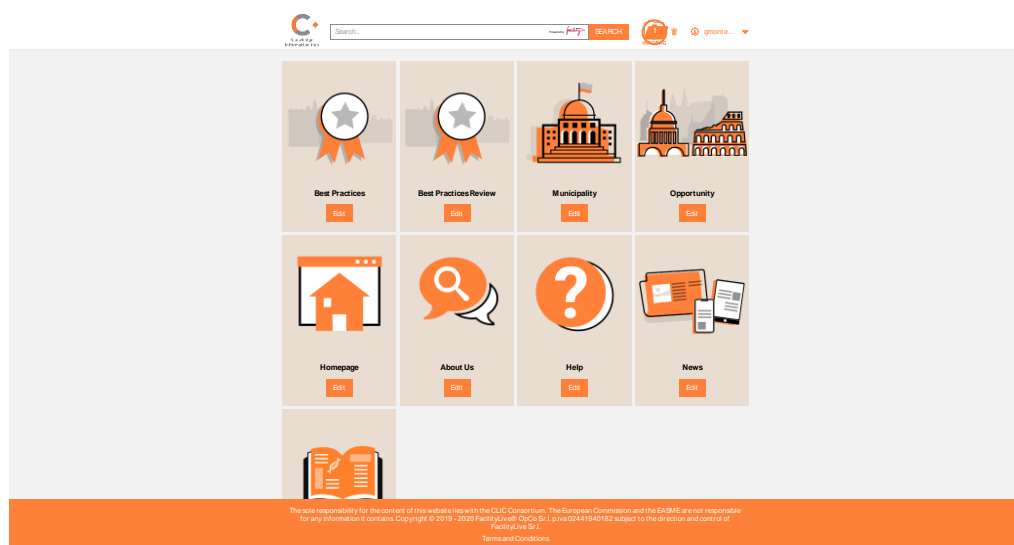


Figure 17 – Back-Office Page

The platform provides explanation of all the steps to follow in order to upload a content on the platform.

Best Practice

The user has the possibility to propose a reuse project as a “best practice”:

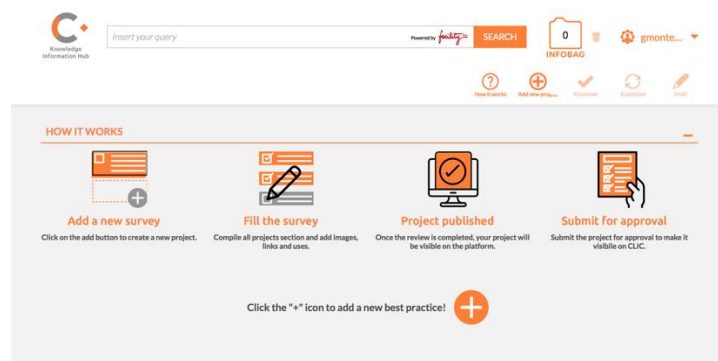


Figure 18 – Best Practice Back-Office

To add a project the user shall click on the bottom plus sign and fill the related form:

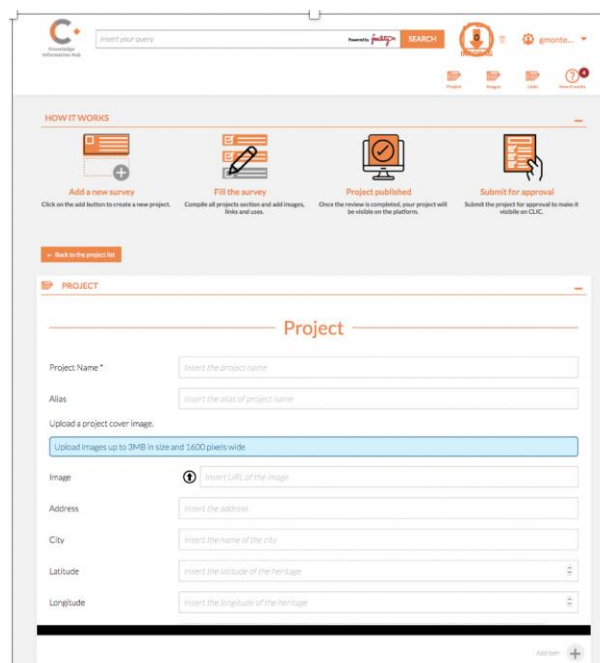


Figure 19 – Project Form

Review and Publish

The administrator can access the projects that have been proposed as best practices and those that have already been published on the platform:

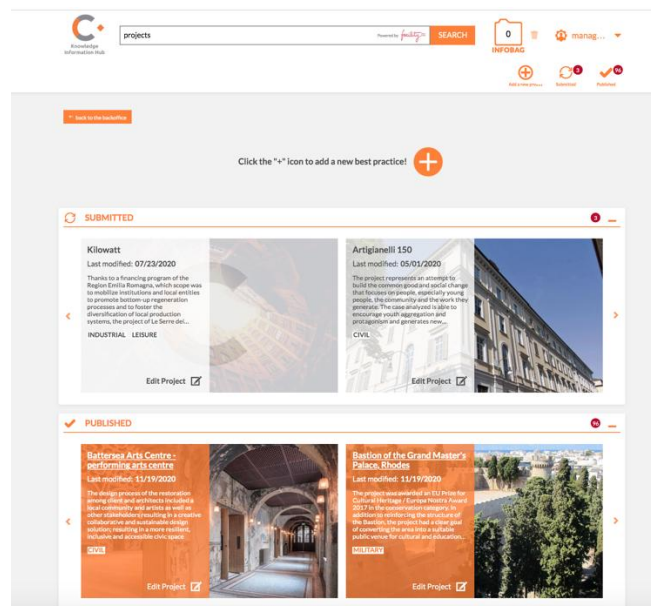
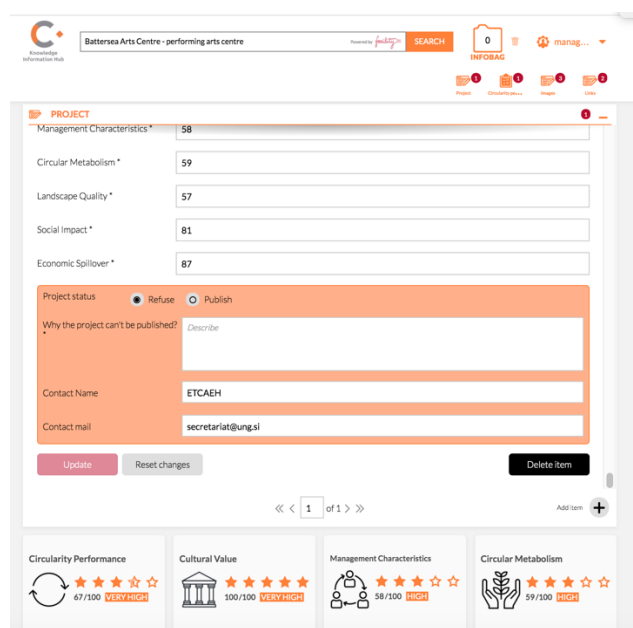


Figure 19 –Review Back-Office

The reviewer has the possibility to evaluate a project in its main aspects and decide if the project is publishable or not. In case it is rejected, you have the possibility to indicate the reason for which the project was rejected.



PROJECT

Management Characteristics * 58

Circular Metabolism * 59

Landscape Quality * 57

Social Impact * 81

Economic Spillover * 87

Project status ☒ Refuse ☐ Publish

Why the project can't be published? Describe

Contact Name ETCAEH

Contact mail secretariat@ung.si

Update Reset changes Delete item

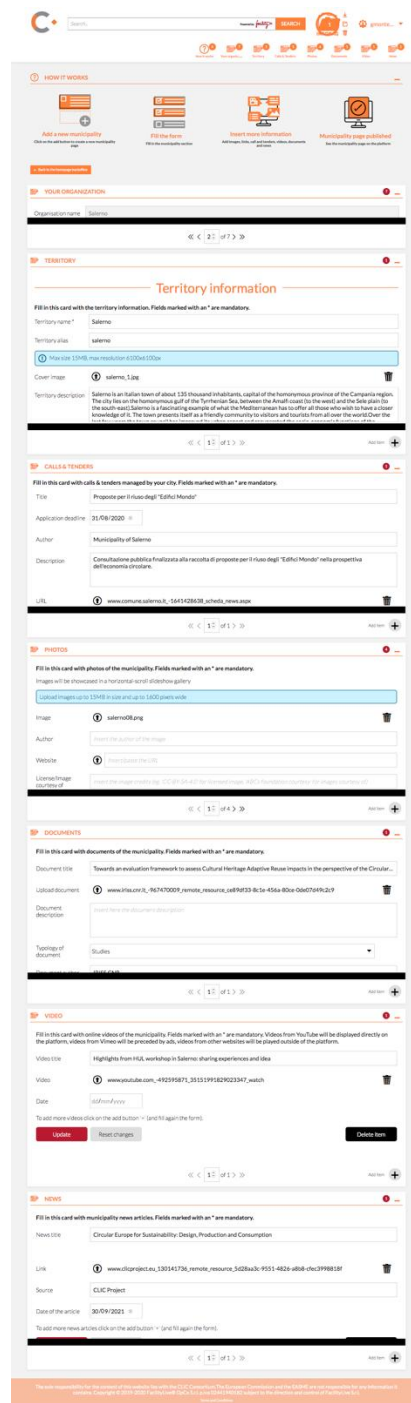
<< 1 of 1 >>

Summary:

- Circularity Performance: 67/100 VERY HIGH
- Cultural Value: 100/100 VERY HIGH
- Management Characteristics: 58/100 HIGH
- Circular Metabolism: 59/100 HIGH

City/Region

The City/Region administration can add, modify, delete information about the City/Region:



The screenshot displays the CLIC Platform back-office interface for City/Region administration. The interface is organized into a sidebar on the left and a main content area on the right. The sidebar contains navigation options such as 'Home', 'Territory', 'Circles & Tenders', 'Photos', 'Documents', 'Video', 'News', 'Users', 'Settings', and 'Help'. The main content area is divided into several sections, each with a form for adding or editing information:

- Territory information:** This section includes fields for 'Territory name', 'Territory status', 'Cover image', and 'Territory description'. It also features a 'Territory information' tab and a 'Territory information' button.
- Circles & Tenders:** This section includes fields for 'Title', 'Application deadline', 'Author', and 'Description'. It also features a 'Circles & Tenders' tab and a 'Circles & Tenders' button.
- Photos:** This section includes fields for 'Image', 'Author', 'Website', and 'License/usage'. It also features a 'Photos' tab and a 'Photos' button.
- Documents:** This section includes fields for 'Document title', 'Upload document', 'Document description', and 'Topic of document'. It also features a 'Documents' tab and a 'Documents' button.
- Video:** This section includes fields for 'Video title', 'Video', 'Date', and 'To add more videos click on the add button'. It also features a 'Video' tab and a 'Video' button.
- News:** This section includes fields for 'News title', 'Link', 'Source', and 'Date of the article'. It also features a 'News' tab and a 'News' button.

Figure 20 –City/Region Back-Office

Opportunities can be added, modified or deleted:

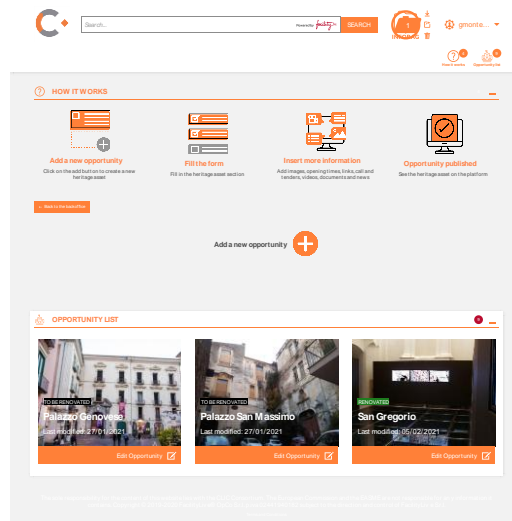


Figure 21 –Opportunity Back-Office

Literature and Regulation

Through the Back-Office it's possible to add, modify and delete Publications:

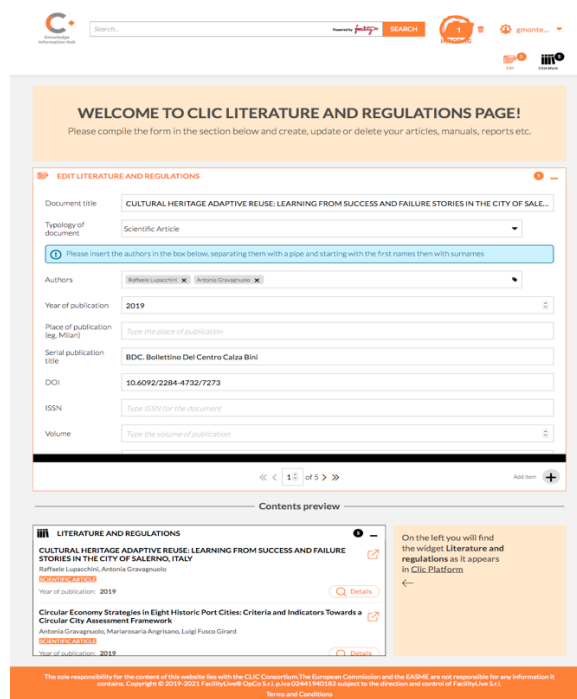


Figure 22 –Opportunity Back-Office

7 References

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CLIC deliverable *D1.4 Database of best practices*

CLIC deliverable *D3.2 Economic landscapes maps of pilot cities*

CLIC deliverable *D3.3 Maps of landscape perception*

CLIC deliverable *D6.2 Project Website*

Habitat III 2016, <https://unhabitat.org/habitat-iii/>

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Habitat III Events on Data Revolution, <http://habitat3.org/the-conference/programme/all/smart-city-strategies-and-data-revolution-for-sustainable-development/>

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8 Acronyms

[FL]	[FacilityLive]
[WP]	[Work Packages]
[PoC]	[Proof of Concept]
[HIP]	[Heritage Innovation Partnership]