#### ARCH SAVING CULTURAL HERITAGE

# Hamburg

Advancing Resilience of Historic areas against Climate-related and other Hazards

# PROJECT AREA World Heritage in Hamburg

Hamburg is the second largest city in Germany and has 1.8 million inhabitants. ARCH focuses on the UNESCO World Heritage Site Speicherstadt and Kontorhaus District with Chilehaus. With its historic warehouses and office buildings, the area is located adjacent to Hamburg's city centre, directly on the banks of the Elbe River and on the Elbe islands. On July 5th 2015, the Speicherstadt and Kontorhaus District, including the Chilehaus, were inscribed onto the UNESCO World Heritage List.

# The Speicherstadt

The Speicherstadt was built between 1885 and 1927 on a 1.1 km long group of islands in the Elbe. It is the largest contiguous, uniformly shaped warehouse ensemble in the world and has become home to arts and cultural activities, offices and start-ups.

# The Kontorhaus District with Chilehaus

The Kontorhaus District with Chilehaus are office complexes developed from the 1920s to the 1950s, for offices of companies with port-related activities. It stands out because of its expressionist brick architecture and unity of building function and continues to offer extensive office spaces. HAMBURG

## ABOUT ARCH Advancing Resilience of Historic areas against Climate-related and other Hazards

The impacts of climate change are global in scope and unprecedented in scale. Cities will face frequent extreme events in the future and the risk to their historic urban and rural districts from climate change will also increase. ARCH is a European-funded research project that aims to better preserve areas of cultural and historic value from hazards and risks. The ARCH team, with the cities of Bratislava, Camerino, Hamburg and Valencia, co-creates tools that will help cities save historic areas from the effects of climate change.

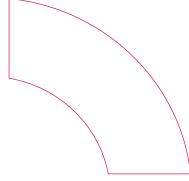
#### **Climate Change: Hazards for Hamburg**

Human-induced climate change has a major impact on people and the environment. These changes can also be felt and measured in Hamburg. The risks that climate change poses for Hamburg include rising in temperatures; longer and more frequent periods of heat and drought and associated low water levels; more frequent heavy rainfall events; increased risk of flooding, storms, and storm surge; and rising in sea level and possible salinisation of the Elbe River. You can find more information on the effects of climate change on Hamburg here (English version is available for download).

# How Does ARCH Make Hamburg More **Resilient?**

Together with the scientific project partners from Spain, Italy, Ireland, Slovakia, South Korea and Germany, tools and databases are being developed to better identify the effects of climate change and to help protect cultural heritage from natural disasters.





# The main goals of Hamburg in the ARCH project are to identify hazards, co-develop tools, and work within a collaborative network of cities seeking to boost the resilience of their historic areas.

## **Project work**

The following are some of the main results of the ARCH project in Hamburg:

#### Information System

The Historic Area Information System (or HArIS) is an information system that presents data on air pollution, rainwater infiltration, or the subsidence of buildings. The Hamburg team supports the further development and helps to test the methods developed in the project under real conditions.

#### Mutual Learning Framework

The project work also includes a Mutual Learning Framework, which fosters exchange with cities such as Liverpool, Thessaloniki, and Regensburg, all of which face similar challenges as Hamburg.

### 3D Modelling

In Hamburg, the focus is also on the creation of a 3D model that incorporates information on the built environment, cultural heritage and climate data. This will test how cultural heritage can be monitored digitally and preserved for future generations.

#### Management Plan

Prevention and resilience play a special role in supporting the planning of measures and control mechanisms to preserve the warehouses and office buildings. For this purpose, the management plan published in 2015 will be analysed and revised in relation to the project topics. This process will be open to participation from Hamburg residents.



#### Partners











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#### Disclaimer

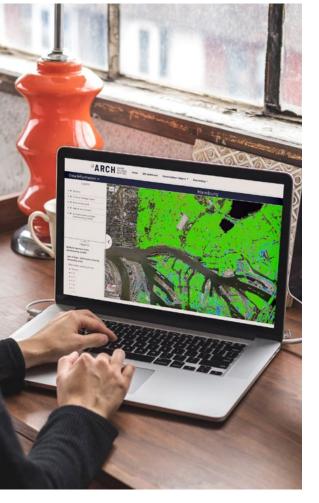
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#### Images

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