



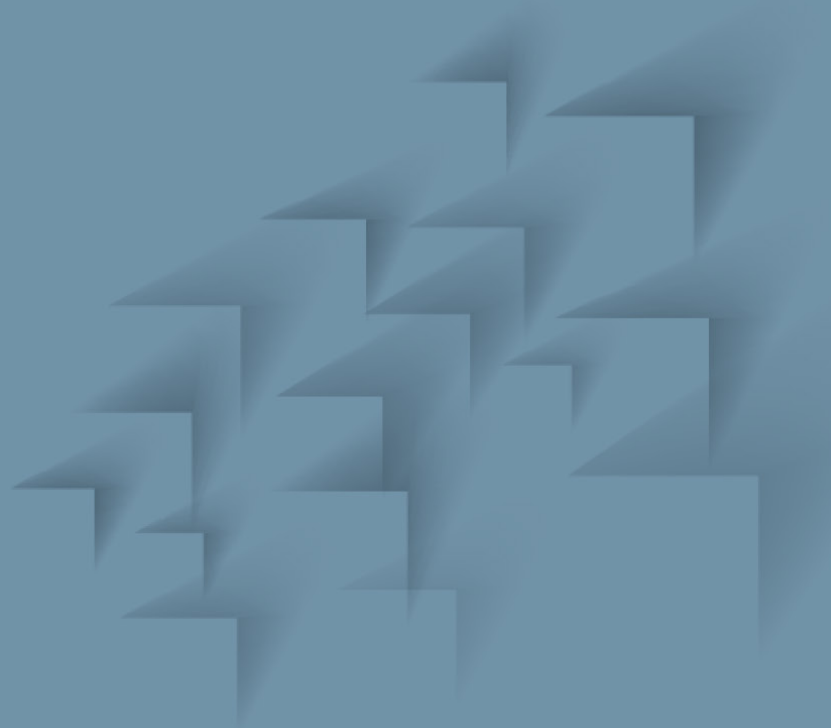
European Union

Interreg
CENTRAL EUROPE

ForHeritage

IMPACT ASSESSMENT

of cultural heritage projects



Document information

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Introduction: purpose and structure of this tool

This tool is a result of the Interreg Central Europe project *For Heritage (4H): Excellence for integrated heritage management in central Europe*. As to promote excellence in heritage management, the project and this document capitalize on the existing knowledge gathered from previously EU-funded projects (such as FORGET HERITAGE, RESTAURA, IFISE, CLIC and others) and relevant experiences.

Within the *For Heritage* project, six tools related to heritage management have been produced:

- Good/participatory governance in cultural heritage: How to involve public
- Financial instruments and innovative financial schemes for cultural heritage
- Public-private cooperation in cultural heritage revitalisation
- Impact assessment of cultural heritage projects
- Transferable elements of cultural heritage revitalization pilot projects
- How to organise a successful training to improve management in the cultural heritage sector

This document represents the tool n.4 listed above and intends to offer an insight on impact assessment applied to cultural heritage projects, a relevant topic which is currently under discussion in the international community in relation to definition of common methodologies.

The following pages are aimed at providing a baseline knowledge to familiarise with the concept of impact assessment and its application to the field of cultural heritage, also trying to reply to some key practical and methodological questions as entry point. Links to external sources are also provided, in order to follow the international debate.

Due to the extension and complexity of this topic, this “guide for beginners” will not have the ambition to be complete and exhaustive, but it is rather intended to provide an overview on the main implementation aspects, as to approach the impact assessment from a practical perspective.



For the purpose of this tool, a number of EU-funded projects dealing with CH management and sustainability were analysed (such as the FORGET HERITAGE, RESTAURA, IFISE, CLIC, SOPHIA, KEEP-ON, FINCH and ROCK projects). The knowledge was also complemented through the analysis of key relevant documents in the European scenario. The key information and content elaborated in this tool were derived especially from two main documents, which provided an extensive insight into this very challenging and relevant topic:

The Report of the cooperation project *Cultural Heritage Counts for Europe (CHCFE)*, published in 2015 and available at: <http://blogs.encatc.org/culturalheritagecountsforeurope/outcomes/>

The Article by Francesca Nocca, *The Role of Cultural Heritage in Sustainable Development: Multidimensional Indicators as Decision-Making Tool* published under Creative Commons within the MDPI open access journals - Sustainability 2017, 9(10), 1882, available at <https://www.mdpi.com/2071-1050/9/10/1882/pdf-vor>¹

¹ © 2017 by the author. Licensee MDPI, Basel, Switzerland. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (<http://creativecommons.org/licenses/by/4.0/>).

1. What is impact assessment?

The assessment of impact is the attempt to establish to what degree an action affects certain changes in the society: the impact of an intervention is defined as the difference between what has changed thanks to that intervention, and what would have happened anyway.

One of the aims of impact assessment is to gain a sounder knowledge of the relationship between actions and effects, but it can also be used for process-oriented evaluations. It is therefore important to define the purpose of the assessment.

Impact assessment is based on a pre-defined “intervention logic” related to a presumption that an intervention will generate a sequence of desired effects (in a “theory of change” approach).

The produced impacts of an intervention can be positive and negative, intended and unintended, direct and indirect. This means that an impact evaluation must establish what has been the cause of observed changes (called ‘impacts’) referred to as causal attribution (causal inference).



1.1. Why to assess impact?

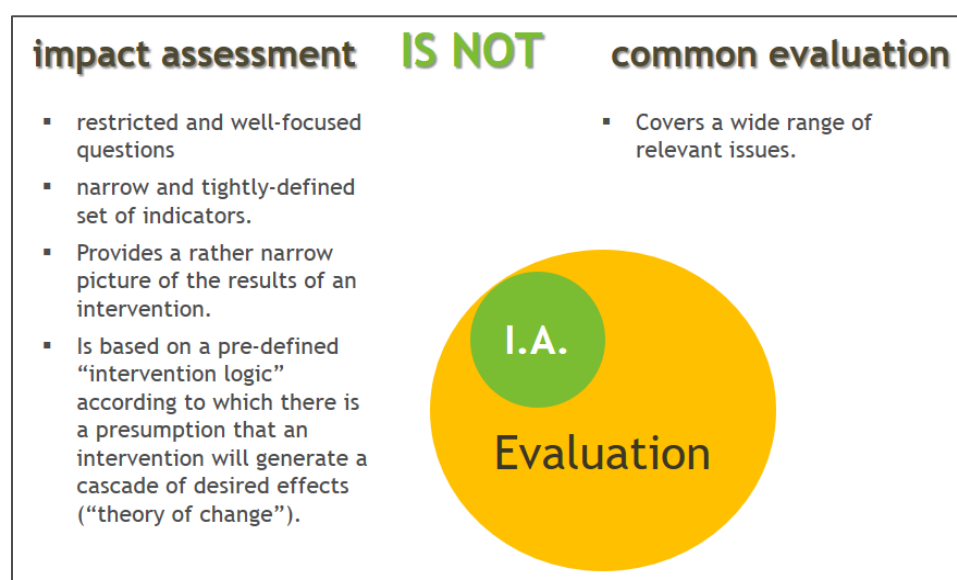
What is the purpose of and how can one assess the impact of an intervention? This is an important question as societies are increasingly dependent on the generation of economic and social benefits.

The reasons for measuring the impact of an intervention can be various:

- Internal requirement >> public management, evidence-based policy making, transparency, etc.
- Legal requirement >> for instance in the case of an outcome-based contract.
- External requirement >> from stakeholders, investors, customers, providers, etc.

In public management, impact analysis is part of the policy cycle and is included in the broader evaluation activity aimed at understanding to what extent and how an intervention was effective in correcting the problem that was addressed.

An evaluation activity is likely to cover a wider range of issues relevant for the decision makers: the appropriateness of the designed programme, the cost and efficiency, its unintended effects, and the identification of the lessons learnt for the benefit of future interventions. Instead, impact assessment is designed to answer more restricted and focused questions, which are associated to a narrow and tightly defined set of impacts (for this reason, impact assessments tend to offer a rather narrow picture of the results of an intervention).



The purpose of impact measurement can reasonably be related also to financial aspects since the expected impact of an action is normally related to the attraction of financial investors to sustain it. Through impact measurement, they can assess the impact of their investments and monitor the continuous improvement of the organization. In this perspective, the objective of impact measurement is, in facts, the management and control of the process of generating an impact, to optimize it in relation to its costs.

To be viable, the impact must be linked to economic performance: donors and impact investors want the funds they provide to be well spent, into adequate organizations.

What can you achieve:

- Gain knowledge on the process and its effects
- monitor the continuous improvement of the organization
- Optimize the process in relation to its costs




ATTRACT INVESTORS

Some innovative public-private contracts and procurement models² have also been experimented in the last years, which assign an active role to the public administration in involving the private sector (such as Project financing and public-private partnership). In some cases, those types of innovative public-private contracts value the beneficial impact generated by the investment alongside with the financial return (as in the case of impact bonds and pay-by-result contracts).

What makes impact finance innovative is the possibility for the investor to allocate financial resources to projects with predetermined objectives, in order to participate in the creation of a social and/or environmental impact. Furthermore, the return on capital is often tied to the achievement of the objectives.

If the privatization tout court highlights many limitations, the partnership with private actors can represent an alternative, but the use of this kind of instruments requires the use of a hybrid approach, focused on the social impact of the action.

IMPACT-BASED FINANCE



Innovative public-private contracts and procurement models that value the **beneficial impact** alongside with the **financial return**.

- The investor provides capital with the **intention to generate a measurable impact**, alongside with a financial return.
- The financial resources are allocated in relation to predetermined objectives/targets and the return is tied to the achievements.
- The primary purpose of the investment is the impact.
- Impact assessment is fundamental: highly debated topic at international level, to define standard methodologies.

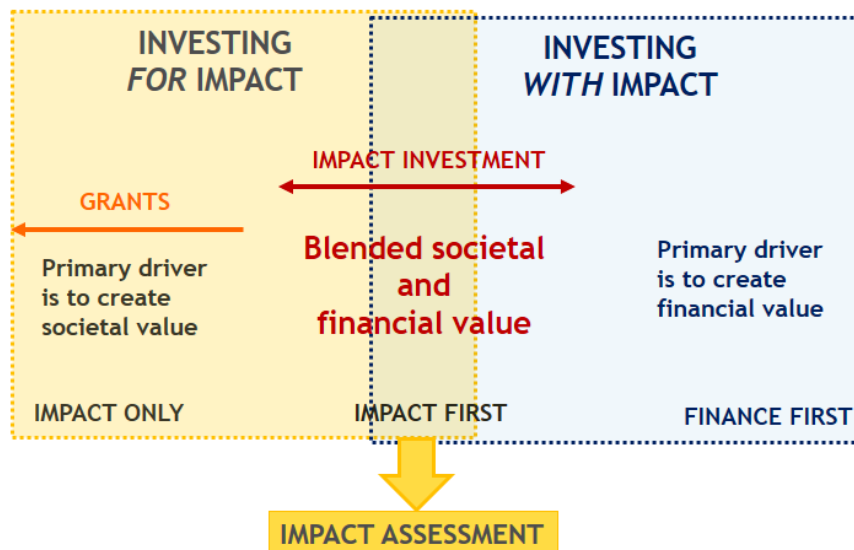
PAY-BY-RESULT CONTRACTS

IMPACT BONDS

² To learn more on the use of public-private cooperation approach in cultural heritage revitalisation, we invite you to consult the dedicated ForHeritage tool at the following link <https://www.interreg-central.eu/Content.Node/D.T1.2.3-PPC.pdf>

When trying to involve private investors the following aspects should be tackled: *how and under what conditions the involvement of private players can positively impact on the conservation and management of CH? How can institutions stimulate private players to invest in the re-use of abandoned buildings of historical and cultural value? How to conciliate private business goals and social, cultural and environmental aims promoted by public institutions?*

Private players are a heterogeneous and complex target: there are several typologies of private actors, depending on their higher or lower direct interest on enhancing culture with respect to their higher or lower interest on gaining economic and financial benefits. Different typologies of private organisations have different business models and approaching them is complex for public institutions. Each different type of potential private investor can envisage a different added value in investing (or not) in CH projects. Public institutions should make private operators aware of the potential impacts of an investment and act to create as much as possible a direct link the local community that will be affected by the investment.



Own elaboration adapted from: *INVESTING FOR IMPACT - EVPA Impact Strategy Paper*.

<https://evpa.eu.com/pages/evpa-impact-strategies-journey>

1.2. The impact assessment process: when and who?

Whereas ex-ante impact analysis is a prospective analysis of what the impact of an intervention might be (it is the equivalent of “business planning” in policy

making), **impact assessment is run ex-post** (at the end of a funding cycle) and specifically focuses on the effects of the intervention. Impact assessment could focus on short-term and long-term impacts.

Impact measurement is about data collection and it should engage, in a participatory approach, the implementing organisation, the recipients and beneficiaries of the interventions.

On average, an impact assessment can take between 3 and 6 months and it may be expensive since evaluation systems are difficult to design and a contribution from high-skilled professionals or specialised bodies such as universities or research institutes may be required. It is also particularly important to have an external «neutral» evaluator to validate the methodology and the assessment.

Underestimations in the design of evaluation systems can severely compromise the success of assessment activities.

THE APPROACH

The analysis of expected results and impacts might follow two alternative paths.

Interactive→ Collect evidence through 1) workshop involving civil servants from other sectors and offices, or 2) by public meeting with potential external partners or groups of citizens or 3) by specific survey focused on audiences and beneficiaries.

Desk-based→ Draw on existing experience and available sources such as service plans and strategies.

The first approach is recommended as it has several advantages. It encourages greater participation, it is wider in scope and it opens up options for future collaboration. It is, however, more resourceintensive and still needs to be complemented with desk-based support

OVERALL COSTS

Evaluation activities generally represent an additional cost for institution because they are often demanding in terms of project management and because they require skills that public institutions often lack. Potential partnership with universities or other research centres could provide institutions with expert skills and cut the costs for evaluating expected results and impacts.

Costs heavily depend on how easily data can be collected, analysed and using which tools.

Survey by questionnaires are not expensive while impact assessment analysis or qualitative research (i.e. to evaluate the socio-cultural effects produced within the territory) are usually more expensive and requires the involvement of skilled research professionals.

Source: The H2020 *ROCK Project: Regeneration and Optimization of Cultural heritage in creative and Knowledge cities* <https://rockproject.eu/about> Picture taken from: *A Report (D3.2) on governance toolkits and financial schemes for implementation of CH-led regeneration projects* <https://rockproject.eu/documents-list>

2. A multidimensional approach to impact in cultural heritage

Many abandoned or underused heritage sites represent a cost and a “territorial ‘waste’” that should be valorised as resource: today, cultural heritage has come to be seen as an important driver for fostering economic development and social cohesion: cultural heritage can be used to support sustainable tourism and for the establishment of cultural and creative industries’ hubs, it can contribute to increase local employment, social inclusion and quality of life.

Beyond cultural policy, cultural heritage is currently mainstreamed in several other policies and programmes at national and European level, dealing with regional development, cohesion, agriculture, environment, energy and climate change, education, research and innovation.

In 2012, the World Bank published the book on the economics of cultural heritage³ with the following main conclusions:

Just as environment is the natural capital, heritage is the cultural capital: several valuation methods show that heritage investments have positive return.

A balanced blend of regulations and incentives should be sought, in order to enhance the public and private values of heritage. They contribute to urban liveability, attracting talent, and providing an enabling environment for job creation, thereby enhancing regional competitiveness.

Heritage investment has distributional effects. Moreover, it develops tourism, a labour-intensive industry that provides proportionally more income opportunities for the cities low-skilled labourers and the poor.

There are a number of successful models, with an increasing integration of public and private financing (public-private partnerships, urban development funds and impact investment funds, etc.)⁴.

The European Union recognises cultural heritage as “*strategic resource for a sustainable Europe*” and the availability of quantitative and qualitative evidence

³ “The Economics of Uniqueness: Investing in Historic City Cores and Cultural Heritage Assets for Sustainable Development” <https://openknowledge.worldbank.org/handle/10986/12286>

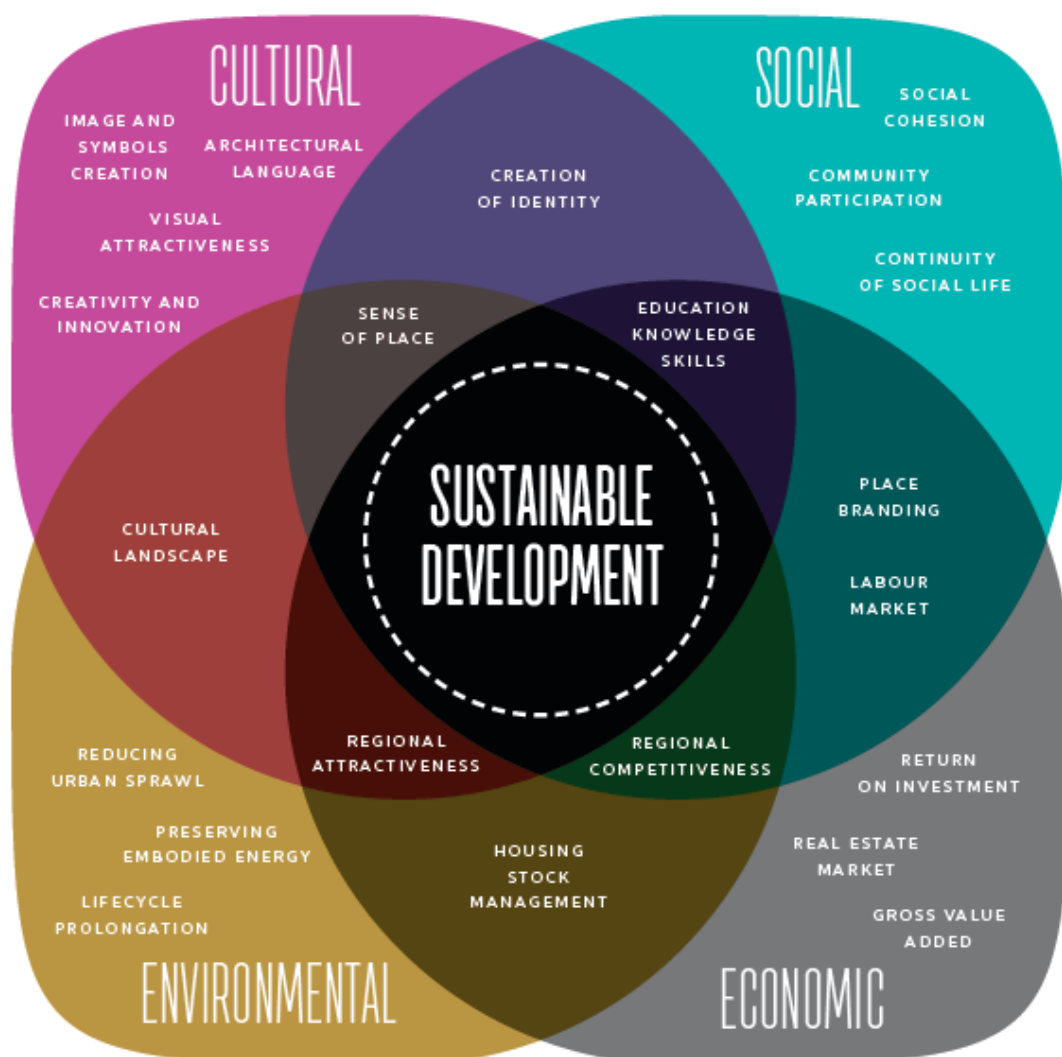
⁴ The approach of “impact finance” is nowadays of growing importance. Also in the Cultural Heritage sector, the social finance could play a strategic role in creating valuable partnerships between public and private bodies, to find funding and implement the more innovative projects, capable of generating transversal results that contribute to the improvement of the social and/or environmental conditions of the territory in which they are located. Impact Bonds or Pay-by-Result Contracts in some cases could reasonably be applicable beyond the social domain, also to the cultural domain. Similarly, to social goals, also cultural goals can be driving force for making such contracts. For instance, the bond can contribute to the development of a local historical site or the implementation of a traditional cultural event for which a strong commitment can be generated. Thus, the possibility of the realization of a new type of bond - can be called Cultural Impact Bond - for promoting local -cultural activities can be envisaged.

of its benefits and impacts will indeed be very important to give more strength to the voice of cultural heritage in Europe.

The European Parliament has urged the Commission to “*include in the guidelines governing the next generation of structural funds for cultural heritage a compulsory quality control system*”, in order to demonstrate the positive outcomes of interventions and the effectiveness of the EU support actions.

Based on a review of international literature dealing with the impact of immovable heritage, run in the framework of the cooperation project *CHCFE - Cultural Heritage Counts for Europe*, it has been highlighted that cultural heritage projects can impact on four sustainable development domains (the so called “holistic four pillars approach”): cultural, social, economic and environmental⁵. These are also articulated into subdomains, as shown in the following picture.

⁵ This has been very well highlighted by the cooperation project Cultural Heritage Counts for Europe (CHCFE), that run an extensive analysis on a large number of significant studies dealing with the impact of cultural heritage which resulted in a comprehensive Report of nearly 300 pages. It demonstrates the multiple benefits of heritage for Europe’s economy, society, culture and the environment, and presents policy recommendations on how to tap into heritage’s full potential. See: <http://blogs.enactc.org/culturalheritagecountsforeurope/outcomes/>



Source: *The Cultural Heritage Counts for Europe (CHCFE) Project Report- The different subdomains identified in the collected studies mapped in the holistic four-domain approach diagram*

Such four aspects were traditionally considered separately (economic studies being predominant and environmental impact studies being still relatively under-represented), whereas they are fundamentally interlinked and should be addressed in an interrelated approach in order to give evidence of the potential of cultural heritage as a key driver of sustainable development across a wide range of policy areas.

The Cultural Heritage Counts for Europe (CHCFE) Project identified a large number of significant studies dealing with the impact of cultural heritage but only a

minority (6%) of the analysed case studies showed to apply a “holistic” approach covering the four domains⁶.

To value the impact of cultural heritage, the adoption of this kind of holistic approach simultaneously considering the contribution to each of these four domains will be essential also to support the delivery of an “integrated policy approach to heritage” in the European Union, as to guarantee that the multiple benefits of cultural heritage are realised in practice. In fact, the integration of multiple and different policies should also be addressed: beyond interventions on cultural heritage per se, the coordination with policies addressing social needs, promoting cultural events and initiatives, supporting commercial activities and start-ups, providing services of general interest such as public transports, etc, might also have a strong positive impact on the success of the same initiative, thus increasing the overall benefit of the broader regenerated area.

So, as said, cultural heritage is a capital of cultural, social, environmental and economic value. In this emerging framework, Impact assessment and measurement indicators are highly debated topics at international level, in order to define standard methodologies.

2.1. Valuing cultural heritage

The CHCfE - Cultural Heritage Counts for Europe project provides an overview of the currently available and accessible data within the EU member states on the wide-ranging impacts of cultural heritage on economy, society, culture and environment. It collects references and summarises numerous studies with relevant data and examples that show not only the positive impacts generated by cultural heritage, but also in some cases its adverse impacts.

The 10 key findings reported by the CHCfE project are summarised as follows⁷:

- *Cultural heritage is a key component and contributor to the attractiveness of Europe’s regions, cities, towns and rural areas in terms of private sector inward investment, developing cultural creative quarters and attracting*

⁶ The Cultural Heritage Counts for Europe (CHCfE) Project organised its research output into three levels of analysis: macro, meso, and micro.

“In the macro level of the report (ca 140 studies reviewed), a theoretical framework was established which allows the data to be understood within a broader global perspective. This level, therefore, covers a review of theoretical literature on heritage impact as well as on indicators (both qualitative and quantitative) employed to measure this impact in Europe and in the rest of the world. The meso level entails an analysis of the research that has been done across the European Union (with 221 studies selected for further analysis) demonstrating the wide-ranging impacts of cultural heritage at local, regional, national, and European levels. Finally, the research was completed at the micro level with case studies which provide real-life evidence that heritage has an impact in one or more of the four domains: economic, social, cultural, and environmental, including a representative sample of exemplary projects which have received an EU Prize for Cultural Heritage/Europa Nostra Award.”

⁷ Taken from “The Cultural Heritage Counts for Europe Report” EXECUTIVE SUMMARY - http://blogs.encafc.org/culturalheritagecountsforeurope/wp-content/uploads/2015/06/CHCfE_REPORT_ExecutiveSummary_v2.pdf

talents and footloose businesses – thereby enhancing regional competitiveness both within Europe and globally.

- *Cultural heritage provides European countries and regions with a unique identity that creates compelling city narratives providing the basis for effective marketing strategies aimed at developing cultural tourism and attracting investment.*
- *Cultural heritage is a significant creator of jobs across Europe, covering a wide range of types of job and skill levels: from conservation-related construction, repair and maintenance through cultural tourism, to small and medium-sized enterprises (SMEs) and start-ups, often in the creative industries.*
- *Cultural heritage is an important source of creativity and innovation, generating new ideas and solutions to problems, and creating innovative services – ranging from digitisation of cultural assets to exploiting the cutting-edge virtual reality technologies – with the aim of interpreting historic environments and buildings and making them accessible to citizens and visitors.*
- *Cultural heritage has a track record on providing a good return on investment and is a significant generator of tax revenue for public authorities both from the economic activities of heritage-related sectors and indirectly through spill over from heritage-oriented projects leading to further investment.*
- *Cultural heritage is a catalyst for sustainable heritage-led regeneration.*
- *Cultural heritage is a part of the solution to Europe's climate change challenges, for example through the protection and revitalisation of the huge, embedded energy in the historic building stock.*
- *Cultural heritage contributes to the quality of life, providing character and ambience to neighbourhoods, towns and regions across Europe and making them popular places to live, work in and visit – attractive to residents, tourists and the representatives of creative class alike.*
- *Cultural heritage provides an essential stimulus to education and lifelong learning, including a better understanding of history as well as feelings of civic pride and belonging, and fosters cooperation and personal development.*
- *Cultural heritage combines many of the above-mentioned positive impacts to build social capital and helps deliver social cohesion in communities across Europe, providing a framework for participation and engagement as well as fostering integration.*

2.1.1. Strategic recommendations

Based on the evidence gathered through its analysis, the CHCfE Consortium presented the following 5 strategic recommendations:

Within the framework of the on-going EU initiatives on cultural statistics, the EU institutions and member states should **support evidence-based policy making**.

- > adhere to and promote a holistic approach to collecting, managing and interpreting data, both quantitative and qualitative, which can demonstrate the impact of heritage on Europe's economy, society, culture, and environment;
- > make use of the framework provided by this project to identify, define and categorise heritage impact indicators;
- > support proper training of practitioners who are responsible for conducting heritage impact assessments and providing cultural (heritage) statistics.

The EU institutions should play an active role in **ensuring that cultural heritage impact is measured** in a more systematic and holistic way by all relevant stakeholders and operators.

- > identifying and disseminating good practice;
- > introducing a requirement for projects which are recipients of EU funds to conduct a holistic impact assessment, measuring both short- and long-term impacts.

Monitoring trends - "The European Commission should actively help monitor trends related to cultural heritage over a longer period of time in order to inform policy makers at all levels. Any future monitoring mechanisms (possibly in the form of an Observatory) should collect and disseminate studies undertaken in various EU member states. They should also compile and publish regular EU reports on the condition of heritage assets, as well as on the pressures and participation levels related to cultural heritage. These reports should address the key gaps in our knowledge by theme as well as by region."

Sharing and disseminating data, since continuous data collection and mapping is crucial to making informed policy choices for the future.

- > the evidence collected through this project should be made widely and freely accessible to all interested parties;
- > the survey carried out by this project should remain open-source and capable of being expanded in scope and content;
- > regional and local authorities in particular should be encouraged to make use of this project's findings as a capacity building tool and guide to good practice.

Maximise cross-sectorial impacts of cultural heritage - Special focus and recognition should be given to the positive contribution of heritage to regional and

local sustainable development – as a strategic resource for “smart, sustainable and inclusive growth” and as a basis for fostering “inclusive, innovative and reflective societies” – in the context of the mid-term review of Structural Funds.

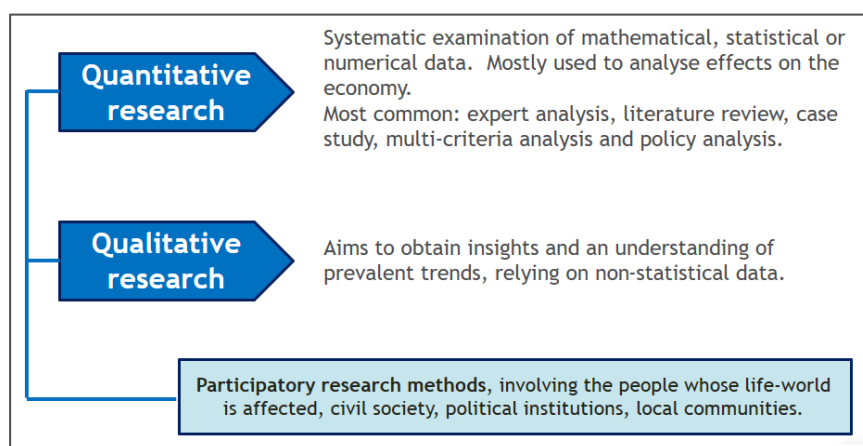
- > EU institutions and member states at all levels of governance – national, regional, and local – should adopt and implement an integrated approach to heritage. In other words, they should ensure the mainstreaming of heritage by: integrating the care, protection and proper use of heritage in all related policies, programmes and actions, raising awareness of the downstream benefits that upstream investment in cultural heritage can bring across a wide range of policy areas.
- > Participatory governance needs to be reinforced through the structured and systematic inclusion of all stakeholders and civil society in developing strategies and policies for cultural heritage.

2.2. Preliminary considerations on assessment methods

To ensure that impact evaluations are high quality and therefore useful, it is important that they use the most appropriate methodology: both quantitative and qualitative methods can be applied, and ideally, a combination of the two should be sought.

The terms ‘qualitative’ and ‘quantitative’ refer to the type of data generated in the research process: quantitative research produces data in the form of numbers while qualitative research tends to produce data in a textual form. In order to produce different types of data, qualitative and quantitative research tend to employ different methods, but both can use a participatory approach.

In facts, participatory methods can be useful to generate both qualitative and quantitative data, even if participatory research tends to employ more contextual methods and to provide rather qualitative and interpretive information.



The Report published by the project Cultural Heritage Counts for Europe - CHCfE summarises the most popular types of methodologies encountered in the analysed studies, clustering them into three categories: *quantitative*; *qualitative non-participatory*; *qualitative participatory*. For each category, five methods are explained. The list is not exhaustive, but those methods resulted to be the most frequently used in the European discourse.

The tables here below, widely taken from the Cultural Heritage Counts for Europe (CHCFE) Report, provides a description of the most commonly applied methodologies identified in the cases analysed by the CHCFE project.

	NAME	DESCRIPTION
QUANTITATIVE METHODS	COST BENEFIT	Market-based evaluation technique, used by decision-makers to assess whether a proposed project should be undertaken or not. Cost benefit analysis is carried out to weigh the costs, both financial and otherwise, of a project against benefits which would arise from it.
	HEDONIC PRICING	Revealed preference method, can be used to measure the effect of the heritage on the land value in various distance from the site. This technique assumes that prices of goods on the market are affected by their characteristics. The estimation of the real estate value and of house prices is based on several attributes like surface, comfort, age, number of rooms, and on a freely functioning and efficient property market.
	TRAVEL COST	Revealed preference method, uses differences in travel costs of individuals making use of a cultural site to infer the value of the site. The premise behind this method is that the travel expenses that people incur to visit a site represent the “price” of access to the site. With this information, peoples’ willingness to pay to visit a site should be estimated based on the number of trips that they make at different travel costs.
	CONTINGENT VALUATION METHODOLOGY (CVM)	Increasingly applied to cultural resources, it derives from environmental economics. Surveys are used to gather stated preference information, which can be used to estimate economic values of cultural resources/projects. It is based on asking a sample of individuals how much they would be willing to pay for a marginal change in the quantity of a public good provided (willingness to pay - WTP).
	CHOICE MODELLING	Similar to CVM, but it is based on stated preferences: it asks respondents to rank the alternatives, rather than just choose among them (A over B; B over A, B & C) in order to infer positions of the items (A, B and C) on some relevant latent scale.

	NAME	DESCRIPTION
QUALITATIVE METHODS NON-PARTICIPATORY	EXPERT ANALYSIS	Method relying on the knowledge and experience of experts in the field, obtained for example by conducting expert interviews.
	PRIMARY/SECONDARY LITERATURE REVIEW	The collection of historical documents and review of relevant archives, newspapers and magazines (primary) or books and journals (secondary).
	CASE STUDIES	Method consisting in providing narrative examples to disseminate information on results of research.
	MULTI-CRITERIA ANALYSIS	Non-monetary evaluation method, takes into consideration the multiple dimensions of a decision problem. Project effects are addressed in their own dimensions and a weighing procedure is used to compare or assess the various project effects against each other
	POLICY ANALYSIS	Determining which of various alternative policies will most likely achieve a given set of goals in light of the relations between the policies and the goals.

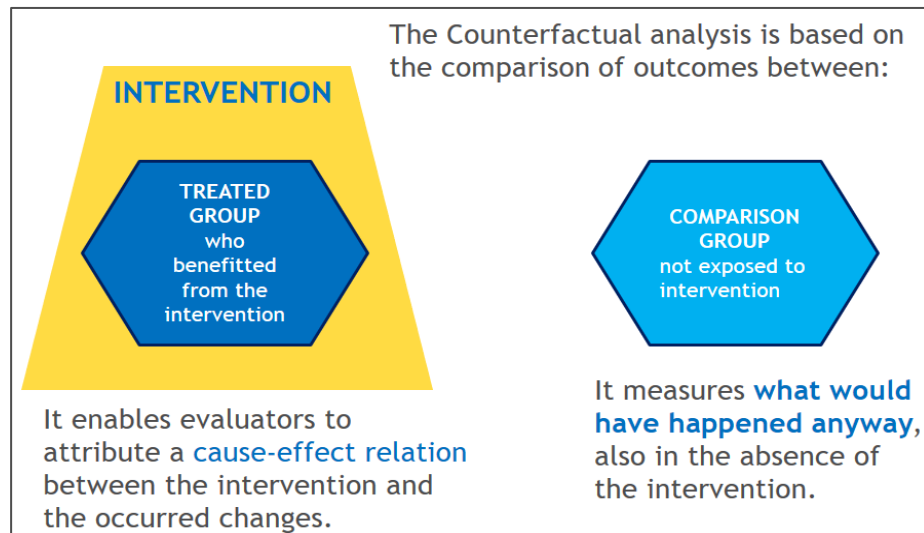
	NAME	DESCRIPTION
QUALITATIVE METHODS PARTICIPATORY	REAP (Read, Encode, Annotate and Ponder)	Method used to examine and describe the relation between local communities and park lands, which can be applied as well in case of the interconnection between communities and heritage sites. In a REAP, a number of methods are selected to produce a dataset that can be triangulated to provide a comprehensive analysis of the site.
	PARTICIPATORY MAPPING	Cartographic practice used to examine the relationships between people and the surrounding landscape, it makes use of sketch mapping, participatory 3D modelling, GPS and GIS.
	CULTURAL MAPPING	Cartographic practice used to document local cultural tangible and intangible resources.
	GROUNDING THEORY	Inductive method revealing information on cultural valuation processes, based on interviews and participant observations.
	ETHNOGRAPHY	Method employing interviews and participant observations to reveal data on the cultural values associated with heritage.

Two broad categories of impact evaluation methods are widely recognised:

- **Theory-based evaluation** (which follows each step of the intervention logic identifying change mechanisms, answering why and how an intervention works) - This approach mainly produces a qualitative estimate of impacts.
- **Counterfactual impact evaluation** (which uses control or comparison groups).
- Counterfactual and theory-based impact evaluations should complement each other.
- **Counterfactual impact evaluation methods** can be used to collect evidence and determine whether the objectives have been met and, ultimately, whether the resources were used efficiently.

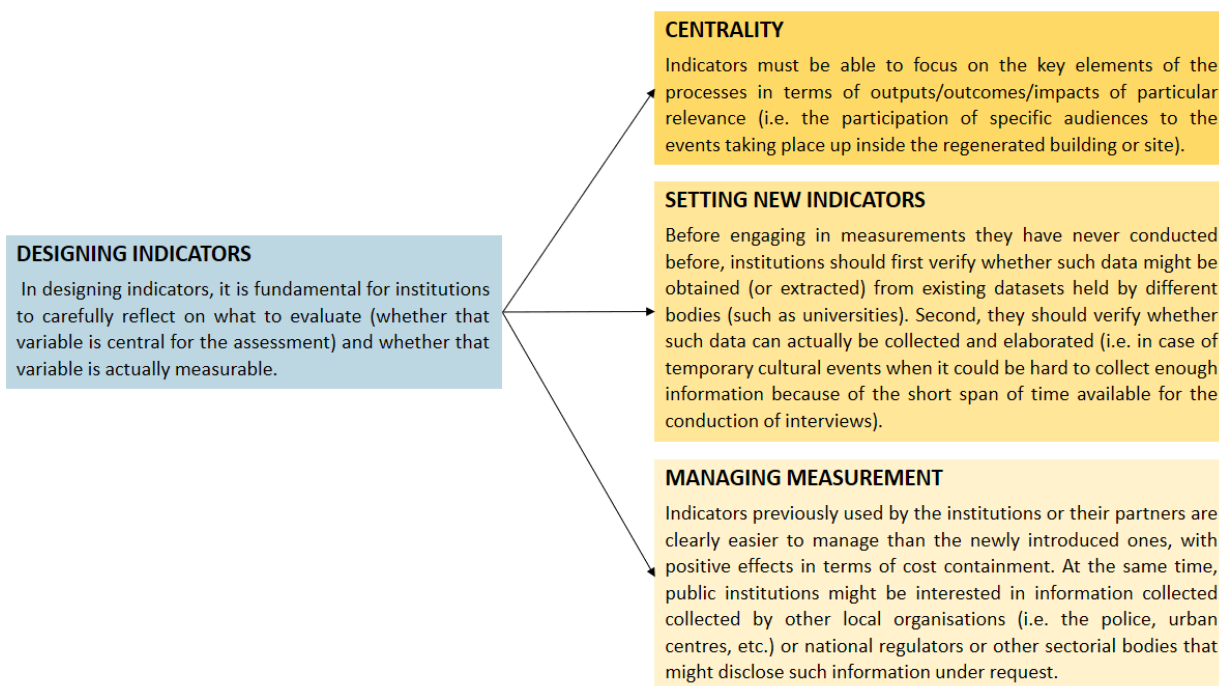
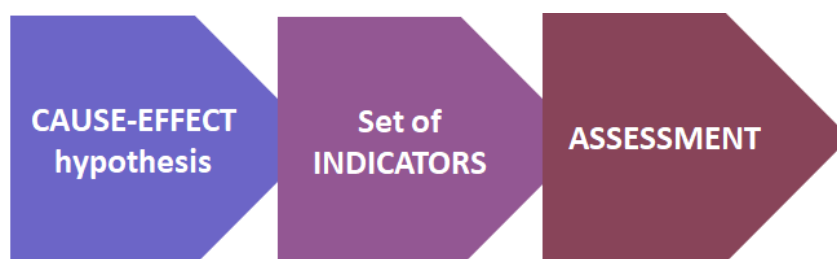
Simply speaking, counterfactual impact evaluation is a method of comparison which involves comparing the outcomes of interest of those having benefitted from an intervention (the “treated group”) with those of a group similar in all respects to the treatment group (the “comparison/control group”), the only difference being that the comparison/control group has not been exposed to the intervention. The comparison group is used to collect information on “what would have

happened to the members subject to the intervention had they not been exposed to it”, the counterfactual case.



2.3. About indicators

Impact assessment implies the identification of impact indicators: once the hypothesis of casual attribution (cause-effects) is defined, a set of indicators needs to be identified and subsequently verified in order to obtain a quantitate/qualitative representation of what has been observed. Each indicator will refer to one specific quality/aspect, in a scale with upper and lower limits. On those bases, data will then be collected.



Source: The H2020 *ROCK Project*⁸ - A Report (D3.2) on governance toolkits and financial schemes for implementation of CH-led regeneration projects <https://rockproject.eu/documents-list>

⁸ *Regeneration and Optimization of Cultural heritage in creative and Knowledge cities* <https://rockproject.eu/about>

A shared and standardised methodology to gain an empirical evidence of the multidimensional impacts of cultural heritage conservation/regeneration and its contribution to sustainable development is still missing. UNESCO and ICOMOS (the International Council on Monuments and Sites) have recognized the need to identify a set of indicators and appropriate evaluation tools to enable the assessment and the monitoring of the contribution that cultural heritage can bring to the achievement of sustainable development goals.

Such indicators are needed to verify and quantify the multidimensional benefits produced by cultural heritage conservation/regeneration initiatives, and to allow for replication and scaling-up of successful practices. Adequate indicators are necessary also to evaluate the economic value of cultural heritage, meaning by that to convert its “intangible” values into financial and monetary ones, in order to measure and give evidence of the consistency between economic value and sustainable development goals.

We can now affirm that even if a first shift in the approach has occurred, since heritage is no longer perceived only as an object of the past but also as a resource for the future, now a further step ahead is required: appropriate ways of using cultural heritage for socio-economic development have to be addressed, and appropriate methods to measure the contribution that CH can bring to development should be sought.

2.3.1. Example: 177 indicators derived from 40 case studies

NOTE: All the information reported in this paragraph are taken from the article by Francesca Nocca, “*The Role of Cultural Heritage in Sustainable Development: Multidimensional Indicators as Decision-Making Tool*” published under Creative Commons within the MDPI open access journals - Sustainability 2017, 9(10), 1882. Available at <https://www.mdpi.com/2071-1050/9/10/1882/pdf-vor>

The complete list of 177 indicators deduced from the analysis of the 40 case is available in the original document.

In 2017 a Critical Analysis of 40 Case Studies was run in order to extract a set of indicators to be used to assess the multidimensional benefits that cultural heritage conservation/regeneration is able to produce. The analysis was also aimed at understanding to which extent a multidimensional approach was applied in the assessed cases.

The following nine impact categories were identified and organised into a comprehensive matrix for impact assessment: 1. Tourism and recreation; 2. Creative, cultural and innovative activities; 3. Typical local productions; 4. Environment and natural capital; 5. Social capital/cohesion and inclusion; 6. Real estate; 7. Financial return; 8. Cultural value of properties/landscape; 9. Wellbeing.

Each impacts category is composed of sub-categories of indicators. In total, 177 indicators were identified in this analysis.

The analysis shows that a multidimensional approach is still lacking and there is an imbalance among the different impact dimensions: the economic component is most frequently addressed, whereas the social and environmental dimensions are often left out. The impacts taken mainly into consideration are related to tourism and real estate, but the kind of tourism emerging from the analysed cases is a “linear tourism”, whereas a “circular tourism”, able to produce positive impacts both in the short and in the long time, is not emerging.

The main limit, as the author herself reports, is the lack of an adequate set of indicators consistent with the above reported matrix, which should enable to consider all the multidimensional impacts to date not included in projects/programmes evaluations.

In conclusion, *“tools to evaluate the contribution of cultural heritage to the achievement of sustainable development (considering the multidimensional benefits that it is able to produce) and the identification of new effective model for sustainable management of cultural heritage are necessary.*

Open fields for future research are thus related to the development of tools for evaluating the role of cultural heritage (and cultural tourism) in the climate change challenge and the relationship between cultural heritage and wellbeing and social cohesion categories. Indicators and evaluation methods still represent a gap and thus an open field of experimentation.”

Impact Categories	Indicator Categories	N. of indicators
1. Tourism and recreation	Touristic demand	56
	Touristic supply	
	Economic vitality	
	Economic impact on local wealth	
2. Creative, cultural and innovative activities	Cultural demand	28
	Cultural supply	
	Economic vitality	
	Economic impact on local wealth	
	Employment in cultural activities	
3. Typical local productions	Creative firms	7
	Local production	
	Employment in local production	
4. Environment and natural capital	Environmental preservation	3
	Green areas and facilities supply	
5. Social capital/cohesion and inclusion	Social cohesion	28
	Sharing/collaborative economy initiatives	
	Employment	
	Social inclusion	
6. Real estate	Real estate value	25
	Real estate supply (N. of residences, commercial units, etc.)	
	Real estate development	
7. Financial return	Public financial return	9
8. Cultural value of properties/ landscape (N. of well-preserved/in ruin)	State of conservation of heritage/landscape asset	14
9. Wellbeing	Security	7
	Quality of services	
	Housing quality	
	Health	

Taken from the information contained in the article by Francesca Nocca, "The Role of Cultural Heritage in Sustainable Development: Multidimensional Indicators as Decision-Making Tool"

2.3.2. Example: multidimensional European-based indicators

NOTE: All the information reported in this paragraph are taken from the Report of the cooperation project *Cultural Heritage Counts for Europe* (CHCFE), published in 2015.

The document is available at: <http://blogs.encatc.org/culturalheritagecountsforeurope/outcomes/>

The project Cultural Heritage Counts for Europe - CECfE identified a large number of significant studies dealing with the impact of cultural heritage. The report published by the project consists of several levels of research findings reflecting the different types of documentation and evidence available: from a review of international theoretic literature on heritage impact and indicators (both qualitative and quantitative), to a mapping and analysis of studies on the impact of cultural heritage in the EU member states, to the assessment of real case studies and best practices.

Through this wide analysis, the projects were able to provide some structured examples of impact indicators in accordance with the so called “four pillars approach”.

The analysis shows that heritage has positive impacts on all four domains – economy, society, culture and environment, regardless of the type of heritage object (e.g. single sites in marginal areas or a wide historic complex in city centres) or geographical location (Western and Central Europe, central and provincial location).

The literature review enabled the identification of a list of potential impact domains and sub-domains and values associated with and derived from cultural heritage.

The CHCFE project aggregated and organised such subdomains and values around the four main domains of sustainable development (pillars). This exercise showed considerable overlapping between many of the sub-domains, which often had to be classified under more than one domain.



The table in the next page illustrates this multidimensional approach by listing the sub-domains created by the authors of the report in the course of the literature analysis and indicating which of the four domains they belong to.

This should be seen, of course, as a reference theoretical model, to be adapted in each context, since heritage is largely influenced by its dynamic context. The authors point out the fact that “the scope and level of cultural heritage impact is

interdependent with its context, stakeholders, and the very nature of the body that is running a given heritage site (responsible for its management and decision making), as well as the raison d’etre of the cultural heritage site itself.“

When assessing the influence of cultural heritage, it is important to take into consideration the following four elements:

- What is the purpose of a CH site, its mission and its objectives.
- Who are the stakeholders and their interest concerning the site, as well as their influence on the site.
- What are the key characteristics of the organisation that runs the site (e.g. how decisions are taken, what the managerial strategy is, etc.)?
- Which the macro- and microeconomic context

	ECONOMIC	SOCIAL	CULTURAL	ENVIRONMENTAL
Image and symbols creation			X	
Visual attractiveness			X	
Architectural language			X	
Creativity and innovation			X	
Sense of place		X	X	X
Cultural landscape			X	X
Reducing urban sprawl				X
Preserving embodied energy				X
Lifecycle prolongation				X
Education	X	X	X	
Skills	X	X	X	
Knowledge	X	X	X	
Creation of identity		X	X	
Regional attractiveness	X		X	X
Social cohesion		X		
Community participation		X		
Continuity of social life		X		
Place branding	X	X		
Labour market	X	X		
Regional competitiveness	X	X		X
Real estate market	X			
Gross Value Added	X			
Return on investment	X			
Tax income	X			
Housing stock management	X			X

Potential areas of cultural heritage impact. Source: CHCfE Report

According to the CHcE Report, the following visualisation presents the most recurring cultural heritage impacts identified at the European level in the assessed cases (and how they were tackled), grouped into nine sub-domains.

It has to be taken into account that impacts generated by cultural heritage may also be negative: the so-called adverse impact. Usually impact assessment is aimed to analyse how a budget invested in a cultural heritage project generates benefits, but it rarely considers the alternative uses of that budget, if spent on something else, could potentially bring more benefits. So, if cultural heritage sites may provide venues for the population and increase stability, on the other hand, indirectly, they might feed the process of gentrification. If cultural heritage can contribute to increase social inclusion, it may sometimes also cause social exclusion. Furthermore, some of the negative effects may also be produced by the way a CH is used, as in the case of increased tourism that can result into increase of traffic, pollution etc.

SUBDOMAIN	SOURCE OF EVIDENCE	POSITIVE IMPACTS	ADVERSE IMPACTS
REGIONAL ATTRACTIVENESS AND COMPETITIVE ADVANTAGE	<ul style="list-style-type: none"> spatial correlation between municipalities, equilibrium sorting models analysis of spatial spillover effects willingness-to-pay for living close to historic city centres macro-economic analysis of clusters 	<ul style="list-style-type: none"> contribution to the neighbourhood's atmosphere, attracting inhabitants (citizens, households, creative class, employees, etc.) creates compelling city narratives for marketing purposes character of cultural heritage buildings attractive for investment (both prestige or affordable space) liveability of the city core and areas attractive to key company personnel 	<ul style="list-style-type: none"> gentrification tourism congestion exclusion of certain social groups
RETURN ON INVESTMENT, TAX INCOME AND GVA/GDP	<ul style="list-style-type: none"> analysis of public investments cost-benefit analysis multi-criteria analysis impact weighing factors 	<ul style="list-style-type: none"> generator of tax revenue for public authorities, both from the economic activities of heritage-related sectors and indirectly or induced activities spillovers from heritage-oriented projects leading to further investment track record on good return on investment 	<ul style="list-style-type: none"> weak sustainable development when solely economic capital is considered
LABOUR MARKET	<ul style="list-style-type: none"> quantitative data analysis statistical analysis of (in)direct employment rates related to the cultural heritage sector 	<ul style="list-style-type: none"> jobs created during implementation of heritage-oriented projects and in heritage maintenance significant indirect and induced creation of jobs — up to 26.7 induced jobs to each cultural heritage job highly labour intensive sector social-service spillovers creates demand for specialised workforce and opportunities for skills training 	<ul style="list-style-type: none"> not enough educated or trained workers a number of job posts only of season or part-time character

SUBDOMAIN	SOURCE OF EVIDENCE	POSITIVE IMPACTS	ADVERSE IMPACTS
IDENTITY CREATION	<ul style="list-style-type: none"> • qualitative data based on interviews and questionnaires • expert analysis • rapid ethnographic assessment • participatory mapping 	<ul style="list-style-type: none"> • creation of immaterial value: genius loci or atmosphere and ambience • symbolic value • attractiveness 	<ul style="list-style-type: none"> • social exclusion • nationalistic exploitation
ENVIRONMENTAL SUSTAINABILITY	<ul style="list-style-type: none"> • Life Cycle Analysis (LCA) • Life Cycle Costing (LCC) • statistical analyses of housing stock shrinkage • comparative analysis between current state of the residential building stock and renovation • data (based on characteristics, physical quality and building stock developments) • dwelling replacement or life cycle extension decision-making process analysis 	<ul style="list-style-type: none"> • preserving embodied energy, reducing churn (demolition and rebuilding) in the built environment • reducing urban sprawl • prolonging the physical service life of buildings and building parts • supporting waste-avoidance • sustainable management of building stock 	<ul style="list-style-type: none"> • high energy consumption if not properly retrofitted
SUBDOMAIN	SOURCE OF EVIDENCE	POSITIVE IMPACTS	ADVERSE IMPACTS
BUILT HERITAGE AND THE REAL ESTATE MARKET	<ul style="list-style-type: none"> • quantitative data based on hedonic pricing and contingent valuation methods • comparative research targeting listed buildings and non-listed properties • correlation between property prices and historic landmark distance 	<ul style="list-style-type: none"> • creates high demand to live in a historical neighbourhood • presence of immovable heritage increases property prices • private and public owners receive preservation subsidies or tax reduction 	<ul style="list-style-type: none"> • heritage status of a building can bring along extra regulations and restrictions which can be difficult to deal with • restrictions for owners regarding free use and disposal of heritage buildings • local increase in property prices
SOCIAL COHESION AND COMMUNITY PARTICIPANT	<ul style="list-style-type: none"> • qualitative research to capture subjective information • surveys • narrative arguments and interview 	<ul style="list-style-type: none"> • social inclusion, confidence and well-being • sense of ownership, civic pride • enables community engagement • creates new networks between communities • creation of inclusive environments 	<ul style="list-style-type: none"> • gentrification • disintegration of local communities • social exclusion
EDUCATION, SKILLS AND KNOWLEDGE	<ul style="list-style-type: none"> • correlation analysis between heritage-oriented projects and specific age group learning • qualitative data based on interviews and questionnaires • expert analysis • rapid ethnographic assessment • participatory mapping 	<ul style="list-style-type: none"> • gaining knowledge, (arts and craft) skills, and awareness • contribution to body of knowledge on science and humanities • providing basis for cooperation and catalyst for creativity • change of attitudes and behaviour in terms of personal development 	<ul style="list-style-type: none"> • negative experience with a heritage site resulting in discouragement of further learning
AESTHETICS OF A PLACE AND IMAGE CREATION	<ul style="list-style-type: none"> • qualitative data based on interviews and questionnaires • expert analysis • rapid ethnographic assessment • participatory mapping 	<ul style="list-style-type: none"> • attractive appearance of the cities • attractiveness of buildings • positive impact on people's sense of identity • provided basis for promotional strategies of cities, regions and countries 	<ul style="list-style-type: none"> • disintegration of local communities • tourism congestion • disneyfication • "Not in My Backyard" attitudes

Source: CHCfE Report

3. For further reading

To learn more on impact assessment for cultural heritage and to follow the international debate and progresses on this very current topic, we invite you to consult the following documents and monitor the following links:

- The *Cultural Heritage Counts for Europe* cooperation project (CHCFE), Report, 2015.

Available at:

<http://blogs.encatc.org/culturalheritagecountsforeurope/outcomes/>

- Francesca Nocca, “*The Role of Cultural Heritage in Sustainable Development: Multidimensional Indicators as Decision-Making Tool*” published under *Creative Commons within the MDPI* open access journals - Sustainability 2017, 9(10), 1882.

Available at <https://www.mdpi.com/2071-1050/9/10/1882/pdf-vor>

- *Measuring and managing impact - A practical guide*, 2019, EVPA

Available at: <https://evpa.eu.com/knowledge-centre/publications/measuring-and-managing-impact-a-practical-guide>

- The Horizon2020 *ROCK project -Regeneration and optimisation of Cultural heritage in creative and Knowledge Cities*.

The main objective of ROCK project is to support the transformation of historical city centres into Creative and Sustainable Districts. The re-use of buildings or sites within the historical city centres can be a driver for local urban regeneration and therefore institutions need to pay careful attention to impacts.

The complexity of regeneration processes makes it hard to assess the results and the impacts connected with the interventions made and makes it even harder to evaluate the actual consequences of the measures taken by public institutions. The definition of a framework for the evaluation of expected results and impacts is crucial. Further information and project resources can be found at: <https://rockproject.eu/>

- The Horizon2020 *CLIC Project - Circular models Leveraging Investments in Cultural heritage adaptive reuse*.

This trans-disciplinary research project aims 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. Further information and project resources can be found at: <https://www.clicproject.eu/>

- The Horizon2020 SoPHIA Project - Social Platform for Holistic Impact Heritage Assessment.

The project promotes a collective reflection within the cultural and political sector in Europe on the impact assessment and quality of interventions in European historical environment and cultural heritage at urban level. It is aimed at creating a Social Platform, a vast and diverse community of stakeholders from different fields and disciplines interested in interventions in historical environment and cultural heritage in Europe, that work together towards the definition of an effective impact assessment model, quality standards and guidelines for future policies and programmes. Further information and project resources can be found at: <https://sophiaplatform.eu/en>