

Shelter



The future of SHELTER



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 821282

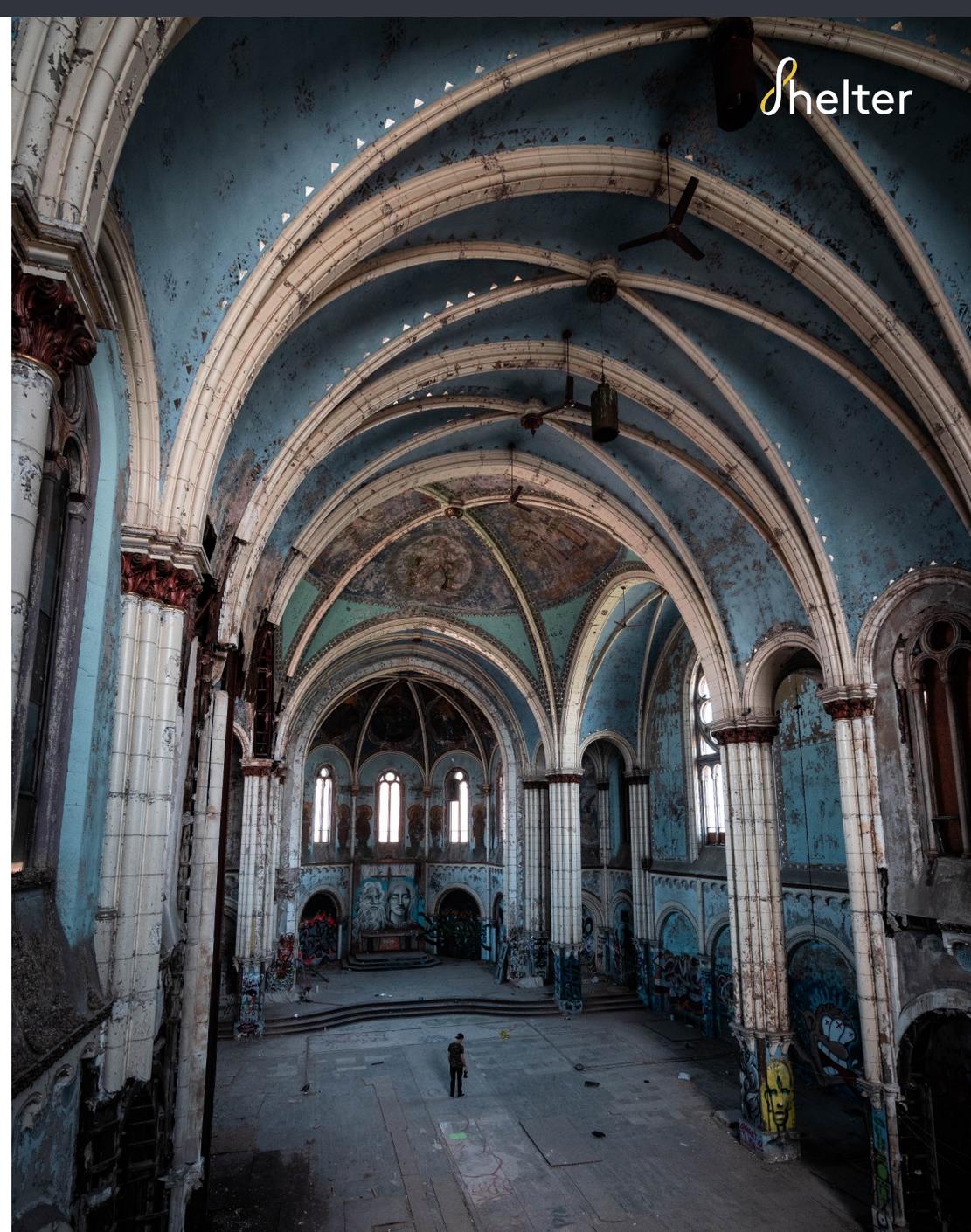
Our mission



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Assuring a Glocal impact

- Spreading awareness of the project's achievements to relevant audiences via dissemination/ communication channels, reaching as many people/ organizations as possible and increasing project visibility
- Finalising **assessment of the potential solution socio-economic impact**, especially in Europe
- Based on market analysis and competitive assessment, preparing the overall business plan and implementation roadmap
- Fostering international and regional **cooperation**



The heritage market environment



Heritage landscape

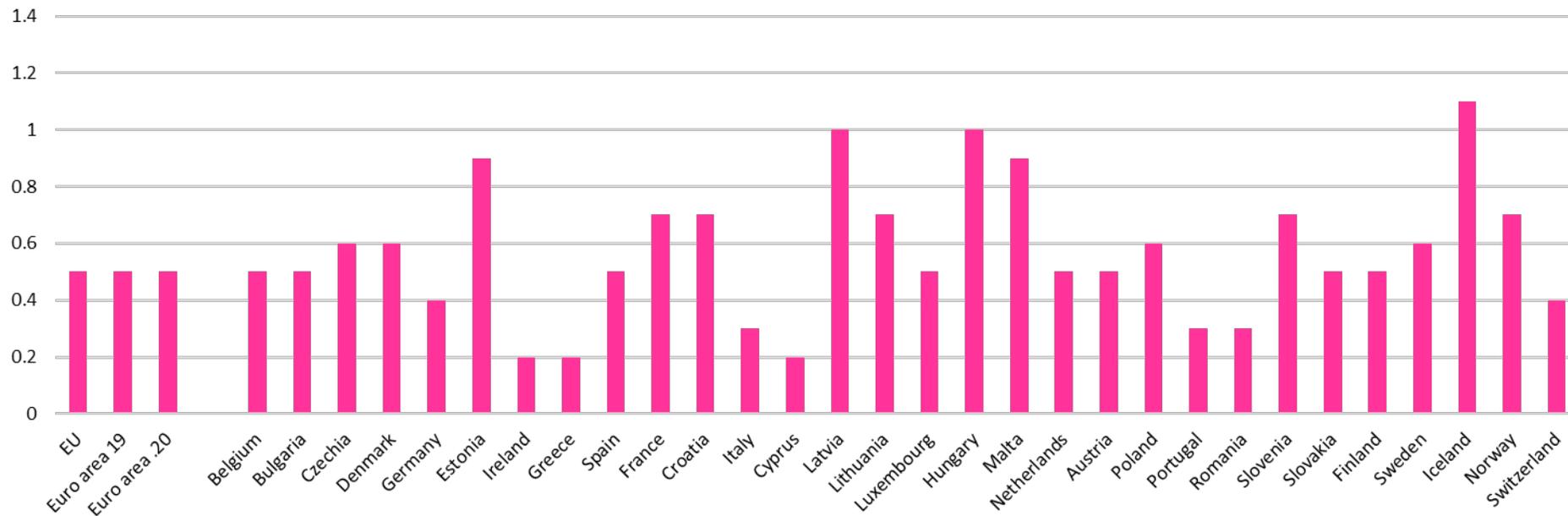
- **1,157 sites** on UNESCO's World Heritage list, 900 of which are cultural sites and 39 of which are mixed sites (both cultural and natural).
 - **+40% of them are in Europe**
- By assigning places as Cultural Heritage Sites for already a half century, UNESCO has helped to pass them on to future generations by encouraging commitment to Cultural Heritage conservation.
- **Cultural Heritage has become a major driver for economic growth and sustainable development** by attracting tourists which in turn boosts the economies of the destinations visited.
 - In Europe, **cultural tourism accounts for 40%** of all tourism. This **creates employment: c. 300,000** Europeans work directly in this sector



Spending for Cultural Heritage

- Heritage is valued as a key component of the economy and tied with the tourism sector. Yet, the budget allocated to protect and valorise heritage is not always adequate

Total general government expenditure on culture 2021 % of GDP



Spending for Disaster Risk Reduction

- Expenditure for civil protection and emergency management is not always sufficient, and is often subject to “budget cuts”, in times of spending reviews

Total general government expenditure on defence, 2021, % of GDP

	Defence	Military defence	Civil defence	Foreign military aid	R&D Defence	Defence n.e.c.
EU*	1.3	1.1	0.0	0.1	0.0	0.0
euro area 19*	1.3	1.1	0.0	0.1	0.0	0.0
euro area 20*	1.3	1.1	0.0	0.1	0.0	0.0
Belgium	0.9	0.9	0.0	0.0	0.0	0.0
Bulgaria	1.6	1.5	0.1	0.0	:	0.0
Czechia	1.0	0.9	0.0	0.0	0.0	0.1
Denmark	1.2	1.2	0.0	0.0	0.0	0.0
Germany*	1.1	1.0	0.0	0.1	0.0	0.0
Estonia	2.0	2.0	0.0	0.0	0.0	0.0
Ireland	0.2	0.2	0.0	0.0	0.0	0.0
Greece	2.8	2.8	0.0	0.0	0.0	0.0
Spain*	1.0	0.8	0.0	0.1	0.0	0.0
France*	1.8	1.5	0.0	0.1	0.1	0.1
Croatia	1.0	1.0	0.0	0.0	0.0	0.0
Italy	1.4	1.3	0.0	0.1	0.0	0.0
Cyprus	1.8	1.7	0.0	0.1	0.0	0.0
Latvia	2.3	2.3	0.0	0.0	0.0	0.0
Lithuania	1.8	1.5	0.0	0.0	0.0	0.3
Luxembourg	0.4	0.4	0.0	0.1	0.0	0.0
Hungary	1.1	1.1	0.0	0.0	0.0	0.0
Malta	0.6	0.6	0.0	0.0	0.0	0.0
Netherlands	1.3	1.2	0.0	0.0	0.0	0.0
Austria	0.6	0.6	0.0	0.0	0.0	0.0
Poland	1.6	1.6	0.0	0.0	0.0	0.0
Portugal*	0.8	0.7	:	0.0	0.0	0.0
Romania	1.9	1.9	0.0	0.0	0.0	0.0
Slovenia	1.2	0.9	0.1	0.0	0.0	0.1
Slovakia	1.3	1.2	0.0	0.0	0.0	0.1
Finland	1.2	1.1	0.1	0.0	0.0	0.0
Sweden	1.3	1.1	0.1	0.1	0.0	0.0
Iceland	0.1	0.0	0.1	0.0	0.0	0.0
Norway	1.7	1.6	0.0	0.0	0.0	0.0
Switzerland	0.8	0.7	0.1	0.0	0.0	0.0

Source: Eurostat (gov_10a_exp)

* provisional

Source: EUROSTAT

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Poland	1.6	1.6	0.0	0.0	0.0	0.0
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Key challenges



Challenges

- **Complex relationship** between heritage domain and technology
- **Low awareness** on how new technologies and methods can support resilience in disaster risk management and climate-adaptation
- **Resilience paradox** – prominent need for climate-adaptation solutions but no time and availability to implement as other issues/interest are priorities esp. by public administrations
- When aware and interested, **focus on the short-term** to solve immediate problem
- **Low support of public financing** to buy and implement new technologies



Main highlights

Exploitation routes

SHELTER knowledge **outputs**, tools and services are **being** tested and **evaluated** by our Open Labs. Some examples:

- **Santa Croce church and archaeological area of Ravenna** – Chatbot and IoT module
- **Dordrecht** – IMMERSITE and Decision Support System Dashboard
- **Seferihisar district** – Risk assessment and solution portfolio
- **Baixa Limia – Serra do Xures** – Resilience dashboard and rapid damage assessment
- **Sava River Basin** - Decision Support System Dashboard, Rapid damage assessment and IoT module



Exploring possibilities

- **Assessing conditions for uptake** of solutions by our Open Labs
- Partners ready to provide developed solutions on a **B2B model approach**, via direct licensing and/ or tech transfer
- Seizing opportunities to **create a legacy** after project's end by means of:
 - Spin-off projects
 - Joint Programming Initiative "Connecting Climate Knowledge for Europe" (JPI Climate)
 - Engagement of local stakeholders to transform SHELTER research innovations into reality



Building synergies

The “EU Task Force for climate neutral and resilient historic urban districts” initiative - involving SHELTER, ARCH and HYPERION projects - with the mission to coordinate EU efforts to make historic and contemporary urban districts climate-neutral and strengthen their resilience to the effects of climate as well as the resilience of the communities depending on those areas. Outputs:

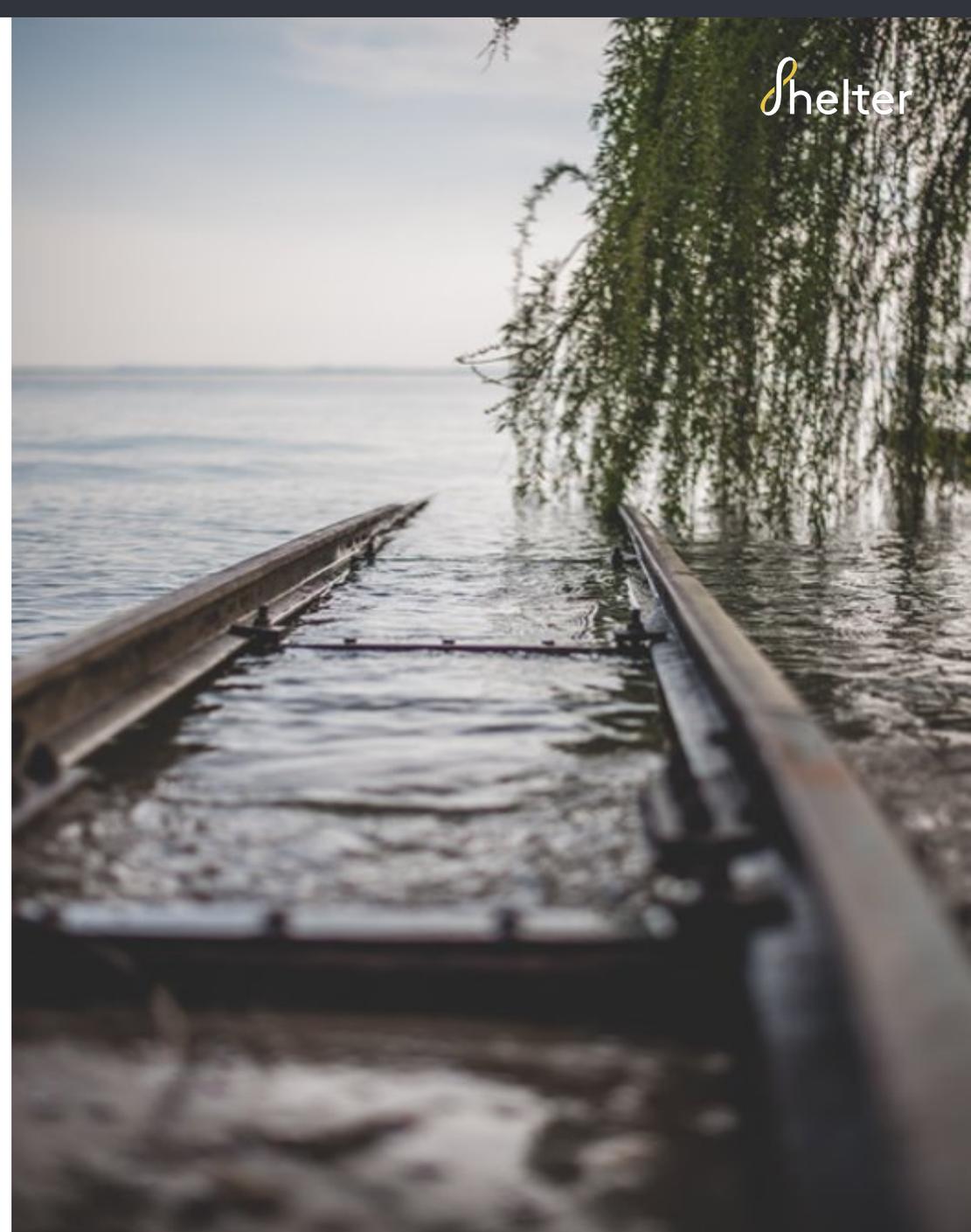
- Regular joint meetings, strengthening the cooperation between the sister projects
- 1 cross-project peer learning workshop easing the exchange of knowledge and best practices to build heritage resilience
- 1 joint paper: “Paving the way for climate neutral and resilient historic districts”

Paving the Way for Climate Neutral and Resilient Historic Districts



Exploring networks...and more!

- Participation to UN Days
- **Synergies and networking** with other projects: STRENCH, RURITAGE, SAFERS, PROCHULTER, VARCITIES, etc.
- Building **new standards** in collaboration with ARCH on the topic “City Resilience Development - Guide to combine disaster risk management and climate change adaptation – Historic areas”
- **Heritage Research Hub**
- **Horizon Result Booster services**
 - Portfolio Dissemination & Exploitation Strategy services (shared activity to include sister projects)
 - Horizon Standardisation services



Outlook



A pathway to improved resilience

Thanks to the co-creation processes carried out with our **Open Labs** - involving local authorities, urban planners, conservation practitioners, first responders, cultural heritage owners and managers - **SHELTER** has a **concrete advantage** to guide the historic and natural areas in the transformation toward more resilient, circular, smart and **inclusive historic environment** taking advantage of the window of opportunity that the awareness, adaptation and preparations against hazards provide

- Cost Benefit Analysis and Business Plan (validated with key stakeholders) to be soon delivered to facilitate solutions uptake



What next?

The future of SHELTER is bright as it is likely to be characterized by:

- **increased collaboration** between stakeholders and local communities.
- **continued innovation** in technology
- **growing recognition of the importance of community-based approaches** to heritage preservation and climate change adaptation.

As the threats to cultural and natural heritage areas continue to grow, the adoption of holistic and innovative approaches - like the ones developed in SHELTER - will become increasingly important in safeguarding these sites for future generations.



THANK YOU!

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