# **Climate2Preserv**

## Sustainable Climate Management Strategy to Preserve Federal Collections

DURATION 15/12/2020-15/03/2025 BUDGET 833 538 €

PROJECT DESCRIPTION

Climate2Preserv aims at helping Federal Scientific Institutions (FSIs) to improve the environmental preservation conditions of their cultural heritage (temperature, relative humidity) whilst reducing their energy consumption. The project will contribute to the ongoing (inter)national effort on those Preventive Conservation (PC)- and Environmental Sustainability (ES) questions by largely disseminating the project results. Climate2Preserv's research objectives are:

(1) to develop a clear protocol and user-friendly and flexible tools, the C2P Toolbox, that will guide all actors concerned by the federal collections infrastructures in this optimization process: architects, engineers, preventive conservation experts, sustainability consultants, directors, collections managers, technicians, conservators;

(2) to apply this methodology in two case studies: the Royal Museums of Fine Arts of Belgium and the Cinematek;

(3) to teach the method to the FSIs'- and Building Agency's staff;

(4) to disseminate the method (inter)nationally.

Museums face difficult choices as they respond to conflicting mandates to lower operating costs and energy consumption, and to preserve collections. Driven originally by loans policies that imposed strict environmental guidelines – unfortunately extended to preservation practices – cultural institutions often invest in heating, ventilation and air-conditioning (HVAC) systems with high associated operating costs and energy consumption. Today, new developments in PC, taking into account both the PC and ES objectives of cultural institutions, advocate for loosening these environmental guidelines. Indeed, risk analysis often points out that incorrect temperature and relative humidity (two out of ten agents of deterioration representing the full risk spectrum in PC) generally do not represent the biggest risk. But these revised guidelines are only slowly taken up by the heritage field.

Despite the existence of many tools for improving the PC and ES conditions of collections facilities, to this day there has been no study that provides a comprehensive roadmap for sustainable storage and exhibition spaces. Being a popular topic today, ES has been addressed by the different disciplines engaged in this project (PC, architecture, engineering, etc.) but not translated into a multidisciplinary practice and a common language within a heritage context. To that end, the various partners will bring their expertise for the improvement of the FSIs' collections management.

With an emphasis on interdisciplinary collaboration and the involvement of the FSIs' stakeholders, the C2P Toolbox offers the necessary tools to engage in an environmental optimization process: the C2P Protocol (a step-by-step guide), assessment tools for measuring (potential) impacts of mitigation strategies, and communication tools to facilitate collaborative work. The process is articulated around successive phases: (1) Creation of a team; (2) Documentation of the building, systems, collections and management; (3) Assessment; (4) Definition of the targets; (5) Definition of the mitigation measures; (6) Design of the action plan; (7) Action plan implementation; (8) Evaluation. All this to help the user design and implement immediate indoor climate optimization measures or prepare the groundwork for a long-term improvement trajectory for his/her collections infrastructures.



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The C2P Toolbox will be tested in two case studies, the Cinematek collection and the KMSKB-MRBAB collection. While focusing on the preservation of the collections and the optimization of energy and financial resources, human comfort and security, the project also offers an advanced training opportunity for the various museum experts involved (conservators, architects, HVAC and building engineers). Moreover, training activities (Summer School, national workshop) intended to international and national professionals (FSIs) will help create a core of trained professionals. Climate2Preserv will generate new know-how for the collections preservation of other Belgian museums and it will serve as an international benchmark for the sustainable preservation of collections. In order to diffuse this knowledge, the entire process will be documented, published and disseminated online, while interim results will be discussed and evaluated with the partners.

Our cultural heritage has been proven to be of exceptional value to society. It is therefore our duty to protect this valuable heritage to ensure future generations can enjoy what shaped our world and the exceptional creativity and craftsmanship of humankind. But whilst respecting international preservation standards, the environmental cost should be reduced, Optimal preservation conditions on both PC and ES fronts could lead to the relocation of funds to address more pertinent deterioration causes, to reduce the amount of active restoration, to prevent calamities and to allocate more budget for preventive measures.

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