Press release:

Horizon Europe Project SIMIACCI launches on January 1st, 2025

Lisbon, Portugal – January 2025

Climate Transition and Cultural Heritage Conservation

January 2025

We are excited to officially announce the launch of the **SIMIACCI** project (*Sustainable Intelligent Management of Indoor Air Quality for the Culture and Creative Industries*), starting on January 1st, 2025, and running for the next four years.

This ambitious initiative, funded under the Horizon Europe program, aims to improve efficiency in indoor air quality control in Galleries, Libraries, Archives, and Museums (GLAMs) across Europe, enhancing the conservation of cultural heritage artifacts while reducing energy consumption.

The project successfully kicked off at Lisbon's National Coach Museum, with a fruitful two-day meeting organised by the research institute of Istituto Supérior Tecnico of Lisbon (IST ID), the project coordinator, on January 23-24. The event brough together 15 partners from all over Europe to discuss project goals, share insights and plan the roadmap for the next four years.

Cultural and Creative Industries (CCIs) commitment to climate action

The transition to climate-friendly practices is a pressing demand across all sectors of the EU economy, including CCIs. GLAMs require substantial energy for controlling Volatile Organic Compounds (VOCs), Nitrogen Oxides (NO_x), Hydrogen Sulfide (H_2S), and humidity levels essential for preserving cultural heritage artifacts. Traditional indoor air quality solutions often fall short in efficiency and environmental impact.

Innovative solutions for sustainable indoor air quality management

SIMIACCI introduces a portfolio of innovative technologies aimed at transforming indoor air quality management. Key innovations include:

- Using innovative materials (Metal Organic Frameworks) to capture harmful pollutants: these are materials made from metal atoms connected by organic molecules which are advanced adsorbents for capturing noxious VOCs, mitigating NO_x, and capturing H_2S in real scenarios.
- Developing predictive models and sensors to track and manage contaminant levels: tools to forecast contaminant concentrations and provide conservation recommendations based on real-time sensor data.

- Designing modular systems that meet both technical and environmental needs for air quality control.
- Creating new business models that combine these solutions, integrating market strategies supported by comprehensive economic, environmental, and social analysis.

European collaborations and cutting-edge technology

SIMIACCI will develop 20 prototypes, showcased in 7 GLAMs of varying sizes and contexts across Europe and beyond. These demonstrations will provide concrete evidence of energy and resource-efficient solutions, reducing energy demand by 30-50% and extending the conservation time of cultural heritage artifacts. The GLAMs involved are: DET KGL. BIBLIOTEK (Denmark), NARODNIHO TECHNICKEHO MUZEA (Czechia), MUSEUM NATIONAL D'HISTOIRE NATURELLE (France), MUSEUS E MONUMENTOS DE PORTUGAL EPE (Portugal), STAATLICHE AKADEMIE DER BILDENDEN KUNSTE STUTTGART (Germany), DEUTSCHES MUSEUM VON MEISTERWERKEN DER NATURWISSENSCHAFT UND TECHNIK (Germany), STAATSARCHIV AARGAU (Switzerland)

Leading the way to a sustainable future

Through dedicated exhibitions reaching 30,000 visitors, SIMIACCI aims to inspire climate transition across GLAMs and beyond, ultimately influencing five additional sectors. The creation of the SIMIACCI label will further consolidate GLAMs' leadership in sustainable practices.

A collaborative effort

SIMIACCI brings together world-renowned academic materials and conservation scientists, deep tech SMEs, large companies, and a dedicated association to drive the ambitious project forward.

For more information, please reach *simiacci.project@gmail.com.*

For project's latest news and events, make sure to follow the LinkedIn page: *@SIMIACCI.*