

Museums, Climate and Politics

**Taking political action in
the sustainable transition**



Network of European
Museum Organisations

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Introduction

In this report, the Network of European Museum Organisation's (NEMO) responds to crucial results of the [2022 European Museums Survey; Museums in the Climate Crisis](#), which gave an overview of the status quo of museums facing climate change. Herewith, NEMO encourages museums to develop their capacity to advocate for themselves and their potential as contributors to the sustainable transition of Europe. Museums across Europe are eager to do their part to support a sustainable future and adapt to the present and coming challenges of climate change, but they require adequate support from funders and policymakers. Their potential to contribute is not limited to efficient energy and material consumption: museums offer trusted spaces for public dialogue, continued education and social inclusion.

Considering the present needs of the sector, NEMO presents summaries of relevant national sustainability and climate policies, highlighting those that offer implications for museums and the wider cultural heritage sector. Our report includes a step-by-step guide to evaluate your institution's capacities, communicate with policymakers, and advocate the necessary support for your museum's sustainable transition

While many museum professionals might not consider advocacy an element of their work, there are pressing challenges that individual institutions alone cannot effectively address. Where policies do exist and address cultural professionals, we should align institutional actions and demonstrate the capacity of museums to contribute to the sustainable transition goals present, and where they don't, we must advocate our potential and garner support for the successful sustainable transition of our museums and the communities we serve.

NEMO encourages museums and museum professionals to use this report as a starting point to research and develop a strategic plan and campaign in their institution and to take inspiration from the examples of local policies and museum actions already in place.

About NEMO

Since 1992, NEMO has been dedicated to connecting European museums and their national organisations to ensure their place in the cultural development of Europe, promoting European policies that help museums fulfil their role as keepers of cultural heritage, and supporting European museums through networking and cooperation opportunities. NEMO reaches these goals through four elements of strategic focus, wherein the network highlights the educational, social, economic, and collection value of museums. Additionally, NEMO supports its members and the wider sector within the transversal themes of Professional Development and Digital Transformation. Finally, as of 2023, NEMO has implemented a third transversal theme, applicable to each element of the network's strategic focus: Sustainable Transition.

The new transversal theme of Sustainable Transition acknowledges that the consequences of climate change have a dramatic ecological and social impact on every sector and suggests that museums have not been adequately supported by governing and funding institutions to make a successful sustainable transition, nor has their potential to contribute to that transition been fully acknowledged. NEMO therefore advocates the potential of museums as key actors impacting the sustainable transition.

Sustainability and climate policies in the Member States of the European Union

Presented in the following are the summaries of relevant national sustainability and climate policies of the EU Member States, highlighting those that offer implications for cultural heritage, and museums in particular. NEMO encourages the museum community to use these summaries as a starting point to develop a strategic plan and campaign in their institution: aligning museum actions with national policies or taking action in their absence, while advocating and demonstrating the capacity of museums to contribute to the sustainable transformation of Europe.

Austria

Austria is a federal, representative democratic republic composed of nine states (Länder). The Austrian Parliament is the country's highest legislative authority, consisting of two chambers – National Council (Nationalrat) and Federal Council (Bundesrat), while the lead executive authority is the Federal Government. In addition, each state has its own parliament and government, headed by the governor. In terms of culture, the majority of competencies are assigned to the federal states while national cultural policy is the responsibility of the [Federal Ministry for Arts, Culture, the Civil Service and Sport](#). National cultural policy follows the strategic outline of the government's programme. The [current policy](#) covers the period from 2020 to 2024, and one of its main features is fostering sustainable development in and via the cultural sector. Responsibilities of the federal states in the scope of culture include drafting strategies or guiding principles, promoting cultural activities, providing support and funding, contemporary art promotion, etc. In the context of environment and climate policy, the lead authority at the federal level is the [Federal Ministry for Climate Action, Environment, Energy, Mobility, Innovation, and Technology](#), while the [Federal Environment Agency](#)

is accountable for overseeing policy implementation, and the regional authorities are in charge of the protection of the environment and landscape (each state has its own law on nature conservation), establishing and maintaining the national parks, issuing waste management plans at regional level, etc. When it comes to legislation in the field of culture, in the context of research, the most relevant policy papers include the [Federal Museums Act](#), which outlines the overall framework for the functioning of federal museum institutions (original version 2002, latest amendment 2022) and the [Monument Protection Act](#) (2013). Neither of these documents perceives the climate change implications in their field or proposes any adaptation measures.

Nonetheless, the subject of green transformation and ecological sustainability is highly positioned on the Federal Ministry for the Arts, Culture, the Civil Service, and Sport's agenda through the [Climate-Ready Culture Businesses](#) programme implemented by the ministry in cooperation with the [Climate and Energy Fund](#). The programme offers incentives for the ecological transformation of the cultural sector, which can benefit museums by supporting the following interventions: climate-friendly heating, ventilation and cooling,

the utilisation of renewable energy sources, energy-efficient indoor and outdoor lighting systems, thermal insulation of buildings, and measures to reduce the use of natural resources and cut CO2 emissions¹.

Regarding climate policies, Austria has drafted and adopted the [Long-Term Strategy 2050](#) (2020), the [Integrated National Energy and Climate Plan](#) (2019), the [Strategy for Adaptation to Climate Change](#) (2017), and the [Climate Protection Act](#) (2011, latest amendment 2017). The Long-Term Strategy 2050 recognises the vital role of the humanities and the social and cultural sciences in laying the foundation for solutions to major social challenges such as advancing climate change, and foresees the development of framework conditions that would increase the participation of these disciplines. The Strategy for Adaptation to Climate Change outlines the importance of further research on climate change effects on communities, everyday life and culture, but does not predict any further measures or specify the role of museums in this context.

Belgium

Belgium is a federal state composed of three communities (Flemish Community, French Community, and German-speaking Community) and three regions (Flemish Region, Walloon Region, and Brussels-Capital Region). In terms of federal authorities, the vital actors are the Federal Parliament and the Federal Government. The government oversees the following areas as a public interest: managing the public finances, the judicial

system, foreign affairs, as well as substantial parts of public health and home affairs (such as social security, public debt, monetary policy, nuclear energy, the federal scientific and cultural institutions, etc.). Furthermore, the Federal Government is responsible for the obligations of Belgium and its federalised institutions towards the EU and NATO². The communities are based on the concept of language and are autonomous in matters related to the 'individual', such as culture, education, and the use of language, while the regions are responsible for matters related to the territory: spatial planning, management of roads, etc. Some competences, for example, the environment or energy, are shared (state – regions). The Federal Government does not conduct cultural policy or directly interfere in cultural matters, following the principle of subsidiarity³, while in the field of environment and climate policy, the Federal Government coordinates the country's international (climate) policy, product policy, and adaptation plans through the [Ministry of Climate, the Environment, Sustainable Development, and Green Deal](#), and several bodies that have been set up to foster cooperation and consultation between the various levels of authority, with the primary goal of achieving Belgium's greenhouse gas emission reduction targets concerning the Paris Agreement and European commitments. In this context, the most relevant policy papers include:

[Towards a Climate-Resilient Society by 2050 – federal adaptation measures 2023-2026](#) (adopted in March 2023): a package of 28 federal adaptation measures divided into eight policy areas, in line with the Paris Agreement and the latest EU legislation⁴. The current version of the document does not include specific measures for the cultural

In Belgium, cultural associations can apply for subsidies for a whole range of energy saving measures

sector in general or museum and heritage organisations distinctively.

[National Recovery and Resilience Plan](#) (adopted in 2021, to be implemented by 2026): ensures actions and projects towards achieving a green and digital transition in the context of the EU post-COVID Recovery and Resilience Facility.⁵ It foresees various interventions and measures regarding the cultural sector with a particular emphasis on energy efficiency measures for public facilities, including museums.

[National Energy and Climate Plan 2021-2030](#)⁶ (submitted to the European Commission at the end of 2019): a 10-year integrated document mandated by the EU to each of its member states in order for the EU to meet its overall greenhouse gas emissions targets. The document focuses on five areas of intervention: decarbonisation; energy efficiency; energy security; the internal energy market; and the research, innovation, and competitiveness dimension. In terms of cultural organisations, the plan anticipates several measures:

- At the level of the federal state, culture, along with teaching and education, is recognised as an important actor in awareness-raising on climate change and environmental issues;

- In the Flemish Region, as a part of a new set of financial instruments concerning the decarbonisation dimension, a discrete budget is to be allocated to make cultural buildings more energy efficient and use renewable energy sources (EUR 5 million per year), and loans for installing solar panels will be granted EUR 5 million per year;
- Under the section on energy efficiency, the plan lists current policy in the Flemish Region highlighting the Flemish Government Decree under which investments in cultural facilities are used as a priority for energy-saving measures and emphasising the energy loan for culture- and youth-related facilities that the government launched in 2018. For example, cultural associations can apply for subsidies for a whole range of energy saving measures: conduct of an energy audit, set-up of smart energy metering, general relighting, roof insulation, external wall insulation, floor insulation, replacement of a heating oil system with a gas-fired system, installation of a heat pump, installation of a solar water heater, etc. When subsidies are approved, the applicant undertakes to annually monitor its energy consumption for a period of 10 years;

- In the Brussels-Capital Region, under the energy efficiency measures, incentives for the renovation of buildings are foreseen, including heritage property, and under the same dimension, the Energy Performance of Buildings (EPB) requirement level for new non-residential buildings, including cultural objects, was introduced in 2021;
- At the level of the Government of the Wallonia-Brussels Federation, energy renovation of cultural buildings continues and 25 projects have been approved by the government as of July 2023⁷. On the initiative of the Minister for Culture, Bénédicte Linard, the Government of the Wallonia-Brussels Federation has launched a vast project to renovate the energy efficiency of cultural buildings, to a total value of EUR 53.7 million. This work is continuing, and a list of 25 renovation projects has been firmly approved by the government. The infrastructures concerned were selected following a call for projects aimed at local authorities and cultural operators as part of the European Recovery and Resilience Plan. The projects selected concern only venues used primarily for cultural activities (theatres, libraries, cultural centres, museums, theatres) not belonging to the Wallonia-Brussels Federation and located throughout Wallonia and Brussels. The contribution from the Wallonia-Brussels Federation will cover 70% of the cost of energy-saving work and 40% of the cost of other work and expenses. The amounts have been increased by 10% to take account of rising construction prices. “Making our cultural buildings more energy-efficient is an absolute priority to help cultural operators reduce their energy bills directly and

to welcome the public in good conditions. This will also make the cultural sector more resilient in the long term and contribute to the necessary ecological transition,” emphasises the Culture Minister, Bénédicte Linard.

The [Long-Term Low-Emission Development Strategy](#)⁸ (by 2050, adopted in 2020): Under the Paris Agreement, all parties are encouraged to formulate and communicate their long-term low greenhouse gas emission development strategies. The Belgian strategy outlines measures to achieve climate neutrality by 2050 across sectors, adaptation actions, cross-cutting goals of ensuring a socially just transition, etc., but does not refer specifically to the cultural sector or museums or foresee certain measures in this context.⁹

[National Climate Change Adaptation Strategy](#) (adopted in 2010): The strategy provides an overall climate framework and information on the impacts of climate change in Belgium, proposing adaptation actions on a sectoral level without taking culture or museum organisations into account.

Bulgaria

Bulgaria is a parliamentary democracy and unitary state with three levels of governance: central, districts (28), and municipalities (265). Bulgaria’s highest legislative authority, the Parliament, is unicameral, comprising the National Assembly (Narodno Sabranie), while the Council of Ministers is the lead executive body. At national level, responsibility for the formulation and implementation of cultural policies is shared between the legislature

(the National Assembly) and the executive (the Council of Ministers). The supreme central executive body with the power to initiate legislation in the sphere of culture and formulate the main principles of national cultural policy is the [Ministry of Culture](#), whose representatives are advised by several expert councils representing various art fields. With regard to museum organisations, a specialised directorate of Cultural Heritage, Museums and Fine Arts has been established within the ministry with a key role in formulating and implementing policies in this area. Regional and local authorities also possess diverse competencies in the field of culture and, along with these, there are interdepartmental commissions that coordinate the activities of central government in which culture plays a part. When it comes to environmental and climate policy, the lead authority is the [Ministry of Environment and Water](#), which develops and implements state environmental policy (water, waste, climate, air, nature, soils, noise, radiation), formulates national plans, strategies, and prevention activities, while the [Ministry of Energy](#) is responsible

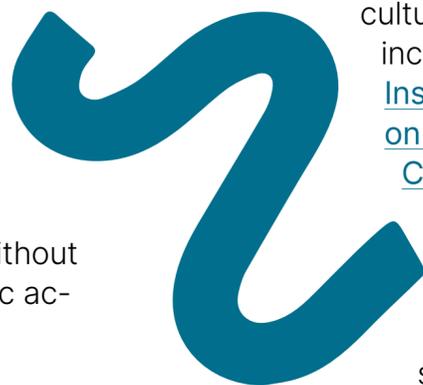
for the energy sector, including renewable energy and energy-efficiency goals and policies.

In terms of laws and policy papers on culture, in the context of research, the most relevant include the [Cultural Heritage Act](#) (2009), which defines the main scope of cultural heritage and the areas of its preservation and protection, and the [Act on Protection and Development of Culture](#) (latest amendment 2013) defining the main principles and priorities of the national cultural policy, cultural organisations and bodies responsible for the protection of culture. The Cultural Heritage Act recognises the threats of climate change on immovable cultural heritage by identifying the classification of cultural assets at risk that are potentially threatened by damage or destruction because of the great danger of flooding or progressive changes in geological, climate and other natural factors. It also places attention on the creation of a plan for the conservation and management of heritage sites, based on the subject of sustainable development of immovable cultural value.

The Bulgarian Cultural Heritage Act recognises the threats of climate change on immovable cultural heritage by classifying cultural assets at risk

When it comes to climate policy, Bulgaria has adopted: the [Recovery and Resilience Plan](#) (2021), the [National Climate and Energy Plan](#) (2019), the [National Climate Change Adaptation Strategy and Action Plan](#) (2019), and the [Climate Change Mitigation Act](#) (2014, latest amendment 2021). The Recovery and Resilience Plan holds measures for the cultural sector, though none related to the sustainable transformation, while the National Climate Change Adaptation Strategy and Action Plan recognises the possible threats imposed by extreme weather as a consequence of climate change in the context of the possible negative effects on tourism, and in this regard proposes strategic measures for the development of cultural tourism that would encompass the renovation of important cultural assets in urban areas.

Currently in Bulgaria, the non-governmental community has initiated a debate on the Climate Change Mitigation Act and the urgency for either its full revision or a significant modification that would lead to the inclusion of measures such as the package [Fit for 55](#)¹⁰, better maintenance of the international obligations towards [UNFCCC](#)¹¹, science-based and participatory climate management, etc. In terms of museums and culture in general, the current version of the Law in Article 4 briefly states that the state policy on limiting climate change is integrated into the relevant sectoral and integrated policies in, among others, the field of cultural heritage protection, without further elaboration or outlining specific actions.



Croatia

Croatia is a unitary state with three levels of governance: central, regional (20 counties – županija), and local (428 municipalities – općina), and cities (127 - grad). At the central level, the Parliament (Sabor) is the lead legislative authority and the Government is the executive authority. In terms of cultural policy, the [Ministry of Culture and Media](#) is the body responsible for drafting policy objectives and guidelines, establishing institutions and other legal entities in culture, provision of funds, and resources for the development of cultural activities, including museums, galleries, libraries, archives, theatres, and publications. Regional and local authorities also possess a variety of responsibilities in terms of culture, entailing the establishment and funding of museums and the protection of cultural heritage. The responsible authority for environment and climate policy is the Ministry of Environmental Protection and Energy, which is accountable for legislation implementation and monitoring, adoption of EU regulations in the environment sector, development of the energy system, etc.

When it comes to legislation in the field of culture, the most relevant policy papers include the [Law on Managing Cultural Institutions](#), [Museums Law](#), and the [Law on the Protection and Preservation of Cultural Assets](#). The Law on the Protection and Preservation of Cultural Assets recognises the possible climate change impacts on natural and cultural heritage by placing responsibility on the competent institutions to ensure the conditions of heritage

safeguarding in exceptional circumstances, including ecological disasters. The Law also foresees the creation of the Cultural Heritage Council, an interdisciplinary body responsible for monitoring and improving the state of cultural assets composed of experts from the fields of museology, nature, and environmental protection. The other mentioned laws in the cultural field do not refer to climate change or propose adaptation actions, but it is important to emphasise that the ministry is currently working on the creation of the National Plan for the Development of Culture and Media covering a four-year period (2023-2027), which should align with the overall [National Development Strategy 2030](#) and include certain measures in this context.

In terms of climate policies, Croatia has designed and adopted the [National Recovery and Resilience Plan](#) (2021), which foresees a budget allocation for the energy renovation of buildings with cultural value, as well as other public facilities. The resources for this action will be granted through open calls by various ministries, including the [Ministry of Culture and Media](#)¹²; the [National Energy and Climate Plan](#) (2019), which envisions the energy renovation programme for heritage buildings as a financial measure to increase the energy efficiency of these facilities; and the [Law on Climate Change and the Protection of the Ozone Layer](#) (2019), which determines the overall competencies and responsibility for climate change mitigation, adaptation and protection of the ozone layer, monitoring and reporting of greenhouse gas emissions, etc. This Law does not refer to museums or the cultural sector in general.

Republic of Cyprus

Cyprus is a unitary republic whose territory is composed of districts, municipalities, and communities. The highest legislative authority is the House of Representatives, which is a single-chamber Parliament, while the Government has the lead executive role. In the field of culture, the primary authority is the [Deputy Ministry of Culture](#), which operates as a specialised unit within the Ministry of Education, Culture, Sports and Youth and is responsible for formulating and implementing the government's cultural policy and promoting Cyprus' contemporary culture abroad. In this context, district authorities are accountable for the administration and coordination of central government policies, and local authorities' (municipalities and districts) actions include funding and promoting all aspects of culture.

When it comes to environmental protection and the battle against climate change, the ministries of [Agriculture, Rural Development and Environment](#), and [Energy, Trade and Industry](#) possess a leading role in designing policies and programmes. The subject of sustainable transformation in the cultural sector (and hence museums) is not yet on the authority's agenda. In terms of policy acts and papers in the field of culture, there is no framework, general law, nor law on museums. Several cultural heritage protection laws have been adopted, mostly regulating the status of antiques and the return and export of cultural goods and objects. When it comes to climate-related policies, Cyprus has adopted the [Long-Term Low Greenhouse Gas Emission Development Strategy](#) (2022), [Recovery and Resilience Plan](#) (2021), and [Integrated National Energy and Climate Plan](#) (2020), but none

of these documents place attention on culture and museums nor predict any related adaptation measures.

Czech Republic

The Czech Republic (Czechia) is a parliamentary democracy and a unitary state that comprises three levels of governance: central, regional (14 regions – kraje), and municipal (6258 municipalities – obce). Czechia's Parliament is bicameral, composed of the upper house; the Senate, and the lower house; the Chamber of Deputies, while the lead executive authority is the Government, which is, through the [Ministry of Culture](#), responsible for overall national policy in the cultural sector, national libraries, and museums, cultural monuments, etc. Regional and local authorities are in this context accountable for supporting and funding projects in their territories and the establishment of cultural institutions, including museums and galleries. The central authority in terms of environment and climate policy is the Ministry of the Environment, accountable for the protection and promotion of sustainable use of resources, climate protection and improvement of ambient air quality, protection of nature and landscape, and overall policy creation, implementation, and monitoring in this area.

The most relevant policy papers and acts in the field of culture encompass the [Act on State Landmark Conservation](#) (original version 1987, latest amendment 2013), the [Act on the Protection of Museum-type Collections](#) (2000), and the [National Cultural Policy 2021-2025](#), which represents

The Czech National Policy perceives the climate crisis as a threat and sets the effective care and protection of cultural heritage as one of the main priorities

a new strategic framework for the role of culture and creativity in the Czech Republic. While none of these laws mention climate change implications nor propose relevant measures, the National Cultural Policy perceives climate crisis as a threat in its SWOT (Strengths, Weaknesses, Opportunities, Threats) analysis and sets the effective care and protection of cultural heritage in this context as one of the main priorities. In this regard, close cooperation with the Ministry of the Environment is planned.

When it comes to climate policies, the Czech Republic has adopted the following papers: the [National Recovery and Resilience Plan](#) (2021), the [National Energy Climate Plan](#) (2019), the [Climate Protection Policy](#) (2017), and the [Adaptation Strategy to Climate Change in the Czech Republic](#) (2015). Of the afore-mentioned documents, the Recovery and Resilience Plan foresees measures

and budget allocation for the cultural sector, but none in the context of sustainable transformation. The Adaptation Strategy to Climate Change, in a section on consumer measures, recognises natural and cultural heritage as a driver of gentle¹³ tourism, while the other papers do not refer to museums or the cultural sector in any way.

Denmark

Denmark is a constitutional monarchy, a parliamentary democracy, and a unitary state organised on a decentralised basis. It has three levels of governance: central, regional (regioner – 5), and municipal (kommuner – 98). In addition, Danish territory includes two distinctive autonomous regions, the Faroe Islands and Greenland, which are not members of the EU. The Folketing, or Parliament, of Denmark is the unicameral national legislature, and executive power is exercised by the Government. Within Parliament, a particular Committee of Culture (Folketingets Kulturudvalg) deals with cultural policy issues, while the overall coordinating executive power for policy initiation, planning, and implementation in this area lies with the [Ministry of Culture](#). The competencies of the ministry include, among others, creative arts, libraries, archives, museums, protection and preservation of buildings and monuments, higher education and training, and international cultural cooperation. The actual policy implementation has been delegated to a complex framework of cultural agencies, councils, committees and institutions with different tasks, competencies and degrees of autonomy. With regard to cultural heritage and museum organisations, the vital actor is the [Agency for Culture and](#)

[Palaces](#), whose scope of responsibilities includes advising the ministry in setting and achieving the government's cultural policy goals, and managing and maintaining state-owned palaces and castles, gardens and cultural properties¹⁴. In terms of climate policy, the lead authority is the [Ministry of Climate, Energy, and Utilities](#), responsible for national and international efforts to prevent climate change¹⁵. The subject of climate change adaptation and mitigation doesn't seem to be on the cultural authorities' agenda.

When it comes to regulations in the field, the most relevant policy paper is the comprehensive [Act on Museums](#) (latest version 2006) whose purpose is to promote the activities and cooperation of museums, with a view to safeguarding Denmark's cultural and natural heritage and ensuring access to and knowledge about it. This applies to museums owned by the state under the Ministry of Culture and to museums receiving state subsidies pursuant to the Act. The Act does not recognise climate change as a factor influencing this area nor foresee any adaptation measures.

In terms of climate policy, Denmark has adopted the [Recovery and Resilience Plan](#) (2021), [Climate Programme 2020 - Denmark's Mid-Century, Long-Term Low Greenhouse Gas Emission Development Strategy](#) (2020), [The Climate Act](#) (2020), and the [National Energy and Climate Plan](#) (2019), but none of the papers refer to the cultural sector or anticipate any measures toward its green transformation that could contribute to the state's ambitious goal of reducing its greenhouse gas emissions by 70% by 2030.

Estonia

Estonia is a democratic unitary republic with a single-tier local government system comprising 79 municipalities (64 rural and 15 urban). It has a single-chamber Parliament (Riigikogu), while the executive power is vested in the Government. Within the Parliament, a Cultural Committee is established, which examines the laws and state budget, and nominates the candidates for the boards of public institutions in this area. The [Ministry of Culture](#), on the other hand, is accountable for policy drafting and implementation in the fields of culture, sport, and heritage conservation. Under the Ministry, the [National Heritage Board](#) is set to ensure heritage valorisation and preservation by carrying out surveillance, counselling monument owners, supporting renovation, and maintaining the national registry of cultural monuments. In terms of culture, local authorities possess a few competencies as well, such as managing local museums, libraries, and community centres, and heritage preservation (in cooperation with the National Heritage Board). In the sphere of climate and environment, the lead authority is the [Ministry of Climate](#), responsible for issuing policies regarding climate, mineral resources, environmental awareness, fisheries, and hunting. In 2013 the [Estonian Environment Agency](#) was created as a state authority administered by the Ministry to fulfil the national environmental monitoring programme, participate in the preparation of national and international reports, evaluate environmental status, and ensure vital services in the field.

In terms of legislation on culture, in the context of research, the most substantial papers include the [Museums Act](#) (2013) and [Heritage Conserva-](#)

[tion Act](#) (2019). While the Museums Act doesn't recognise climate change implications nor forecast any sectoral adaptation measures, the Heritage Conservation Act acknowledges the environmental protection criteria in provisions related to the principles of heritage conservation. The act proposes the environmental impact assessment for conservation activities and provisions on suspension of works for the protection of archaeological heritage in case the activities in this context affect the ground, water body or sedimentation thereof. In addition to these, the Ministry of Culture has adopted the [Culture Development Plan 2021-2030](#) which establishes the strategic goals in the field of culture and continues the strategy set out in the Fundamentals of Cultural Policy until 2020. The plan is in line with five strategic goals of the country's long-term strategy, [Estonia 2035](#), and is seen as a tool to help implement the goals of Sustainable Estonia 21, contributing to the UN Sustainable Development Goals (SDGs). As of the last update in June 2023, the benchmark for the environmental impact of Estonian cultural organisations is still being developed and it can be presumed that this will be followed by appropriate measures.

In terms of climate policies, Estonia has drafted and adopted the [Recovery and Resilience Plan](#) (2021), the [National Energy Climate Plan](#) (2019, updated in 2023), the [Climate Change Adaptation Development Plan 2030](#) (2017), and the [National Environmental Strategy until 2030](#) (2007). The Recovery and Resilience Plan contains measures related to the creative industries, but none refer to greening the cultural sector in general or museums per se. The National Energy Climate Plan recognises that coordinated cultural, social, environmental and economic development is a prereq-

uisite for achieving the SDGs, but doesn't propose any specific measures for cultural organisations. The Climate Change Adaptation Plan 2030, which serves as the framework for actions directed toward reducing Estonia's vulnerability in relation to climate change, acknowledges the high danger heritage sites could face due to increased flooding occurring as a consequence of climate change, and recalls the Water Act that proposes obligations to competent authorities for preparation of risk assessments and management plans that encounter cultural heritage, inter alia. The National Environmental Strategy until 2030 focuses on natural heritage and its role in shaping the cultural values and habits of citizens, but doesn't foresee any adaptation or conservation measures that could be undertaken by museum organisations.

Finland

Finland is a parliamentary republic and a unitary state whose territory comprises 19 provinces (including the autonomous region of Åland Islands) and 310 municipalities. It has three levels of governance: central, regional (regional councils), and local (local governments). The legislature, Parliament (Eduskunta), is unicameral, and the Government exercises the lead executive. In terms of culture, sectoral activities are supported at both central and local level. The [Ministry of Education and Culture](#) is the lead authority responsible for legislation, central government financing and strategic steering, and providing prerequisites for artistic and cultural activities. Within the ministry, the [Heritage Agency](#) is established with a role to protect environments with cultural history val-

ue, archaeological cultural heritage and architectural heritage, and other cultural property. It also collects and presents a cultural-historical national collection, studies material cultural heritage, and both supports and develops the museum field nationally. The agency is a member of international [Climate Heritage Network](#), which seeks solutions for the tensions between the protection of cultural heritage and climate change mitigation and adaptation. In terms of environmental and climate policy, the primary authority is the [Ministry of Environment](#), which sets targets for environmental protection, defines environmental policies and laws, drafts strategic plans, coordinates international cooperation, and so on. Another vital actor in this area is the [Finnish Environment Institute \(Syke\)](#) which produces and compiles environmental data, develops new ways to protect water, the air and the soil, improves waste management and the supervision of chemicals, and provides experts for participation in the drafting of environmental legislation.

In 2017 the Ministry of Education and Culture adopted the [Strategy for Cultural Policy 2025](#), which represents the leading strategic framework for cultural development, describing the government's duties in cultural policy, evaluating the current state of arts and culture and changes in the field, and setting strategic targets for the defined period. The target areas set by the strategy include the enhancement of conditions for artistic and creative work and production, inclusion and

participation in arts and culture, cultural basis, and continuity. The strategy recognises that over the next period, “there will be more demands for ecologically, economically, socially, and culturally sustainable development” and that these “can and should be supported with instruments available to the cultural sector”. Another vital strategic document in the field is the [Sustainable Development Policy of the Ministry of Education and Culture and its Administrative Branch](#), issued in 2020. Even though this document emphasises the sectoral role in promoting goals related to social sustainability, it does point out that the goals of ecological, economic, social and cultural sustainability as a whole support and complement one another, and measures taken in the administrative branch can promote cultural change, which is seen as a requirement for a transition toward comprehensive sustainable development. In the field of cultural heritage, in March 2023, the Government issued a resolution for the [Cultural Heritage Strategy](#), which is the first strategic document in the field that comprehensively examines all aspects of cultural

heritage with the aim that the cultural heritage is highly valued and that protecting and fostering it is a collective responsibility shared by everyone. The strategy places great attention on climate change mitigation and adaptation measures, and heritage safeguarding in this context. It acknowledges that: “Climate change has a concrete impact on the preservation of cultural heritage and the cultural environment. Changes in the conditions and the increase in extreme weather phenomena affect the built cultural environment, archaeological sites, and landscapes and may threaten their preservation. An effort must be made to prepare for changes through anticipation and by developing the management of the sites and monitoring their condition.” Furthermore, it outlines the set of targets in this regard: cultural heritage knowledge and skills contribute to speeding up the transition towards a more sustainable lifestyle; cultural environments are used and managed in a sustainable manner; cultural heritage sector actors are paving the way to low-carbon and sustainable activities; cultural heritage will be included in plans for cli-

mate change mitigation and adaptation; when climate change policies are planned, the effects are assessed from the point of view of cultural heritage; and so on. It is important to emphasise that the Cultural Heritage Strategy is a continuation of the [Cultural Environment Strategy 2014-2020](#), which was the first Finnish national strategy concerning cultural environment and landscape. This strategy outlined the role the cultural environment possesses in climate change mitigation and adaptation, and was completed under the leadership of the Ministry of the Environment. In terms of the legal basis for heritage protection, the vital provisions for protecting cultural heritage sites and the environment are given by the [Land Use and Building Act](#) (1999, with 2003 amendment), but without specific reference to museum organisations.

In Finland, the functioning of museums is regulated by the [Museums Act](#) (previously the Museums Decree 1992; current Act version 2019, [updated with new provisions on regional museums](#)), which is aimed at maintaining and strengthening individuals’ and communities’ understanding of and participation in culture, history and the environment, promoting the preservation of cultural and natural heritage and art for future generations, and promoting communality, continuity and cultural diversity, as well as education and culture, wellbeing, equality and democracy. However, the Act does not include measures for climate change mitigation or adaptation. Another substantial regulation concerning museums is the [Museum Policy Programme 2030](#), which outlines that museums have an important part to play in the creation of a culturally, socially, and ecologically sustainable society, and in promoting wellbeing. It recognises that “climate change, the depletion of natural

resources, and globalisation have numerous, interconnected and, over the long term, dramatic impacts on the natural environment, people’s living conditions, the economy, and society at large. The greatest challenge of our time is finding the means and creating the structures for ecologically, culturally, and economically sustainable growth in welfare. Sustainable thinking is also having an impact on the museum sector. Sustainability must become a focus area in the maintenance of properties and collections and the production of content, as well as in the objectives set for museums’ operations”. It proposes a set of measures for greening the institutions and suggests a comprehensive reform of the Museums Act that shall take into consideration, inter alia, “cultural sustainability as part of sustainable development as a whole wellbeing”.

When it comes to environmental and climate policy, Finland has adopted the [Climate Act](#) (2022), the [Recovery and Resilience Plan](#) (2021), the [Long-Term Low Greenhouse Gas Emission Development Strategy](#) (2020), and the [National Energy and Climate Plan](#) (2019). In the Recovery and Resilience Plan, in a section related to green transition, Finland’s government set an ambitious target of achieving carbon neutrality by 2035 and highlighted the importance of substantial reforms and investments required to put the country on track towards the achievement of this goal. However, the cultural sector’s role is not recognised in this context, and the plan does not foresee any measures for cultural organisations, hence museums. None of the other noted documents mention culture or museum organisations and heritage assets in any way.

The Finnish Cultural Heritage Strategy recognises that climate change has a concrete impact on the preservation of cultural heritage and the cultural environment

France

France is a parliamentary democracy and a unitary state organised on a decentralised basis, comprising three sub-levels of governance: regions (régions – 18; 13 metropolitan and five overseas), departments (départements – 101), and municipalities (communes – 35,358). The French Parliament is the bicameral legislature composed of the Senate (Sénat) and the National Assembly (Assemblée Nationale), while the Government exercises the central executive power. Within the Government, the [Ministry of Culture](#) is responsible for the preparation and implementation of national policies, defining the overall priorities and guidelines, and budget allocation. The organisational chart of the ministry is made up of a central administration and three types of decentralised establishments and services to carry out its action: regional directorates of cultural affairs (DRAC), public establishments (EP), and services with national competence (SCN). In terms of central administration, the vital actor operating in the field of museum organisations and cultural heritage is the [Directorate-General for Heritage and Architecture](#), as one of the four main entities of the Ministry of Culture, together with the Secretariat-General, the Directorate-General for Artistic Creation and the Directorate-General for Media and Cultural Industries. Its scope of responsibilities includes heritage protection and preservation, regulatory and technical oversight in the field, improving knowledge of heritage, architectural design and quality, and coordination and management of a decentralised network of operators in the heritage field. The directorate is composed of seven departments, including the [French Museums Service](#), which is accountable for defining, coordinating, and eval-

uating state policy in terms of heritage and museum collections, organising the cooperation of public authorities in the field, contributing to the enrichment of public collections, etc. Regional authorities - DRAC - are responsible for conducting the state's cultural policy in the regions and their departments, particularly in the fields of knowledge, protection, conservation and enhancement of heritage, the promotion of architecture, support for artistic creation and dissemination in all its components, and so on. In the [Decree](#) regulating the mission of regional authorities, it is emphasised that they participate in spatial planning, sustainable development, and social cohesion policies.

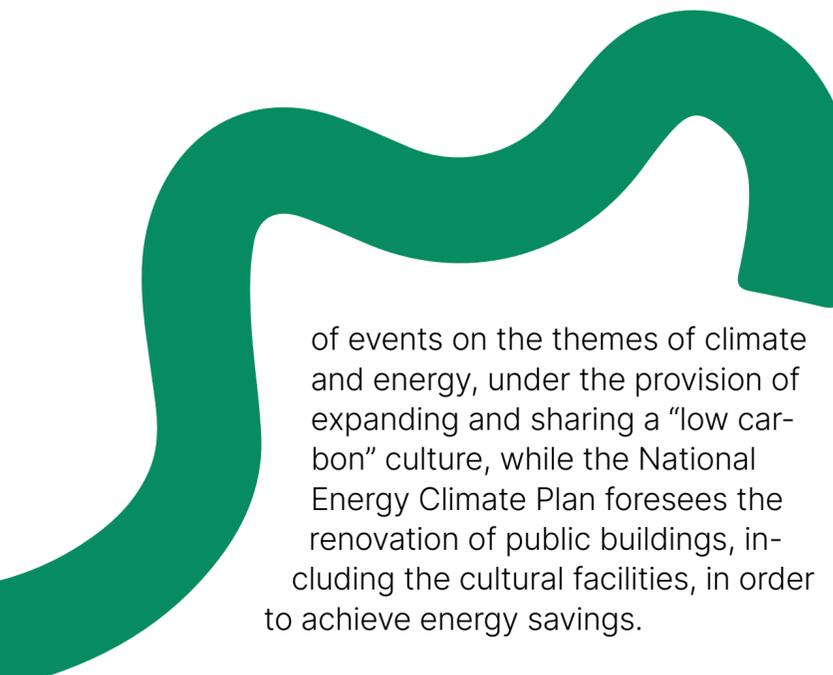
In the field of environmental protection and climate policy, the lead executive authorities at the central level are the [Ministry of Ecological Transition and Territorial Cohesion](#) and the [Ministry of Energy Transition](#), which are responsible for developing and implementing government policy in all areas related to ecology, energy transition and the protection of biodiversity. They are advised by the [General Inspectorate for the Environment and Sustainable Development \(IGEDD\)](#) which contributes to the forecasting, design, monitoring of the implementation, and evaluation of environmental and climate policies, at all geographical scales. When it comes to policy papers and laws in the field of culture, the [Heritage Code](#) (Code du Patrimoine) represents the most relevant, comprehensive Act, which provides a broad definition of cultural heritage, covering all public and private buildings and movable property, and presents a framework for museums operations, with an emphasis on defining the statute [Musée de France](#). The code contains several provisions referring to the environmental protection and enforcement

of the [Environment Code](#) in this area. It defines the national domains, as real estate complexes presenting an exceptional link with the history of the nation, and prescribes that these assets should be conserved and restored by the state in respect of their historical, artistic, landscape, and ecological character. Furthermore, it proposes taking into account the national objectives for the development of the use of renewable energy and energy renovation when conducting work on heritage sites. In addition, the Ministry of Culture recognises the subject of ecological transition and sustainability through various initiatives. The [Cycle of Higher Studies of Culture](#), placed with the secretary general of the ministry, meets each year to build together a strategic and shared vision on the major issues related to cultural policies in the face of contemporary changes. At the [20-21 session](#) of the cycle, the central focus was on the issue of ecological transition in the cultural sector, resulting in a number of reports published on the subject. The cycle also met in February 2023 to discuss heritage and archival preservation issues under the programme named [Combining Disjunctions with the Ecological Emergency](#). Another initiative in this direction undertaken by the ministry encompasses the establishment of an aid category – [sustainable development](#) – under which various types of projects are being granted and promoted.

In terms of climate policies, France has drafted and adopted the [Strategy for Energy and Climate](#) (2023), [Law on the Fight on Climate Change and Resilience](#) (2021), [Recovery and Resilience Plan](#) (2021), [National Low Carbon Strategy of France](#) (2021), and the [National Energy and Climate Plan](#) (2020). The Strategy for Energy and Climate aims

The French National Energy Climate Plan foresees the renovation of public buildings, including the cultural facilities, in order to achieve energy savings

at achieving carbon neutrality by 2050 through sectoral policies to enhance energy efficiency, reduction of final energy use, and a reinforcement of production from renewable sources. In terms of measures related to museums and the heritage sector, it foresees allowance of better integration of solar energy into French architectural heritage and the renovation of state heritage buildings that do not meet thermal regulations. The Recovery and Resilience Plan proposes budget allocation for various actions in the field of culture, including heritage revival, restoration of the national monuments, and renovation of other heritage facilities (museums, archives, archaeology), but without identifying specific energy efficiency requirements. The National Low Carbon Strategy of France perceives the role of museums in awareness-raising by assigning them to the organisation



of events on the themes of climate and energy, under the provision of expanding and sharing a “low carbon” culture, while the National Energy Climate Plan foresees the renovation of public buildings, including the cultural facilities, in order to achieve energy savings.

Germany

Germany is a parliamentary democracy and a federal republic composed of 16 states (Länder). Federal laws are brought in bicameral cooperation between the Bundestag - the Federal Parliament, and the Bundesrat - a legislative body composed of representatives of the Länder governments, while the highest executive authority at national level is the Federal Government (Bundesregierung). The division of jurisdictions among the federal government and states is regulated by the Basic Law for the Federal Republic of Germany, which assigns the majority of competencies to the Länder, and local authorities possess diverse responsibilities in various fields as well. In that regard, Länder are the most substantial public actors in the cultural sphere, while the federal state commitments in the field of cultural policy encompass the external cultural policy and representation of the country in the EU through several bod-

ies and roles assigned at federal level: the Federal Government Commission for Culture and the Media (BKM), Committee on Culture and the Media, and the Minister of State for International Cultural Policy within the Federal Foreign Office. In terms of environmental and climate policy, the responsibilities are shared between the Federal Government and Länder, while at federal level the Federal Ministry for Economic Affairs and Climate Action and the Federal Ministry for the Environment, Nature Conservation, Nuclear Safety, and Consumer Protection operate in this area. At federal level, in terms of cultural policy papers, there is no umbrella law or legislation in the field of museums and cultural heritage (except the Act on the Protection of German Cultural Heritage against Removal Abroad and other general laws that refer to the cultural sphere).

Even though the Federal Government has limited responsibilities in terms of cultural policy, several governmental programmes and actions have been launched aiming to initiate a dialogue on climate change adaptation measures among the cultural actors that could benefit museums. In 2017, the [German Council for Sustainable Development](#), which is the government’s advisory body on issues of sustainability policy, launched the Sustainability Fund, a programme to promote transformative projects on sustainability culture that supported various projects until its completion at the end of 2021. In 2020, the [Action Network Sustainability in Culture and Media](#) was launched, funded by the Federal Government Commission for Culture and the Media (BKM), as the central cross-sectoral contact point for the topic of “operational ecology” in culture and media. The network currently consists of about 50 partners (municipalities, cultural

institutions, and associations, research institutions, energy agencies, etc.), including the [German Museum Association](#), and organises diverse activities such as climate workshops and educational programmes for management transformation in cultural institutions.

In terms of climate policy, Germany has designed and adopted several laws and policy papers - [Immediate Climate Adaptation Programme](#) (2022), [Federal Climate Change Act](#) (adopted in 2019, latest amendment in 2021), [Climate Action Programme 2030](#) (2021), [Germany’s Recovery and Resilience Plan- DARF](#) (2021), [Integrated National Energy and Climate Plan](#) (2019), [Climate Action Plan 2050](#) (2016). Some of these recognise the importance of the cultural dimension of the sustainable transformation, but no concrete adaptation measures for the cultural sector or museums are proposed in any of them.

Concrete obligations for cultural institutions currently only arise through the [Film Promotion Act](#), which has been in force since 2022 and stands for minimum ecological standards in the field of audiovisual productions, making these a condition for funding in the film sector. The [principles of good corporate and investment promotion](#) require companies in which the Federal Government holds a majority stake to submit a non-financial statement. The cultural and creative industries are already affected by this in initial stages. Although the law does not yet link subsidies to the

The German Federal Government launched the Action Network Sustainability in Culture and Media as the central contact point to implement cross-sectoral approaches to energy and resource efficiency across the cultural landscape

consideration of ecological sustainability, there are an increasing number of foundation projects, e.g. at KSB - [German Federal Cultural Foundation](#), which make ecological measures, including those in museums, a criterion for funding.

Greece

Greece is a parliamentary republic and a unitary state organised on a decentralised basis. The principles of decentralisation and local self-government are enshrined in the constitution, which assigns responsibilities to regions (13) and munic-

ipalities (325). At state level, the highest authorities encompass the unicameral Parliament and the Government. In terms of cultural policy, Greece follows a mixed model in which the [Ministry of Culture and Sport](#) establishes policy priorities with an emphasis on cultural heritage, manages cultural sites, provides support and funding for contemporary creation, and conducts cultural diplomacy, while the regional and local authorities develop their own specific programmes and have a diverse scope of responsibilities. In the field of environment and climate action, the lead authorities are the [Ministry of Environment and Energy](#), which is responsible for environmental preservation, policy-making in the energy sector, and climate change mitigation, and the [Ministry for Climate Crisis and Civil Protection](#), whose scope of accountability includes climate crisis management, civil protection and disaster management, emergency planning and response, public awareness and education, and international cooperation.

The Greek National Climate Law recognises cultural heritage as highly vulnerable and a priority area in the context of adaptation measures

In terms of cultural policy papers and acts, the most relevant include the [Law on Institutions, Measures, and Actions for Cultural Development](#) (1997), which contains a wide range of legislation whose clauses comprise, among others, a framework for the establishment of new national art galleries and museums, provisions regarding music, cinema and arts education, the establishment of a state-owned company entrusted with cultural heritage valorisation and promotion through editions, audiovisual and multimedia productions, etc, and the [Law for the Protection of Antiquities and Cultural Heritage in General](#) (2002), which broadens the notion and scope for the protection of monuments and works of all cultural traditions and historical periods, and establishes legal provisions for the museum sector. Neither of the documents place attention on climate change or projects and specific adaptation measures in this context. Nonetheless, the Greek Government has raised its concerns about cultural heritage vulnerability in this context and has established an initiative, [Climate Change Impacts on Cultural Heritage: Facing the Challenge](#), under which it organised an international scientific [conference](#) in Athens in 2019.

The conference served as a basis for drafting the Greek proposal “Addressing climate change impacts on cultural and natural heritage”, which was launched, with the supporting partnership of UNESCO and the World Meteorological Organization, during the UN Climate Action Summit later that year.

When it comes to climate-related policies, Greece has designed and adopted the following:

- [National Climate Law on the Transition to Climate Neutrality and Adaptation to Climate Change](#) (2022): Under Article 16 on municipal emissions reduction plans, the Law sets an obligation that each local government organisation is supposed to investigate, identify, and prioritise measures and actions to reduce emissions and create a Municipal Emissions Reduction Plan, which would include a detailed inventory of energy consumption and emissions for public facilities and appropriate adaptation and evaluation measures, with a specific emphasis on the cultural sector. The Law also acknowledges the conclusions of the National Strategy for Climate Change Adaptation, which recognises cultural heritage as highly vulnerable and a priority area in the context of adaptation measures.
- [Recovery and Resilience Plan](#) (2021): The plan proposes a variety of measures for the cultural sector, among others those referring to climate change adaptation. It foresees a budget allocation for the protection of emblematic places and monuments of cultural heritage from climate change, and a budget for designing smart environmental and cultural infrastructure, which is a measure that directly relates to museum organisations by including the development of digital services and content production to promote cultural exhibits with augmented and virtual reality in museums as one of its actions.
- [National Energy and Climate Plan](#) (2019): The plan doesn't particularly draw measures for the cultural sector or museums per se but invokes the National Strategy for Adaptation to Climate

Change as the principal strategic document that sets the overall objectives, guidelines and tools for implementing necessary climate adaptation measures and actions and the vital role the cultural heritage protection takes in it.

- [National Circular Economy Strategy](#) (2018): The strategy represents a framework for the implementation of the circular economy principles at national level, but without setting specific measures for museums or culture in general.
- [The National Strategy for Climate Change Adaptation](#) (2016): The strategy recognises cultural heritage protection as one of its priority areas, and in a dedicated section, it proposes a set of four comprehensive actions encompassing appropriate adaptation measures. These actions include: 1) knowledge and recording of climate change risks on cultural heritage (institution of new and updating of existing systems of recording parameters related to the effects of climate change), 2) managing climate change risks to cultural heritage, 3) integrating cultural heritage protection and adaptation policies into broader national policies, and 4) training professionals and informing the public. In addition, the fourth action perceives museums as vital actors in informing the public and awareness-raising on climate change.

Hungary

Hungary is a parliamentary democracy and a unitary state, whose territory comprises 19 counties and 3,175 municipalities. It has a two-tier system of local government encompassing regional and local authorities, whose competencies have been significantly reduced due to the re-centralisation of the state. The National Assembly is the unicameral legislature, while the executive power is vested in the Government. Until May 2022, when the Parliament decided to establish the [Ministry of Culture and Innovation](#) on the basis of the Fundamental Law (the foundation of the Hungarian legal system), issues of culture were dispersed between various government organs. However, the Ministry of Culture and Innovation and the Committee for Culture of the Parliament have negligible roles, since the system does not operate along the conventional algorithm of defining cultural policy priorities, preparing, and executing implementation¹⁶. When it comes to climate policy, the primary authority is the [Ministry of Innovation and Technology](#), which is responsible for the establishment of a legal, economic, and technical regulatory system for the attainment of environmental goals and coordination of issues related to the climate crisis. In Hungary, there is no comprehensive framework law on culture or arts. [The Act on the Protection of Cultural Goods, Museum Institutions, Public Library Services, and Community Culture](#) (1997) is often referred to as the Law on Culture, but in verity, it regulates only the afore-mentioned sub-sectors. The Law doesn't recognise culture's relationship to the climate crisis nor foresee any adaptation measures in this context. The other fundamental pieces of cultural legislation are the [Act on the Protection of Cultural Heritage](#) (2001),

and the [Law on World Heritage](#) (2011). Both acts include environmental aspects in various issues of the protection of cultural heritage and consider principles of sustainable development. The Act on the Protection of Cultural Heritage emphasises the importance of sustainable use of heritage - encompassing damage prevention and mitigation activities, as well as harmonisation of the sustainable management of protected monuments and their development. Otherwise, there is nothing specific about practices related to cultural heritage's adaptation to the climate crisis in either of the documents.

In terms of climate policy, Hungary has adopted the [Recovery and Resilience Plan](#) (2021), the [Climate and Nature Protection Plan](#) (2020), the [Law on Climate Protection](#) (2020), the [National Energy and Climate Plan](#) (2019), and the [National Climate Strategy 2008 - 2025](#) (2008). The Recovery and Resilience Plan doesn't specifically mention museums or heritage assets, but it proposes measures related to the improvement of energy efficiency in public buildings and their higher share of renewable energy production, including certain cultural facilities, which is a measure foreseen by the National Energy and Climate Plan as well. Other noted climate policy pieces do not recognise the importance and role of the cultural sector, nor museums in the processes of adaptation and mitigation of Hungarian society in the climate crisis.

The Irish Culture 2025 framework policy points out that cultural policy and expression have an important role to play in assisting a fair transition to a more sustainable future

Ireland

Ireland is a parliamentary democracy and a unitary state with three levels of governance: central, regional (three regional assemblies), and local (comprising 26 county councils, three city councils, and two city and county councils). The Irish Parliament, known as the Oireachtas, consists of the president and two houses: Dáil Éireann (House of Representatives) and Seanad Éireann (Senate), while the executive power is vested in the government. When it comes to cultural affairs, the lead authority within government is the [Department of Tourism, Culture, Arts, Gaeltacht, Sport, and Media](#) (TCAGSM), with responsibility for heritage lying with the [Department of Housing, Local Government, and Heritage](#). In addition, the Heritage Council (established in 1995) is a national state body with statutory powers that operates at arm's length from its funding department. In terms of climate policy, the primary authority is the [Department of the Environment, Climate and Communications](#), responsible for the delivery of policies and programmes in a number of areas, including environment and climate action, energy, natural resources, and waste policy.

In terms of cultural policy legislation, Ireland doesn't have an umbrella law on culture, or museum legislation. The most substantial acts include the [Heritage Act](#) (1995), the [Arts Act](#) (2003), which defines the framework for cultural policymaking, the [National Cultural Institutions Act](#) (1997), and the [National Monuments Act](#) (1994). Even though none of these regulations refer to climate change or propose adaptation measures, this issue is currently highly positioned on the cultural authorities' agenda, through various initiatives and strategic documents. The TCAGSM's [Culture 2025 Framework Policy](#) (published in 2020) sets out values and high-level principles to inform public policy and planning in the decade ahead. In a dedicated section on culture and sustainability, the strategy points out that "cultural policy and expression have an important role to play in assisting a fair transition to a more sustainable future. The policies, programmes, and infrastructure that underpin the cultural sector can contribute to that transition by ensuring that, through their implementation, every opportunity is taken to pursue and promote sustainable practices". Furthermore, it emphasises the role of culture in awareness-raising on sustainability and climate threats, and the "ability to promote alternate approaches to meet-

ing the related challenges”. It proposes that the government will ensure that cultural policies and related measures “seek to maximise their contribution to sustainability while working with the creative and artistic community to examine the scope of their work to raise awareness of the exigencies of sustainability and climate action”. Another substantial paper in the field is the national heritage plan, [Heritage Ireland 2030](#) (published in 2022), which places climate change and action at the centre of its reflection: “Climate change and biodiversity loss will be a key focus of Heritage Ireland 2030 over its lifetime. We can use the medium of ‘inclusive heritage’ to lead a narrative that will bring people and communities along on a journey of change, building on a widely-held appreciation of nature, local heritage, and environment”. The plan foresees diverse actions to protect biodiversity and address the climate emergency, including the preparation of sector adaptation plans for biodiversity and built and architectural heritage, collaboration with other government departments and agencies on the implementation of relevant actions in their sectoral adaptation plans, carrying out climate change risk assessments in

The Italian National Strategy emphasises that the most effective way to respond to the impact of climate change is to proceed to the integration of the necessary measures in the existing management plans

every local authority area to establish a baseline of information from which the benefits and impacts of Climate Change Actions on built and natural heritage can be measured and documented, piloting case studies in every local authority on the appropriate and sensitive energy upgrading of traditional buildings to use as examples for other home and building owners, and so on. In addition, in 2021, as part of the TCAGSM’s [Creative Ireland Programme](#), and in cooperation with the Department of the Environment, Climate, and Communications, the [Creative Climate Action](#) two-year funding programme was launched for creative projects that engage the public on the urgent need for climate-related lifestyle and behaviour change, which benefits the entire cultural sector, including museums and heritage facilities. In June 2023, the TCAGSM announced a [new funding grant scheme](#) on climate action, aiming to support cultural organisations to reduce their carbon emissions, along with the development of a new National Policy on Culture, Climate and Creativity, bringing these areas of policy together.

When it comes to climate and environmental policy, Ireland has adopted the [Recovery and Resilience Plan](#) (2021), [National Energy and Climate Plan](#) (2020), [Climate Action Plan](#) (2019), [National Adaptation Framework](#) (2018), [National Mitigation Plan](#) (2017), and [Fossil Fuel Divestment Bill](#) (2016). The National Adaptation Framework outlines a ‘whole of government and society’ approach to climate adaptation in Ireland and acknowledges the requirement for managing and adapting to the effects of climate change on heritage, while the other documents do not propose any specific measures for the cultural sector or museum and heritage facilities. Another vital cross-sectoral strategic document is the comprehensive [National Development Plan 2021-2030](#), which covers diverse actions in the field of culture including investment in regional cultural infrastructure, including museums, in terms of decarbonisation.

Italy

Italy is a democratic republic, considered a regionalised state, whose territory encompasses the regions (regioni; 15 ordinary regions, and five special-status regions), provinces (province; 110 regular and two self-governing Bolzano and Trento), municipalities (comuni; 7960), and metropolitan cities (città metropolitane; 15). It has three levels of governance: central, regional, and local (municipalities and metropolitan cities). The lead legislative authority is the bicameral parliament, consisting of the Chamber of Deputies and the Senate, which are on equal footing, while the executive power is vested in the government. Within the government, four ministries are responsible for cultural affairs:

[The Ministry of Culture](#), the Ministry of Economic Development, the Ministry of Foreign Affairs, and the Ministry for Education, University, and Research. The Ministry of Culture has jurisdiction over heritage, museums, libraries and archives, visual arts, performing arts and film, national cultural institutions, and copyrights, and it encompasses 13 General Directorates, encompassing the General Directorate of Museums and the General Directorate for Cultural Heritage Security. The ministry is also assisted by four central advisory bodies, including the High Council of Heritage and Landscape. In terms of climate policy, the lead authority is the [Ministry of Environment and Energy Security](#). In terms of legislation in culture, the central framework law regulating the heritage field and museum operations is the [Heritage and Landscape Codex](#) (2004), regulating the protection, enhancement, circulation, and management of cultural heritage and landscape assets, with a view to environmental heritage as well. The codex recognises the sustainable development requirements by prescribing cooperation of public authorities in the defining guidelines and criteria related to activities of protection, planning, reclamation, upgrading, and enhancement of the landscape environment, with a view to sustainable development, but doesn’t foresee any measures and actions toward the sector’s green transformation.

When it comes to climate policies, Italy has drafted and adopted the [Recovery and Resilience Plan](#) (2021), the [National Energy and Climate Plan](#) (latest update July 2023), the [Law on Environmental Provisions to Promote Green Economy Measures and Limit the Excessive Use of Natural Resources](#) (2015), and the [National Strategy on Adaptation to Climate Change](#) (2015). The

Recovery and Resilience Plan anticipates various measures related to the field of culture, including budget allocation for improving energy efficiency in museums, along with theatres and cinemas, and envisions the creation of capacity-building programmes for cultural operators to manage the digital and sustainable transition. These measures are reflected in the National Energy and Climate Plan, which additionally proposes the adoption of minimum environmental criteria for cultural events, including exhibitions, and the promotion of a green approach throughout the cultural and creative chain by incorporating innovative eco-design and circular economy principles in the chain. The Law on Environmental Provisions acknowledges the significance of cultural heritage safeguarding and outlines measures brought by the Heritage and Landscape Codex, while the National Strategy on Adaptation to Climate Change proposes another set of comprehensive measures in terms of museums and cultural heritage. In a dedicated section on cultural heritage, it emphasises the key message for public and private institutions responsible for the management of cultural heritage, that “the most effective way to respond to the impact of climate change is to proceed to the integration of the necessary measures in the existing management plans or those being defined”. Furthermore, it provides concrete measures and guidelines - when it comes to heritage preservation, it foresees actions regarding the continuous monitoring and transformation of material restoration practices for stone (develop different cleaning techniques and methods than those used up until now, carry out water-repellent surface protective and consolidation interventions), wood (stabilise the relative humidity, intensify and, where they are not present, activate systematic controls of thermo-hydro-

metric conditions) and metal materials (reduction of the exposure of the cultural heritage to corrosive agents, with possible relocation of the artefacts). In terms of built heritage and buildings, the measures encompass the appropriate redesign of the water drainage system, protection of surfaces and historical structures against excessive radiation, and changing the traditional restoration approach aimed at safeguarding the original elements or structures, in favour of an approach aimed at improving the durability of a structure or element in consideration of the vulnerability to climate change.

Latvia

Latvia is a parliamentary democracy and a unitary state. After undergoing several administrative reforms, the country is currently organised into 43 local government units encompassing 36 municipalities and seven state cities¹⁷. National authorities – the institutions that set the general policy guidelines, legislation, and budget of the Republic of Latvia – are the Parliament (Saeima) and the Cabinet of Ministers, which is the highest executive body in the country. The Latvian cultural policy model centralises around the [Ministry of Culture](#), the primary institution responsible for formulating and coordinating state cultural policy, social integration policy and media policy. Nevertheless, several transformations have been accomplished towards the decentralisation of culture, including the establishment of advisory boards or councils in most cultural sectors (including the [National Council of Museums](#)), which include diverse

Latvia foresees measures and budget allocation for infrastructure projects of public buildings, including cultural facilities, to improve their energy efficiency and the transition to renewable energy sources

stakeholders and actively participates in the policymaking process, as well as the establishment of the [State Culture Capital Foundation](#), which is responsible for grant allocation for cultural projects. In terms of local authorities, local governments are responsible for maintaining cultural heritage and facilitating the preservation of traditional cultural values, the development of creative folk activity, providing organisational and financial assistance to cultural institutions and events, reserving cultural monuments, and managing local government museums¹⁸. In the field of environmental and climate policy, the highest authorities encompass the [Ministry of Environmental Protection and Regional Development](#) and the newly established [Ministry of Climate and Energy](#)¹⁹. With regards to climate-related policies addressing the cultural sector and museums per se, several policy papers can be identified:

- [Cultural policy guidelines 2022-2027](#). – a document developed by the Ministry of Culture in close cooperation with industry representatives – state, local governmental, non-governmental, and private cultural insti-

tutions, cultural professionals, as well as culture consumers – which defines cultural policy priority tasks for the next six years. The main objective of the guidelines is to provide a sustainable and accessible culture for Latvia's development, recognising the safeguarding, conservation, and sustainable use of cultural heritage as one of the primary areas of activity²⁰. In a dedicated section, the document acknowledges climate change as a significant factor affecting the cultural landscape both in terms of potential damage caused by its consequences (foremost in the context of cultural heritage and outdoor events) and in terms of new environmental policies that will indirectly influence the cultural processes, while at the same time, emphasising the importance of the cultural sector's contribution in the country's efforts towards climate neutrality and climate sustainability. Even though the document does not impose specific measures for museums, it offers a set of basic approaches that can be undertaken by any organisation in the field of culture, such as implementing activities that drive public awareness of climate change and

adaptation, popularising traditional knowledge and meanings, material recycling, etc.

- [Law on the Protection of Cultural Monuments](#) (Initial version 1993, last amendment 2013) - in the section dedicated to Cultural Monument Protection Zones, the Law recognises the importance of environmental preservation by prescribing that any environment-degrading objects, even though those located within the cultural monument protection zones “should be designated for demolition and further development thereof shall not be permitted”.
- [Latvia’s Recovery and Resilience Plan](#) (submitted to the European Commission in 2021, to be implemented by 2026) - the plan anticipates measures and budget allocation for infrastructure projects of public buildings, including cultural facilities, to improve their energy efficiency and the transition to renewable energy sources in order to achieve the goals set out in the National Energy and Climate Plan. It also foresees actions in the area of flood risk management that would reduce the adverse effects of floods on cultural heritage, inter alia.

Following the EU’s climate policy and Paris Agreement obligations, Latvia designed and adopted the [National Energy and Climate Plan 2021-2030](#) and the [2050 Climate Neutrality Strategy](#), but neither document places attention on the cultural sector or proposes measures that would refer to museums. Currently, Latvia is in the process of developing a new climate law that will be a combination of already existing legislation but will improve and update the climate policy framework by expressing all policy provisions in one place²¹.

Lithuania

Lithuania is a parliamentary democracy and a decentralised unitary state composed of 10 regions divided into 60 municipalities. Municipalities are the only self-governing authorities, while the regions serve solely as territorial and statistical units. Seimas is the unicameral parliament of Lithuania, within which the Committee on Culture was established as the authority that deals with various cultural development issues, discusses questions of current interest, adopts decisions, and analyses culture-related legislation. The Government of the Republic of Lithuania exercises the executive power. In the field of culture, the [Ministry of Culture](#) is the government institution that develops and implements state cultural policy by drafting laws and other legal acts, defining concepts and programmes for the development of different artistic fields and coordinating their implementation, financing cultural institutions (including museums), protecting cultural property, and drafting international treaties. The ministry is advised by 16 advisory councils, including the Council on Ethnic Culture and Intangible Cultural Heritage and the Museum Council. Local authorities are responsible for the establishment, reorganisation, transformation or liquidation of cultural institutions (including museums), organisation of cultural events, and financing and maintenance of local cultural institutions and cultural heritage, which are the powers expressed through municipal councils and other relevant bodies formed by them. In terms of climate policy, the lead executive authority is the [Ministry of Environment](#), which implements climate change policies and state legislation on territorial planning and construction, promotes measures to increase energy efficiency, promotes renewa-

ble energy, and preserves biodiversity. In 2019, the government adopted the [Lithuanian Cultural Policy Strategy](#) for a period of 10 years, which is the first long-term comprehensive strategy adopted since the restoration of the independence of Lithuania in 1990. It formulates core values and sets strategic goals and tasks of cultural policy. In its situation analysis, the strategy recognises the role of culture in the context of pro-social and environmental behaviours of the population, maintaining that cultural policy must strive to create equal, sustainable partnerships with other areas of public policy, including environmental protection. It also acknowledges the wider mission of cultural institutions in improving the overall social environment, encompassing sustainable local development. Under the strategy’s third goal, which is to develop national awareness and knowledge of tangible and intangible heritage in modern society, the strategy places attention on the sustainable use of cultural heritage. In 2019, the government also prepared a draft of the [Cultural Policy Framework Law](#), which aims to establish an overall foundation for general policy principles. Like the Cultural Policy Strategy, the Law recognises culture as a creator of significant added value for the state in various fields, including the environment. In addition to these, in the context of research, the most relevant policy papers in the cultural field include the [Law on Museums](#) (original version 1995, last edition in January

The Lithuanian Agenda proposes adaptation targets and objectives for 2030 in individual sectors most vulnerable to climate change, including cultural heritage

2023), and the [Law on Protection of Immovable Cultural Heritage](#) (original version 1994, last edition 2021). In its introductory provisions, the Law on Museums recognises the role of museums in terms of social responsibility and sustainable development, and the Law on Protection of Immovable Cultural Heritage proposes measures in the context of environmental protection that could eliminate sources of pollution within the heritage territory and maintain historical green areas that are objects of cultural heritage, in compliance with the heritage maintenance regulations approved by the Minister of Culture and coordinated by the Ministry of Environment.

When it comes to legislation on climate change and environmental protection, Lithuania has adopted the [Recovery and Resilience Plan](#) (2021), the [National Climate Change Management Agenda](#) (2021), and the [National Energy Climate Plan](#) (2019). The Recovery and Resilience Plan foresees actions in the domain of culture, but none of them are directed towards the green transformation. The National Climate Change Management Agenda proposes adaptation targets and objectives

for 2030 in individual sectors most vulnerable to climate change, including cultural heritage. In this regard, the agenda sets a target to increase the resilience of cultural heritage sites to natural and catastrophic meteorological events by identifying their sensitivity and vulnerability to climate change and enhancing their resilience with appropriate adaptation measures. The Ministry of Environment is set to be the coordinator of the agenda, which shall, within its remit, be implemented by other ministries, including the Ministry of Culture. The National Energy Climate Plan doesn't foresee any measures related to the cultural sector.

Luxembourg

Luxembourg is a constitutional monarchy and a unitary state with a municipal level of decentralisation. Its territory encompasses three districts, 12 cantons and 102 municipalities, which serve as the only subordinate local authorities. The Parliament of Luxembourg (Chambre des députés) is unicameral, and the Government serves as the lead executive authority. Within the Government, the [Ministry of Culture](#) is competent in all areas relating to national and international cultural policy, cultural heritage protection, the coordination of national cultural institutes, and the implementation of the current cultural development plan. In terms of environmental authorities, the lead executive body is the [Ministry of the Environment, Climate and Sustainable Development](#), whose tasks encompass the implementation of the governmental programme, the coordination of actions regarding sustainable development, and the implementation of appropriate measures to protect the natural and

human environment in the fight against climate change. When it comes to legislation on culture, Luxembourg doesn't have a general law on culture or a museum law. In this regard, the most relevant policy papers in the context of research include the [Law on the Reorganisation of the State's Cultural Institutes](#) (2004) and the newly modified [Law on Cultural Heritage](#) (2022). While the Law on the Reorganisation of the State's Cultural Institutes doesn't contain any provisions on climate change or suggest related adaptation measures, the Law on Cultural Heritage recognises heritage as a vital element of sustainable development. Besides the afore-mentioned acts, the ministry has adopted a [Cultural Development Plan](#) for the seven-year period 2021-28. The strategy calls for a more transversal governance system, encouraging cooperation between other disciplines, fields and sectors including ecology. It recognises the role of culture and specifically heritage in sustainable development, but does not foresee precise measures for museum organisations.

In terms of climate policies, Luxembourg has adopted the [Recovery and Resilience Plan](#) (2021), the [Law Relating to the Climate](#) (2020), the [National Energy and Climate Plan](#) (2019), and the [Action Plan towards the Reduction of Greenhouse Gas Emissions](#) (2006). Of these papers, only the National Energy and Climate Plan briefly mentions heritage by predicting the inclusion of heritage protection aspects in the national building renovation strategy, which aims to increase energy efficiency and help phase out fossil-fuel heating systems. Nonetheless, the Ministry of the Environment, Climate and Sustainable Development has conducted initiatives towards greening the cultural sector by developing platforms and guidelines

for sustainable event production, such as [ELO](#) and [Green Events](#). While these are not specifically intended for museum organisations, they could offer an initial guidance in this area.

Malta

Malta is a decentralised unitary state and a parliamentary republic whose territory comprises six regions and 68 municipalities. The lead legislature is the unicameral House of Representatives (Kamra tad-Deputati), and the executive is the Government, while the sub-authorities include the regional and local councils. In terms of cultural policy, the lead authority within the Government represents the [Ministry for National Heritage, the Arts, and Local Government](#), established in January 2020, following a reorganisation of ministerial departments as a result of the new prime minister's mandate. This ministry is responsible for the main areas of cultural heritage restoration, culture, arts, the Maltese language, national archives, the National Library, local governments, broadcasting, and the audiovisual sector. When it comes to museums, the vital actor is [Heritage Malta](#), a national government agency set up in 2002 under the provisions of the Cultural Heritage Act, entrusted with the management of national museums and heritage sites and their related collections, including two UNESCO World Heritage Sites. The central

authority formulating and implementing climate policy in Malta is the [Ministry for the Environment, Energy and Enterprise](#), which is leading Malta's commitment to a sustainable and climate-neutral future. In 2021 Malta adopted the [National Cultural Policy](#), which addresses the immediate needs of arts and culture and reaffirms the intrinsic value they bring to society and acknowledges the role culture has in tackling global issues such as democracy and collective action, climate change, and other matters related to social and environmental sustainability. The strategy focuses on eight policy priorities, including developing cultural infrastructure, and protecting and safeguarding cultural heritage. Under the objective of developing cultural infrastructure, the potential of culture as a platform for climate action is emphasised, as well as the sector's crucial role in addressing environmental sustainability through concrete actions, to contribute to the shared global goals in the framework of the [Paris Agreement](#). Furthermore, the strategy calls for the immediate development

Malta's Strategy for 2050 highlights the cultural heritage sector as a key area whose transformation is needed to secure a future that supports people, the planet and prosperity

of a Culture for Climate Action Strategy that will consider supporting public cultural organisations and heritage institutions, artists, and arts organisations in measures towards greening the cultural sector by providing tools, resources and support, including expertise, financial mechanisms, infrastructural investments and sharing of good practice, to reduce carbon emissions and other negative environmental impacts by the cultural and creative sectors, integrating environmental impact as a requirement in the selection criteria of public funding programmes, and so on. However, while other sections of the document mention distinctive museum practices in the context of achieving the various objectives set, this is not the case in an excerpt on climate action.

Substantial cultural policy papers relevant to the research encompass the [Cultural Heritage Act](#) (2002) and [Malta's National Strategy for the Promotion of Cross-cultural Understanding and Management of Cultural Diversity](#) (2009), but none of these identify issues related to the climate crisis as significant. In terms of environmental and climate policy, Malta has drafted and adopted the [Sustainable Development Strategy for 2050](#) (latest update February 2023), the [National Recovery and Resilience Plan](#) (2021), the [Low Carbon Development Strategy](#) (2021), the [National Energy and Climate Plan](#) (2019), the [Climate Action Act](#) (2015), and the [National Climate Change Adaptation Strategy](#) (2012). Malta's Sustainable Development Strategy for 2050 represents the first document in this context that highlights the urban development and cultural heritage sector as one of the key areas whose transformation is needed to secure a future that has people, the planet and prosperity at its heart. However, the document does not analyse

in-depth planning approaches for the preservation and safeguarding of cultural heritage, nor introduce museum practices in this context. The other cultural policy papers mentioned don't take culture into account or propose any measures relevant to the museum organisations or heritage field.

The Netherlands

The Netherlands is a decentralised unitary state with 12 provinces and 342 municipalities (gemeenten), with a three-tier governance system consisting of central, provincial, and municipal governments. The bicameral Parliament, consisting of the First and Second Chamber, is the main legislature, while the executive power at state level is vested in the Government. In terms of cultural affairs, all three tiers pursue their own cultural policy with their own funding and advisory streams. The central Government has the mission of creating conditions for the effective functioning of the other levels of governance, and cultural organisations. At the central level, the competent authority is the [Ministry of Education, Culture and Science](#), which takes responsibility for the availability of high-quality subsidised arts, cultural institutes and companies. It therefore supports organisations that host collections or performances of (inter)national importance, such as museums, symphonic orchestras, opera, theatre, and dance companies, among others. The ministry is also accountable for the national digital library, national monuments and the national public broadcasting system. Another important actor is the [Cultural Heritage Agency](#), operating within the ministry on heritage policy implementation, generating and disseminating

knowledge, and providing practical guidance on national monuments, archaeology, landscape and environment, and movable heritage. In terms of environmental and climate policy, the central state authority is the [Ministry of Economic Affairs and Climate Policy](#), coordinating and funding climate policy and energy, and overseeing nature and the living environment.

When it comes to legislation on culture, the Netherlands doesn't have a comprehensive law on culture or a museums law. The most substantial cultural legislation in this context is the [Cultural Heritage Act](#) (2016), which does not display a link between the process of climate change mitigation and adaptation and the preservation of cultural heritage or museum practices. However, there are signs of growing awareness and engagement at the intersection of climate change and cultural heritage. At the beginning of June 2023, the Cultural Heritage Agency organised the 8th edition of the [Architectural Finishes Research Conference](#), which encompassed the subject of [challenges regarding climate and cultural heritage](#) and could potentially spark further concern in this direction. Other government [initiatives](#) conducted by the Netherlands Enterprise Agency are subsidies for a new designation of monuments or for the conservation of national monuments, and National Restoration Fund loans, which could benefit museums but are not concretely linked to climate change mitigation or adaptation efforts.

In terms of climate policies, The Netherlands drafted and adopted the [Recovery and Resilience Plan](#) (2021), the [Long-term Strategy on Climate Change Mitigation](#) (2020), the [National Energy and Climate Plan](#) (2019), the government-wide

programme, [A Circular Economy in the Netherlands by 2050](#), and the [Climate Act](#) (2019).

None of them propose any measures for climate change adaptation and mitigation in the cultural sector. Notably, the [Council for Culture](#) (a body established by law to advise the Dutch Government and Parliament on the arts, culture and media) published its recommendations last June geared towards accelerating sustainable development in the cultural sector and giving culture a more prominent role in Dutch society's sustainability transitions. [The Cultuur+Natuurlijk](#) report emphasises the crucial role museums can play in promoting sustainability and strengthening the relationship between culture and nature. Despite the efforts outlined above, the government's focus on sustainability in the cultural sector is relatively weak and sustainability does not often feature permanently and prominently on the agendas of many cultural organisations, including museums.

Poland

Poland is a parliamentary democracy and a unitary state whose territorial administrative structure is based on three levels of self-government: 16 regions (voivodeships), 314 districts (powiats),

and 2478 municipalities (gminas)²². The Polish legislative branch is a bicameral legislature consisting of the Sejm and the Senate, while the highest executive branch is the Council of Ministers. The central state administration is the main actor in setting cultural policy objectives and funding principles, with the [Ministry of Culture and National Heritage](#) as the main policymaker. Nonetheless, each level of local government has a statutory obligation to undertake activities in the area of culture and the protection and care of monuments, with the most important element of this obligation being the financing of local cultural institutions and defining of their own cultural policies. In terms of environment and climate policy, the main authority is the [Ministry of Climate and Environment](#) which

has established a number of arms-length bodies with a primary role in monitoring, research, and educational activities, while local authorities' scope of responsibilities encompasses environmental protection, adopting regional protection plans for implementing the national guidelines, adopting regional waste management plans, etc. In terms of cultural policy and acts regulating the museum and cultural heritage field, the most substantial policy papers include the [Act on Organising and Conducting Cultural Activity](#) (adopted in 1991, with later amendments), which represents the legal basis for cultural institutions, [Act on Museums](#) (adopted in 1996) and [Act on the Protection and Care of Monuments](#) (adopted in 2003). None of these documents place attention on climate change and its effects on cultural institutions nor foresee any adaptation measures. Article 87 of the Act on the Protection and Care of Monuments, which refers to the obligations

of local authorities to assemble their own monument protection plans, states that these protection plans should take into account conditions for nature protection and ecological balance but without further elaboration on the topic. In the context of research, it is important to mention that in 2022, the Ministry of Culture and National Heritage published on its official website the [Recommendations for Cultural Institutions in the Field of Electricity Savings](#), which may unequivocally result in climate-positive impacts but were created as a response to rising electricity prices, and the Ministry of Climate and Environment Act on special solutions to protect electricity consumers in 2023, which emerged from the turbulent situation on the electricity market.

Among the climate policy documents, the most relevant papers include the [National Energy - Climate Plan 2021-2030, Recovery and Resilience Plan](#) (adopted in 2021, to be implemented by 2026.), [Strategic Adaptation Plan for Sectors and Areas Sensitive to Climate Change until 2020, with a Perspective by 2030](#) (adopted in 2013), and [Poland's Energy Policy until 2040](#) (adopted in 2021)²³. The Recovery and Resilience Plan envisions support for increasing the energy efficiency of local community activity facilities – thermal modernisation of selected buildings of libraries and community centres – which is a measure that could benefit the cultural sector in general, but does not specifically refer to museums, while other mentioned policy papers do not include culture as a sector exposed to climate change or as a field that could contribute to necessary adaptations, and don't propose any measures in this context.

Portugal

Portugal is a parliamentary democracy and a unitary state that has three levels of governance: central, regional (encompassing seven regions that correspond to seven different NUTS II²⁴), and local (municipalities and civil parishes). The unicameral Parliament is the highest legislative branch, while the Government is the focal executive authority. The central state administration, through the [Ministry of Culture](#), is the leading actor that develops and implements cultural policy, awards sectoral funding to cultural and artistic bodies, and designs, coordinates, and implements specific programmes, while in the sphere of environment and climate policy, the [Ministry of Environment and Climate Action](#) is responsible for public land planning, fire prevention, climate change policy, mobility, and energy. In the context of culture, regional and local authorities are accountable for cultural facilities, including the management of museums, protection and enhancement of cultural heritage, provision of support for cultural projects and activities, etc. In terms of the environment and fight against climate change, regional authorities are engaged in protecting the environment and ecological balance, participating in the management of air quality, proposing the creation of protected areas at national, regional or local level, etc. In terms of cultural policy and acts regulating the museum and cultural heritage field, the most substantial policy papers include the [Framework Law on Portuguese Museums \(2004\)](#),

The Portuguese Framework Climate Law acknowledges that the state has the responsibility to promote climate policy on a cultural level

which defines principles of the national museological policy and establishes a legal framework for museum operations, and the [Portuguese Heritage Protection Law](#) (2001), which institutes the system of rules for the protection and enhancement of cultural heritage²⁵. The Framework Law on Portuguese Museums does not recognise climate change in any of its provisions, nor foresee any adaptation measures. At the same time, the Portuguese Heritage Protection Law, in this context, places its attention solely on the protection of the environment through a provision stating that principles of the Law should be applicable to natural, environmental, landscape and palaeontology assets as well, compatible with their respective regulatory systems, and foresees cooperation with Ministry of Environment in that regard.

The most significant climate policy papers that Portugal has developed and adopted include the [Framework Climate Law \(2021\)](#), which sets the objectives for the country's climate policy and provides an overall foundation for action in this matter. It confines two provisions related to the cultural sector: in Article 7 on climate-related ob-

ligations, besides recognising that everyone has a duty to protect and preserve climate balance and contribute to climate change mitigation, it also acknowledges that the state has the responsibility to promote this matter on a cultural level (among others); in Article 24 on sectoral plans for adapting to climate change, it indicates the development of five-year sectoral plans that would be designed by the Government in dialogue with the representative structures of each sector and foresees such a plan in an area of cultural activities. Additionally, the [National Energy and Climate Plan 2021-2030](#) (2021), under the energy efficiency dimension, anticipates the establishment of the Portuguese National Energy Council as an independent consultation body operating at all levels of governance, whose mission will be to promote the participation of various social, cultural and economic forces to reach a consensus on energy policy in the context of the energy transition. Lastly, there is the [Recovery and Resilience Plan](#) (2021), which forecasts the allocation of a specific budget for the cultural sector and proposes measures for museums and cultural heritage objects in terms of their requalification and conservation to meet the requirements of energy and water efficiency.

In addition to the above mentioned documents, Portugal has developed and adopted a [Long-term strategy for carbon neutrality of the Portuguese economy by 2050](#) (2019) and [National Strategy for Adaptation to Climate Change](#) (2015), but neither of these documents takes culture or museums into account.

Romania

Romania is a parliamentary republic and a unitary state whose territory is divided into counties (42 including the capital Bucharest), towns, and communes. The bicameral Parliament, composed of the Chamber of Deputies and the Senate, is the highest legislative authority, while the Government serves as the primary executive body. Within the Government, the responsibilities for drafting and implementing cultural policy belong to the [Ministry of Culture](#), which also has overall authority for budget allocation in its field. Important actors that participate in the sub-sectoral policy making process are several standing committees/commissions composed of specialists in their respective fields (including the National Commission of Museums and Collections). In the area of climate policy and environmental action, the main authority is the [Ministry of Environment, Water and Forests](#), which drafts policies in this area, implements governmental programmes, and enforces monitoring activities. Management of local public affairs is the responsibility of the self-governing deliberative local administrative authorities, namely the county council and the local councils, which are, in the context of culture, accountable for managing cultural institutions in their (territorial) interest.

Romania does not have general legislation on culture, but the legal provisions in force are sector-specific, and in the context of research, the most substantial is the [Law on Museums and Public Collections](#) from 2003. The Law sets the framework conditions for the operation of museum organisations and public collections, without recognising any influences of climate change or adaptation requirements. Another important policy

paper in the field of culture is the four-year [Institutional Strategic Plan](#) of the Ministry of Culture, which represents the management framework integrating the ministry's strategic objectives, programmes, and the measures subsumed under them. The plan that is currently in effect ([2021-2024](#)), besides recognising the need for heritage protection that would further prevent the destruction of the environment, does not foresee any mitigation or adaptation measures for the cultural sectors and museums..

In terms of relevant climate-related policy papers, Romania has drafted and adopted the [Recovery and Resilience Plan](#) (in 2021), [the 2021-2030 Integrated National Energy and Climate Plan \(2020\)](#) and the [Strategy for Mobilising Investments in the Renovation of Buildings](#) (2017), brought by the Ministry of Regional Development, Public Administration, and European Funds to improve the energy efficiency of the building sector. The Recovery and Resilience Plan foresees budget allocation for the cultural sector, but none of the proposed measures refer to 'greening the sector' and adaptation efforts, while the Integrated National Energy and Climate Plan does not recognise culture in any of its dimensions. At the same time, the Strategy for Mobilising Investments in the Renovation of Buildings proposes the renovation of heritage buildings aimed at increasing their opportunities for energy savings.

Slovakia

Slovakia is a parliamentary republic and a unitary state whose territory comprises eight self-governing regions, 79 administrative districts, and 2,926 municipalities. Slovakia's Parliament, named the National Council of the Slovak Republic, is the unicameral legislative body, while the Government is the head of the executive. The framework of self-government is organised within two dominant levels, regional and local, while the districts serve mainly for statistical purposes. At parliamentary level, culture is overseen by the Committee on Culture and Media, while the lead authority for cultural policy implementation is the [Ministry of Culture](#), whose scope of responsibilities includes national language, preservation of monumental funds, national heritage and library science, art, copyright and copyright laws, extension service and folk artistic production, support of cultural innovation for ethnic minorities, presentation of the Slovak culture and arts abroad, relations with churches and religious societies, and media and audiovisual. Within the ministry, many specialised advisory bodies are established to provide for the technical and conceptual aspects of its main activities, encompassing the Commission for the Preservation of Movable Items of Cultural Heritage, the Council for the Preservation of Intangible Cultural Heritage, the Monument Council, the Archaeological Council, the Commission for the Verification of Special Professional Qualifications for Carrying Out Research on Monuments and Historic Sites, the Commission for the Preservation of Elements of Cultural Heritage, etc. In terms of environmental and climate policy, the primary executive authority is the [Ministry of the Environment](#),

dealing with nature and landscape protection, waste management, protection of water resources, air protection, etc.

Slovakia doesn't have a general act on culture. In the context of research, the most substantial pieces of cultural policy include the [Act on Museums and Galleries and the Protection of Objects of Cultural Significance](#) (original version 1999, amendment 2009), the [Act on Conditions for the Export and Importation of Objects of Cultural Significance](#) (original version 2004, amendment 2009), and the [Act on the Protection of Monuments and Historic Sites](#) (original version 2002, amendment 2014). None of these recognise climate change or foresee any adaptation measures towards greening the sector.

When it comes to climate policy regulations, Slovakia has adopted the [Recovery and Resilience Plan](#) (2021), the [Low-Carbon Development Strategy of the Slovak Republic until 2030 with a View to 2050](#) (2020), the [Greener Slovakia – Strategy of the Environmental Policy of the Slovak Re-](#)

The Greener Slovakia Strategy recognises the role of culture, notably museums, and heritage objects in awareness-raising

[public until 2030](#) (2020), the [National Energy and Climate Plan](#) (2019), and the [National Adaptation Strategy](#) (2014). The Recovery and Resilience Plan anticipates different measures in the context of the green transition, some of which may have indirect implications for the green transformation of museum practices – for example, the development of sustainable transportation or promotion of a more sustainable local economy – but museum organisations and heritage sector, are not particularly mentioned.

The Greener Slovakia Strategy forecasts heritage protection as an area of flood protection measures, stating that “Slovakia will implement flood protection measures to ensure the protection of human life and health, property, environment, cultural heritage, and economic activity, as set out in the flood risk management plans.” The strategy also recognises the role of culture, notably museums, and heritage objects in awareness-raising, by provisioning the following actions: support, maintenance, and use of exhibition and museum premises, open-air museums, objects of cultural and natural heritage, environmental education centres, nature and forest schools with the aim of raising awareness of the natural and cultural values of the area. Other listed climate policies don't recognise the role of cultural organisations nor mention museums or heritage assets in any way.

Slovenia

Slovenia is a parliamentary republic and a decentralised unitary state, whose territory is composed of 12 regions and 212 municipalities. The legislative authority is held by the bicameral Parliament of Slovenia composed of the National Assembly (legislative power) and the National Council (a body with limited advisory and control power, composed of social, economic, professional and local interest groups). The [Ministry of Culture](#) is a central authority responsible for developing cultural policy and performing administrative and expert tasks in this area, but nonetheless, all municipalities are responsible for local cultural life by promoting cultural activities (including museums), maintaining the infrastructure for cultural services, preserving cultural heritage at a local level, etc. In the field of environment and climate policy, the primary responsibility lies within the [Ministry of the Environment, Climate, and Energy](#), which is accountable for overall legislation on environmental protection and climate change, and the activities of local authorities in this context encompass actions towards protecting the air, soil, and water sources, waste management and disposal, etc.

In terms of policy papers in the field of culture, the [Act Regulating the Realisation of the Public Interest in the Field of Culture](#) (2002) is an umbrella law setting rules for cultural policy decision-making, defining the public interest for culture and the responsible bodies (including the scope of their tasks) and mechanisms for implementation. The Act does not recognise the influences of climate change or foresee any sectoral adaptation measures. Another important law in the context of research is the [Cultural Heritage Protection Act](#)

(2008), which defines the system for holistic protection of cultural heritage, and specifies the division of responsibilities between different preservation bodies and the scope of their tasks. The Act predicts intersectoral cooperation and integration of experts from the field of environmental protection and protection against natural and other disasters in the process of creating heritage protection strategies or government programmes.

In terms of relevant climate policies, Slovenia has designed and adopted the [Recovery and Resilience Plan](#) (2021), which foresees investments in infrastructure in the field of culture and cultural heritage by provisioning a budget for the sustainable restoration and revival of cultural heritage and public cultural infrastructure primarily in terms of energy efficiency. The [Long-Term Strategy until 2050](#) (2021) aims to make Slovenia a climate-neutral and climate-resilient society by 2050 by setting goals that should be taken into account across all sectors. In a dedicated section on heritage protection, which is recognised as one of the main areas of action, the strategy outlines the impact of climate change on the preservation of cultural heritage and recalls the International Council on Monuments and Sites (ICOMOS) Working Group on Climate Change and the Protection of Cultural Heritage [document](#) (2019), which emphasises the importance of a holistic treatment of heritage. Furthermore, it states that cultural and natural heritage are indivisible and must be understood and addressed as part of climate change measures. In that regard, the strategy proposes a set of mea-



asures in this context, such as awareness-raising and involvement of the public, promotion of research to monitor the impacts of climate and socio-economic changes on heritage communities, as well as research into preventive and protective conservation procedures, different financial mechanisms for the renovation of heritage buildings to improve fire and earthquake safety and energy efficiency, etc. Additionally, [the Integrated National Energy and Climate Plan \(2020\)](#) predicts the budget allocation for partial and comprehensive energy renovation for museums and cultural heritage buildings. It foresees cooperation with the Ministry of Culture and its involvement in the preparation of criteria for determining eligible costs and tenders, and in upgrading the instrument for the renovation of both private and publicly owned cultural heritage buildings. The plan also acknowledges the importance of heritage protection by proposing the obligation to respect the legislation in this field, inter alia, while implementing its measures. Lastly, [the National Strategy for Museums and Galleries \(2023\)](#), developed by the working group for museum policy, established by the Ministry of Culture, includes trends in contemporary museology and establishes the mission of Slovenian museums and their values (ethics, professionalism, diversity, openness and creativity). The strategy will be the base for a concrete action plan including sector legislation, which the Slovenian museum sector expects.

Spain

Spain is a decentralised unitary state with a parliamentary monarchy, whose territory encom-

passes 17 self-governing regions, two autonomous cities – Ceuta and Melilla – 50 provinces, and 8,131 municipalities. The Parliament (Cortes Generales) is bicameral and comprises the Congress of Deputies (Congreso de los Diputados) and the Senate (Senado), while the central executive power lies within the Government. It has three levels of governance: central government, autonomous communities or regions, and local councils (municipalities and provinces), all of which have general responsibilities for culture, although the majority of public cultural expenditure comes from regional and local governments. At the central level, the highest authority accountable for cultural affairs is the [Ministry of Culture and Sport](#), which is accountable for promoting culture (in terms of funding, subsidies, and grants), facilitating cultural communication between the autonomous communities, managing the archives and museums of a state character; the protection of heritage (cultural, architectural and artistic) against exportation and despoliation; legislation on intellectual property, freedom of expression and communication; and promoting the cooperation between flagship cultural institutions. In terms of environmental protection and climate policy, the central authority is the [Ministry of Ecological Transition and Demographic Challenges](#), responsible for proposing and executing the Government's policy regarding climate change, pollution prevention, protection of natural heritage, biodiversity, forests, the sea, water, and energy.

In terms of cultural policy, the only Act establishing the scope, operation, and governing structure is the [Royal Decree on the Basic Structure of the Ministry of Culture and Sport](#) (2020). Cultural

The Spanish National Strategy emphasises the strong link between culture and sustainable development, as well as the key role culture plays in the social change required by the 2030 Agenda

institutions, such as museums and archives, are regulated by the 1985 [Historical Heritage Act](#), and the other relevant policy paper in the field is the [National Cultural Landscape Plan \(2012\)](#). While none of the afore-mentioned frameworks arrange actions in the context of climate change adaptation, in 2015 the ministry issued the [National Plan for Emergencies and Risk Management in Cultural Heritage](#) conceived with three fundamental objectives: to design measures or procedures for the prevention and protection of cultural heritage in the event of a catastrophe (recognising the climate change implications on heritage sites); to establish an action methodology for these cases to minimise the damage that could be produced; and to design the instruments for action and coordination mechanisms with the different institutions

that intervene in emergency situations. The plan suggests a line of action designed to guarantee effective and coordinated management during these situations, which encompasses the creation of heritage emergency units in autonomous communities, research and documentation programmes to map the heritage sites at the greatest risk, formulation of emergency plans for these assets, etc.

In terms of climate policies, Spain has drafted and adopted the [Law on Climate Change and Energy Transition](#) (2021), the [Recovery and Resilience Plan](#) (2021), the [National Energy and Climate Plan](#) (2019, latest update July 2023), the [National Climate Change Adaptation Plan 2021-2030](#) (2020), [the Spanish Strategy for Circular Economy](#) (2020), and the [Sustainable Development Strategy 2030](#) (2020). The Law on Climate Change and Energy Transition doesn't refer specifically to the cultural sector, but some of the measures planned could be applicable to museum infrastructures such as enhancing energy efficiency in public buildings. The Recovery and Resilience Plan foresees diverse actions in the field of culture, including measures oriented to enhancing the sustainability of the cultural and creative industries, but these are particularly intended for performing arts and music infrastructure. The National Energy and Climate Plan, under the section on just transition includes support for cultural activities and the enhancement of mining heritage and identity, which could benefit museums. It also anticipates the establishment of working groups to draw up information guides for good practice that systematise all environmental criteria in the area of

cultural heritage which, among other things, would focus on the integration of energy renovation and self-consumption facilities into historic and cultural heritage buildings and their surroundings, as well as into the buildings of the designated monumental ensemble.

The National Climate Change Adaptation Plan 2021-2030 doesn't particularly mention museums, but it recognises cultural heritage as one of its areas of activity. Objectives in this context are: to identify the elements of Spanish cultural heritage that are most vulnerable to climate change and define possible adaptation strategies; to incorporate climate change observations and projections into cultural heritage conservation plans; to collect and transfer vernacular knowledge useful for climate change adaptation; to promote cultural tourism that is climate change-adapted and low-carbon; and to encourage international cooperation in knowledge transfer to protect cultural and architectural heritage in the face of climate change. To meet these objectives, the plan sets lines of action, such as training professionals involved in the study and conservation of cultural assets in order to incorporate the climate change dimension into their professional activity. The National Sustainable Development Strategy 2030 emphasises the strong link between culture and sustainable development, as well as the key role culture plays in the social change required by the 2030 Agenda. In light of this, the plan anticipates cooperation among the Spanish Sustainable Development Solutions Network (SDSN), the Secretary of State for 2030 Agenda and the Ministry of Culture and Sport. However the strategy does not plan any measures to foster sustainability in cultural institutions, nor does it mention museums.

Sweden

Sweden is a constitutional monarchy with a parliamentary democracy and a unitary decentralised state whose territory comprises 21 regions and 290 municipalities. Sweden's Parliament (Riksdag) is unicameral, while the executive consists of three levels of governance: central, regional, and municipal. In terms of cultural policy, the lead actor at the central level is the [Ministry of Culture](#), responsible for the arts, cultural heritage, media, national minorities, civil society, sports, and democracy. The [National Heritage Board](#) (central administrative authority) and the County Administrative Boards (responsible for cultural affairs at regional level) are the government agencies and institutions with a specific role in safeguarding the cultural environment, and in implementing cultural heritage legislation, while at local level, local authorities are responsible for the protection and enhancement of cultural heritage. In addition, various bodies are responsible for implementing government cultural policy in diverse areas, such as the [Arts Council](#), which is accountable for project grants allocation, including subsidies for museum organisations. In terms of climate policy, the lead executive authority is the [Ministry of Climate and Enterprise](#) responsible for matters relating to the climate, the environment, energy, enterprise, innovation, radiation safety, the 2030 Agenda for Sustainable Development, and outdoor life.

In the context of research, the most substantial legislation with a cultural scope comprises [the Heritage Conservation Act](#) (1988, with 2002 amendment) and the [Museum Law](#) (2017). The Heritage Conservation Act contains regulations on ancient monuments, historic buildings, religious monuments, and the export and restoration of cultural objects. It points out that care and preservation of the cultural environment is a matter of national concern, and that this task is everyone's responsibility, but doesn't specifically recognise the vulnerability of the cultural environment or heritage assets in the context of climate change or foresee adaptation measures in that regard. The Museum Law regulates the primary roles of a public museum, defining it as "an institution that is open to the public, and which acquires, preserves, investigates, mediates, and exhibits material and intangible testimonies about mankind, and her environment". However, the Law doesn't recognise climate change or anticipate mitigation or adaptation actions. Even though the subject of sustainable transformation isn't arranged through the legislative framework, it seems to be positioned high on the agenda of the National Heritage Board which has issued a number of resources on its platform aimed at promoting sustainable museum practices among the professional community. Some of these include [Museums and Sustainability](#), a [Handbook on Climate Impacts on Cultural Heritage](#), [Methods for Climate and Vulnerability Analysis for Cultural Heritage](#), and [Energy and Indoor Climate](#), and could be beneficial for diverse museum professions.

When it comes to climate legislation, Sweden has adopted [the Recovery and Resilience Plan](#) (2021), the [National Energy and Climate Plan](#) (2020), the [National Strategy for Climate Change Adaptation](#) (2018), and the [Climate Act](#) (2017). The papers include measures that could indirectly influence museums or heritage objects, but none of them proposes specific actions in these areas.

Think global, act local

Local policy examples

Museums are not restricted to investigating and acting on national policies and goals; local policies and ambitions offer opportunities for museums to act in coordination with the needs of their communities. The following examples of local policies were selected based on the information collected through primary research on national policies (administrative division, whether subordinate authorities conduct their own cultural and climate policies, whether there are any links between these in case of national scope, etc.). The summaries are conceived as examples of good practice in this context, encompassing the practical application of existing policies. The methodology was based on the research of primary sources, including official policy papers published by the regional and local authorities, and the search-terms used were identical to those mentioned and used in the case of national policies.

Dresden (Germany)

In 2020, Dresden City Council, which is the elected representative body of the citizens of Dresden, updated its previous climate protection goals with carbon neutrality to be achieved well before 2050. In this resolution, climate protection is declared a municipal task with the highest priority for services of general interest. In 2022, these goals were revised again on the initiative of the citizen's group Dresden Zero Citizens, and a new target has been set for 2035, with a scenario of 2040 to be examined²⁶. In this regard, the City of Dresden has adopted several climate policy papers aiming to achieve the proposed climate neutrality and to utilise adaptation measures across sectors. The subject of adaptation measures in the field of culture is featured in the [Integrated Ener-](#)

[gy and Climate Protection Concept Dresden 2030](#) (drafted in 2016), which proposes measures that the City of Dresden will undertake to increase the energy efficiency of cultural facilities, and which cultural operators can utilise in this context. Some of these measures include the development of a target district heating network and the reduction of transmission losses within it; a gradual increase in the proportion of renewable energy in heat, gas, and the electricity network; and reducing the energy consumption of the water supply and the energetic use of waste potential (in the context of existing plants) and wastewater. Another vital publication, [Guidelines for the Energy Transition in the Cityscape](#), produced by the city authorities, provides recommendations for the use of regenerative energy systems in the building environment, taking into account technical, energetic, economic,

and urban design aspects. Even though the publication doesn't refer specifically to museums or cultural facilities in general, it can be beneficial for them in the context of providing possible solutions that could be adapted and implemented for their practices. The matter of climate change mitigation and adaptation is also highly positioned on the agenda among the authorities regulating the cultural field and cultural operators in Dresden. At the end of 2020, the city council passed the new [Cultural Development Plan](#), the result of a four-year period of planning and extensive research. The plan presents the framework conditions and goals relevant for the next decade. It perceives climate protection as a factor shaping future cultural policies and, in a dedicated section on climate protection and sustainability in the cultural sector, it acknowledges that climate safeguarding is the task of the entire cultural field. It notes that a variety of political frameworks, such as the EU targets for climate and energy policy up to 2030 and the national targets of the federal government, most recently specified in the Climate Protection Programme 2030, impact the cultural sector as a whole and its development. As an example of these influences, questions around the sustainable production of exhibitions and the mobility of artists are given. Furthermore, the plan anticipates a status quo analysis of the cultural establishment and cultural organisations in order to implement its climate protection and sustainability goals. Through the plan, cultural monuments are examined from the point of view of their vulnerability to climate change, for example the heat resilience of the buildings, and in this regard, the plan recognises that a different approach is required, in which both aspects of sustainability (material and cultural) will be discussed and supported.

When it comes to museums, in the section on the perspective for their future, sustainability is considered as part of the museum agenda for the coming years. In addition to the Development Plan, the [Dresden Charta for Sustainability in the Cultural Sector](#) was issued in January 2022 with the aim of supporting the comprehensive sustainability transformation of the cultural sector and hence influencing society, politics and the economy. In its preamble, it acknowledges that “the world is facing enormous challenges due to the global climate crisis. The Paris Agreement and the Agenda 2030 highlight the social and ecological crisis of our time. We need to redefine and practice responsibility for our own operational actions in terms of sustainability”. Furthermore, it recognises the key role cultural institutions play “as spaces for discourse and dialogue”. It defines five guiding principles and proposes practical measures divided into five areas of action: procurement of materials and resources, mobility, building technology and energy, employee development and satisfaction, and communication. Since its publication, the Charta has been signed by numerous Dresden museums.

Dublin (Ireland)

In November 2022, [Dublin City Council](#), the highest local government authority, adopted the comprehensive [Development Plan 2022-2028](#), comprising 16 chapters, including those dedicated to climate action, culture, and built heritage and archaeology. The plan sets the overall framework for the city's development, aiming to improve quality of life for its citizens. In the chapter on [climate action](#), the plan identifies five key action areas –

critical infrastructure and the built environment, transport, biodiversity, resource management, and water resources – and sets targets for emission reduction and carbon neutrality by 2050, in line with the EU Green Deal. In this regard, measures for the cultural sector and built heritage and archaeology are foreseen. The measures include: retaining existing buildings and enhancing their energy performance in keeping with best building conservation principles; supporting operation with other agencies in the investigation of climate change impacts on the fabric of historic buildings; supporting the implementation of the Community Monuments Fund in order to ensure the monitoring and adaptation of archaeological monuments and to mitigate against damage caused by climate change; protection and enhancement of Dublin City's cultural resources to provide new opportunities for engagement with issues facing the city; and supporting the provision of local arts and cultural facilities as part of the implementation of vibrant mixed-use urban villages. The chapter on [culture](#) simultaneously acknowledges that, in shaping policies, a balance must be struck between achieving the cultural vision and aims of the Development Plan and meeting the targets of the National Planning Framework in terms of climate resilient, sustainable, compact growth, though without introducing concrete measures in this context. In the chapter on built [heritage and archaeology](#), the ad-

verse effects of climate change on heritage assets are recognised, indicating that the challenge will be to conserve Dublin's heritage for future generations and to develop sustainable policies and plans for the climate change adaptation of built and archaeological heritage. In order to ensure the protection and enhancement of the city's built heritage, a strategic approach is drawn, including among its measures: ensuring that buildings of architectural and historic interest are protected. This includes those structures that are considered, in the opinion of the Planning Authority, to be of special architectural, historical, archaeological, artistic, cultural, scientific, technical or social interest in the Record of Protected Structures; promoting the environmental benefits of heritage conservation as a crucial contributor to sustainability as it fulfils the interrelated economic, cultural, social, and environmental principles of sustainable development; promoting best practice in the restoration of the fabric of historic buildings; and enhancing adaptive capacity, strengthening resilience and reducing

Dublin's Development Plan 2022-28 places great attention on the role of arts and culture in sparking climate action and puts creative climate action and sustainability among its five priority areas

the vulnerability of heritage in line with the National Climate Change Sectoral Adaptation Plan for Built and Archaeological Heritage, etc.

Another important policy paper in terms of climate change mitigation and adaptation is the [Climate Change Action Plan 2019-2024](#), produced by the City Council in association with [Codema \(Dublin's Energy Agency\)](#) and the [Dublin Metropolitan Climate Action Regional Office \(CARO\)](#). The plan features a range of actions across five key areas – energy and buildings, transport, flood resilience, nature-based solutions, and resource management. It acknowledges the risks of climate change impacts on environmental and heritage loss, and presents actions in this context primarily in the area of flooding adaptations. When it comes to cultural policy, the [Culture and Creativity Strategy 2023-2027](#) for Dublin City was issued in February 2023 as a part of the Creative Ireland programme. The strategy places great attention on the role of arts and culture in sparking climate action and puts creative climate action and sustainability among its five priority areas. It does not propose particular adaptation measures for museums but rather provides an overview of the programmes to be implemented that could be beneficial to them, in order to meet strategic priorities. Another vital strategic document is the [Dublin City Strategic Heritage Plan 2023-2028](#), which is currently in the process of public consultation. The draft plan currently available is the outcome of extensive consultation with three expert working groups for archaeology, architectural heritage and cultural heritage, which identified six strategic goals with defined objectives for each of them. The introductory provision is dedicated to climate change, conceding that the plan will be delivered

in the context of ongoing global climate change and biodiversity emergencies, while in terms of practical measures, it proposes the identification of threats to built, archaeological, and cultural heritage as a result of climate change and as a result of climate adaptation measures, and provides guidance on the management of vulnerable heritage resources and advice on appropriate mitigation measures.

Helsinki (Finland)

In 2021, Helsinki set an ambitious target to become carbon neutral²⁷ by 2030 (emission reduction of at least 80%, while the rest can be compensated), attaining carbon zero²⁸ status by 2040, and aiming to become carbon negative²⁹ afterwards³⁰. In addition, the city has adopted comprehensive strategic documents and appropriate action plans to adapt and prepare for changes brought about by the climate crisis, and the subject of climate change and adaptation urgency is also recognised in strategic documents in the field of culture. In 2020, the [Helsinki City Council](#), which is the city's highest decision-making body, published its vision for arts and culture over the next decade – [Art and Culture in Helsinki 2030](#). The publication was formulated by an independent committee comprising experts from across the cultural sphere. In the introductory provisions, it is emphasised that “such things as technological development, the transformation of working life, demographic change, and climate change are having a significant impact on the lives of the people of Helsinki. Art serves as an environment where tensions and threats can be addressed safely. And

this same environment nurtures the images of the future that are worth pursuing”. Furthermore, it puts forward the idea of an art field that promotes a sustainable world: “Art and culture operators in Helsinki function in an ecologically, socially, and economically sustainable way. Art and culture operators in Helsinki are aware of their responsibilities, respect their environment, and take the initiative in combating climate change. Through their work, they assist in reversing the direction of the environmental crisis and in ecological reconstruction.” In this regard, the paper proposes measures that do not refer solely to museums but rather cover the entire cultural field: “The City of Helsinki will help art and culture operators monitor their carbon footprint, support its reduction, and challenge actors in the field of arts and culture to become carbon-neutral by 2030.” Another important strategic document linking the cultural field, especially cultural and archaeological heritage, to environmental sustainability and climate change is the [Cultural Environment Programme 2023-2028](#)

(2023), developed in cooperation by the [City Museum](#) and the [Urban Environment Division](#). The programme provides an overall view of the values of Helsinki's cultural environments and proposes a plan for their preservation and contextualisation within the UN's Sustainable Development Goals. Helsinki has also designed a thorough, four-year [City Strategy](#) (2021-2025), *A Place of Growth*, which recognises art and culture as enablers of “a good life”. The strategy does not foresee concrete climate change adaptation measures for museums but does propose the reinforcement of structures to make cultural operations more resilient in the face of future crises and the establishment of new funding grant schemes in this regard. When it comes to climate policy, the City of Helsinki has published [Climate Change Adaptation Policies 2019-2025](#), a strategic document whose implementation aims to “decrease the negative impacts of climate change on societal functionality, the economy, nature, and people's everyday lives”. The strategy recognises several measures that include

“The City of Helsinki will help art and culture operators monitor their carbon footprint, support its reduction, and challenge actors in the field of arts and culture to become carbon-neutral by 2030.”

cultural operators and recommends intersectoral cooperation with the city's [Culture and Leisure Division](#), such as climate risk mapping (in terms of vulnerability to climate change impacts), and the integration of these adaptation measures into annual economic and operational planning or action plans. Another vital climate policy paper is the [Carbon Neutral Helsinki Action Plan](#) issued in 2022, but for now, the plan contains measures solely for the sectors that are the most significant sources of direct emissions – heating, transport and electricity. However, the city's previous [Action Plan](#), which was developed based on the prior target of reaching climate neutrality by 2035, encompassed diverse measures in terms of low carbon and circular economy solutions that included the cultural sector, among others.

Ljubljana (Slovenia)

In 2016, the City of Ljubljana received the [European Green Capital Award](#) for its consistent record of achieving high environmental standards, and in 2022, it was selected for the [EU Mission: Climate-Neutral and Smart Cities](#). The mission³¹ comprises 100 cities that will adopt measures to become climate-neutral by 2030 and serve as the role model for the remaining European cities to do the same by 2050³². In this regard, several strategic documents were issued whose implementation is directed towards achieving the target set.

When it comes to museums and the cultural field, the [Local Energy Concept of the City of Ljubljana](#) and its Action Plan propose a number of adaptation measures for cultural facilities and her-

itage assets, while the variety of other proposed measures could also be beneficial for museums since they refer to the totality of public buildings. These measures encompass the installation of solar power plants on the roofs of public municipal buildings with a long-term supply of carbon-neutral electricity from renewable sources (except the objects of cultural heritage) and co-financing of roof insulation on buildings with cultural heritage status as a part of the Ljubljana My City project. The [Urban Forest Development Strategy 2020-2045](#) and the [Rural Development and Urban Farming Strategy 2021-2027](#) contain provisions on the sustainable conservation and promotion of cultural and natural heritage.

In terms of cultural policy papers, in 2020 the City Council of Ljubljana adopted the [Culture Development Strategy](#) for the period 2020-2023 with guidelines up to 2027, addressing the key social challenges facing the city. The strategy was completed under the extraordinary circumstances of the global pandemic, and Ljubljana's candidacy for the title of European Capital of Culture 2025, which influenced the shaping of the proposed policies. In the SWOT analysis, it recognised the sustainable implementation of cultural events, high green awareness of citizens, and the potential for the reuse of materials as opportunities, and further acknowledged culture as an important pillar of sustainable development. The strategy recommends increasing the number of programmes and projects that tackle socially and environmentally relevant topics, and emphasises the importance of biodiversity preservation. Besides strategic documents in the field, the Department of Culture of Municipality of Ljubljana continuously promotes

Ljubljana's Cultural Development Strategy acknowledges culture as an important pillar of sustainable development

sustainable transformation principles by publishing relevant news from the cultural field on its official [webpage](#), and has listed the energy-efficient renovation of Ljubljana Castle as one of its [top cultural achievements](#).

Prague (Czech Republic)

In 2019, the City of Prague set an aim to reduce its carbon emissions by 45% before 2030. In addition, the city is undertaking comprehensive adaptation measures drawn in the [Capital City of Prague Climate Change Adaptation Strategy](#) issued in 2020 by [Prague City Hall](#), upholding a vision of long-term resilience and reducing vulnerability to climate change effects through the step-by-step implementation of adaptive measures to provide the city's inhabitants with high wellbeing. The strategy provides an overview of observed and projected climate change effects in Prague and proposes measures divided into six main areas of action. Under measures to reduce extreme hydrological event impacts, it recognises

cultural heritage as an area highly vulnerable to floods and calls for the continuing development and enhancement of the integrated joint rescue system.

When it comes to measures taking into account museums, the majority of these refer to reducing energy performance in the spectra of public buildings, and increasing the proportion of energy produced from renewable sources. These actions encompass: supporting the use of locally available renewable energy sources in buildings, such as heat pumps, biomass burning boilers, solar thermal panels, solar panels on roofs and other fixed constructions, etc.; supporting incentive programmes for restoring buildings at higher energy effectivity standards than the legal minimum, both at national level (e.g. the [New Green Savings Programme](#)) or by implementing the city's own programmes (the [Operational Programme Prague – Growth Pole of the Czech Republic](#)), taking into account cultural heritage conservation, protection and management, and built-up area patterns; installing an energy-efficient lighting system; and integrating an intelligent Building Management System (BMS) applying current information technologies. The strategy is complemented by the [Implementation Plan](#) for a four-year period (2020-2024), which recognises the role of culture in improving environmental education and outreach. Another vital climate policy strategic document is the [Prague Climate Plan 2030: Prague on the](#)

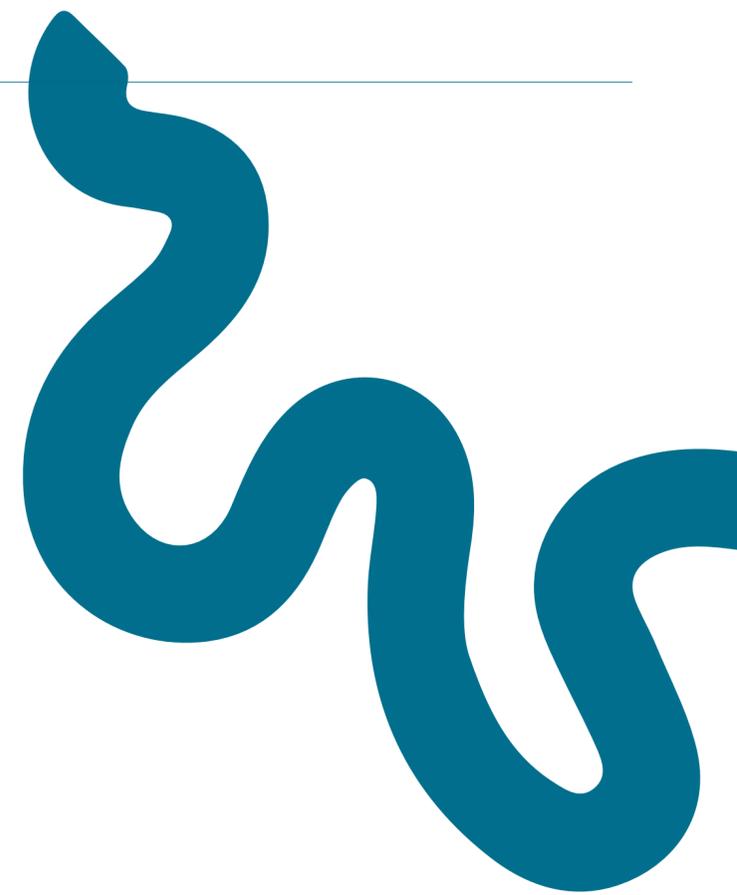
[Road Towards Carbon Neutrality](#), published in 2021, which sets out concrete measures in four elementary areas (sustainable energy, sustainable mobility, circular economy, and adaptation), whose implementation should lead to the Prague 2030 reduction target and reaching climate neutrality by 2050. The plan proposes several measures (in line with those in the Adaptation Strategy) concerning the field of culture, such as the introduction of renewable energy sources and sustainable heat sources, such as photovoltaic (PV) systems or heat pumps, into the energy management of school buildings, playgrounds, and cultural and social-healthcare facilities. As a noteworthy measure, the plan foresees the establishment and support of neighbourhood and community gardens, eco-gardening, and sustainable agriculture, and in this regard showcases the example of Prague National Museum, which is already utilising this

measure. The plan, like preceding climate regulations, acknowledges the role of culture in awareness-raising by proposing regular events bridging culture and education in low carbon technologies, and proposing one binding measure in this regard – a ban on single-use plastic during public events, including all cultural events financially supported by Prague City Hall.

When it comes to the cultural policy framework, the Department of Culture and Tourism of the Prague City Hall, published a conceptual paper, [Cultural Policy for the Capital City of Prague 22+](#) (intended to run until 2030). The strategy sets cross-cutting criteria as the basic principles of this document and its implementation, and recognises sustainability as one of them, including environmental, social and economic sustainability. It is necessary to keep in mind the sustainability as-

pects of all investment projects. The sustainability of culture also relates to the working conditions of cultural actors and related professions (technical, production, etc.), which must be dignified, and the work adequately financially rewarded. Sustainability is also understood regarding environmental approaches to the organisation of one-off cultural events and the operation of cultural organisations. Sustainability, as well as climate change, is also one of the important topics that artists and creatives deal with in their work. The strategy does not foresee any practical adaptation measures in this context, nor any for museums, though it can be expected that they will be addressed in an appropriate action plan.

The Prague Climate Plan foresees the establishment and support of neighbourhood and community gardens, eco-gardening, and sustainable agriculture, and in this regard showcases the example of Prague National Museum



Get inspired

Museum action examples

As demonstrated by the collection of climate and sustainability policies across Europe, museums and the cultural sector at large are not always considered in the sustainable transformation of our society. It is therefore not always possible for a museum to react to a policy in place, rather they must act of their own accord and demonstrate their impact and potential to policy makers. Included here are exemplary actions by museums taking action to meet the challenge of the climate crisis. The museum examples were chosen based on the extent of their involvement in sustainable transformation processes. Different types of museums that address the climate crisis in various ways were selected to offer a range of innovative sustainable transformation pathways to the museum community. May the action of fellow museum colleagues serve as inspiration.

Kunst Haus Wien (Vienna, Austria)

[Kunst Haus Wien](#) in Vienna, Austria, was designed by the visionary artist Friedensreich Hundertwasser and embodies a unique fusion of art, architecture and ecological consciousness, presenting a unique platform to delve into the interconnected realms of urban design, artistic philosophy and spatial experience. Through a multidisciplinary lens, Kunst Haus Wien promotes environmental consciousness and integrates eco-friendly practices into its operations.

Central to [Kunst Haus Wien's ecological mission](#) is its dedication to community engagement and education. The institution hosts workshops, seminars and exhibitions that explore the intersection of art and sustainability, fostering a sense of environmental stewardship among its visitors. By

facilitating collaborations among artists, thinkers and the public, the institution encourages the exchange of ideas that transcend cultural, social and economic boundaries. Kunst Haus Wien extends its commitment to ecological sustainability to its immediate surroundings. Lush green spaces and indigenous plantings envelop the building, serving as habitats for local flora and fauna. This deliberate integration of biodiversity not only enhances the visual appeal of the institution but also contributes to the overall health of the urban ecosystem.

The building's undulating lines, vegetation-covered façades and incorporation of recycled materials exemplify an integration of aesthetics and environmental considerations. This distinctive design not only provides an inspiring visual experience but also serves as an educational tool, encouraging visitors to contemplate the relationship between

art and the environment. To address energy consumption, Kunst Haus Wien employs various sustainable practices. The building incorporates passive solar design principles, optimising natural light and reducing the need for artificial illumination. Photovoltaic panels adorn the rooftop, harnessing solar energy to power a portion of the facility's electricity needs. Additionally, energy-efficient heating, ventilation and air conditioning (HVAC) systems and smart lighting contribute to minimising the institution's carbon footprint. In relation to waste reduction strategies, Kunst Haus Wien takes a proactive stance towards waste reduction by implementing comprehensive recycling and composting programmes. Public spaces are equipped with clearly labelled bins to facilitate waste separation, educating visitors on responsible waste disposal. The institution also collaborates with local artists to repurpose discarded materials into captivating artworks, underscoring the potential of waste as a resource.

Beyond its infrastructural architectural merits, Kunst Haus Wien serves as a canvas for environmental advocacy. The artworks showcased often explore ecological themes, shedding light on pressing [environmental issues](#). Temporary exhibitions, installations and workshops engage visitors in dialogues about sustainability, creating a bridge between art appreciation and environmental consciousness. Through its innovative architectural design, energy-efficient practices, waste reduction initiatives, and educational and community en-

agement, Kunst Haus Wien underscores the transformative power of art in shaping a more sustainable future.

MuSe (Trento, Italy)

[MuSe - Museo delle Scienze di Trento \(Trento Science Museum\)](#) in Italy, which has been active since 1964, actively pursues new strategies for investigating nature and promoting science. Since the museum's 2015 adoption of the UN Agenda 2030, it has become a model museum that promotes sustainability in all aspects of its work – infrastructural development, usage of resources, programme strategies, promotional and dissemination activities, etc.

The building is constructed using techniques that improve environmental sustainability and save energy as much as possible. All of the materials used for construction have local origin, thus contributing to reduced transport pollution. In addition to renewable sources and high-efficiency systems, the museum features a shading system that raises the energy performance of the building regardless of the season, as well as a system of using rainwater for the irrigation of the greenhouse. With the idea of encouraging visitors to come by public transportation or bikes, the museum has limited parking for cars, while enlarging the area for bikes.

The main goal of MuSe's Integrated Museums project is to transfer knowledge and understanding of the main challenges the planet is facing, and thus encourage the development of a culture of sustainability

The [Sustainability Gallery](#) has been open since 2021 as the exhibition space for the promotion and exploration of 17 Sustainable Development Goals (SDG) of the UN Agenda 2030. The initiative is organised together with ASviS – Italian Alliance for Sustainable Development and the CSR and Social Innovation Exhibition, as well as numerous sponsors and supporters. Exhibition displays represent concepts and best practice, installations, and video interviews that consider the future of the planet from different perspectives. The main goal is to transfer knowledge and understanding of the main challenges the planet is facing, and thus encourage the development of a culture of sustainability. In this regard, a good example is the [Goal Zero Area](#), a special zone in which entrepreneurial practices that are more environmentally, socially and economically sustainable are promoted.

MuSe initiated [Integrated Museums](#), a research project that aims to support museums in implementing the national strategy for sustainable development and urban agendas. This initiative was held in collaboration with the International

Council of Museums Italy (ICOM Italy) and the National Association of Science Museums (ANMS), with the support of the Ministry of Ecological Transition (MiTE) for the period 2018 - 2022. The main goals of the project are to emphasise the potential and possibilities for museums to become incubators for social change in terms of contribution to the SDGs.

Alongside its own activities, MuSe is active in providing space for various events such as the Sustainable Development Festival on education for sustainable development entitled [GenerAzione 2030 – Siamo Actendo](#). At the same time, it pays attention to the online space, which is also being used for promoting SDGs in interactive and engaging ways.

Museum für Naturkunde (Berlin, Germany)

The [Museum für Naturkunde](#) (Natural History Museum) – Leibniz Institute for Evolution and Biodiversity Science is one of the oldest museums in Berlin, founded in 1810. It holds the status of an integrated research museum within the Leibniz Association, which connects 97 independent research institutions that range in focus from the natural, engineering, and environmental sciences to economics, the spatial and social sciences, and the humanities. With over 30 million artefacts, the Museum für Naturkunde is home to Germany's largest collections in the fields of zoology, palaeontology and mineralogy. The museum defines its mission as discovering and describing life and earth – with people, through dialogue. “As an excellent research museum and innovative communication platform, we want to engage with and influence the scientific and societal discourse about the future of our planet, worldwide” – [Museum für Naturkunde: Our Strategy for an Integrated Research Museum](#) (2020). In this regard, the main pillars of the museum's work encompass knowledge transfer, research and collections of unique natural and cultural assets that are presented through permanent and frequent special exhibitions. In 2018, the museum presented the [Future Plan](#) – Conceptual and Structural Development Perspectives for the Museum für Naturkunde Berlin, which outlines measures that will enable it to fulfil its responsibility as a place of information, reflection and dialogue with society. The plan emerged from an understanding of the museum's role in the context of contributing to and promoting the UN SDGs and the framework of the climate crisis, and its key elements include structural and infrastructural upgrading with the addition of new

buildings to the available space, the digitisation and development of the collection, and a knowledge transfer project that will facilitate well-founded and multi-layered information circulation among various stakeholders, audiences and the general community.

Another vital guideline for museum operations is the [2020 Strategy](#), which aims to strengthen the museum's role in society. The strategy identifies four SDGs that the museum mainly aims to address: SDG 14 - Life Below Water, SDG 15 - Life on Land, SDG 3 - Good Health and Wellbeing and SDG 12 - Responsible Consumption and Production. Through its strategic orientation and regular activities that encompass various inclusive and interactive programmes such as [Citizens Science](#), the museum represents a platform for community dialogue on environmental topics and the formation of a discourse of the envisioned future. Furthermore, since March 2019, the Natural History Museum has been supporting the protests of pupils and students as part of Fridays for Future, and in this regard, it organised various workshops to provide a forum to address issues of climate protection and to promote an exchange between scientists and students.

Museo Reina Sofía (Madrid, Spain)

The [Museo Nacional Centro de Arte Reina Sofía](#), known for its remarkable collection of contemporary and modern art, holds a prominent position within the cultural landscape of Madrid and the international art field, fostering a sense of shared identity and heritage among diverse com-

munities. By bridging the gap between art and society, the Museo Reina Sofía contributes significantly to both artistic enrichment and societal discourse. Through carefully curated exhibitions, educational programmes and community outreach initiatives, the museum advocates environmental consciousness, addresses ecological issues and the human impact on the environment, and creates a platform for dialogue and reflection. By showcasing artworks that explore environmental concerns, human interactions with nature, and the consequences of unchecked development, the museum prompts critical reflections on these topics.

Commitment to eco-infrastructure interventions, energy consumption, waste management, and exhibition strategies resulted in significant importance from a sustainability perspective. The building itself blends contemporary design with eco-friendly elements, and the museum's use of locally sourced and recycled building materials reduces its carbon footprint while contributing to the overall aesthetics of the space. The museum has invested in energy-efficient lighting systems, heating, ventilation, and air conditioning (HVAC) upgrades, and renewable energy sources such as solar panels. Within its waste reduction strategy and innovative practices, the museum has implemented waste separation and recycling programmes, encouraging the use of reusable materials while at the same time exploring sustainable sourcing of materials

for exhibitions, publications and infrastructure that can contribute to a more comprehensive ecological approach and inspire visitors, artists and fellow institutions to prioritise sustainability, thus catalysing a broader movement toward a more environmentally conscious future.

The museum's dedication to sustainability extends beyond its physical walls. Through workshops, seminars and educational programmes (such as The Night of Ideas: [A Live Planet](#), [The Nature Camera](#), etc.) the Museo Reina Sofía actively engages with the community on environmental topics. By fostering a sense of environmental responsibility among visitors, the institution becomes a catalyst for change beyond the realm of art.

The Museo Reina Sofía has invested in energy-efficient lighting systems, heating, ventilation, and air conditioning (HVAC) upgrades, and renewable energy sources such as solar panels

Museum of Contemporary Art Belgrade (Belgrade, Serbia)

[Overview Effect](#) was an international exhibition curated by Blanca de la Torre and Zoran Eric, held in the [Museum of Contemporary Art Belgrade](#), Serbia, between October 2020 and September 2021. The goal of the exhibition was to explore the complexity and correlations of ecology-related problems, by rethinking the role that art takes in questioning ecological justice and building a better future. The curatorial strategy covered six main topics/questions: Gender, race, and the colonial trace; Watertopias; There is no edge!; Learning from indigenous knowledge; Beyond anthropocentrism; and Back to the future.

Because of the coronavirus pandemic, the project was split into two phases. The first part occurred in October 2020, and consisted of art installations in the museum's sculpture park, the creation of mural paintings, performances, workshops, etc. Many panel discussions and lectures were held, gathering professionals, activists and ecology initiatives. The second part was an exhibition at the Museum of Contemporary Art Belgrade,

running from June to September 2021, which consisted of works by 60 international artists and collectives.

As ecology was incorporated both in the content and format of the exhibition, curators created guidelines for taking care of the carbon footprint of the exhibition's production, focused on reducing the use of pollutants and petrol-derived materials, and instead favouring biodegradable and recycled materials. Waste and energy-saving plans were incorporated into exhibition planning. Prioritising green ways to transport art pieces was taken into account as well. The guidelines recommend the implementation of the "7R" sustainability criteria for each step of the exhibition-making process: Reduce, Reuse, Recycle, Repair, Repurpose, Rethink and Reject. Being aware that it would not be possible to make the exhibition sustainable, the curators decided to offset emissions by the end of the project.

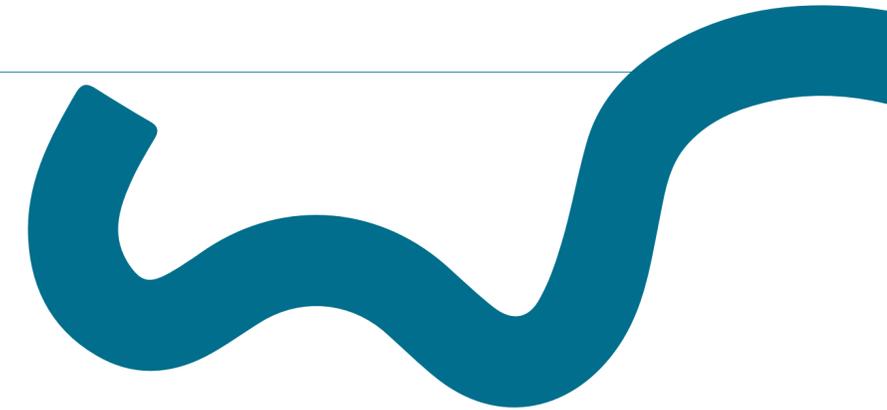
The exhibition also gathered together a transnational network of collaborators and partners that will continue to research questions posed by curators within the concept of the exhibition.

Among the organisations and museums involved in the network are: Pori Art Museum (Pori, Finland), Centro Atlántico de Arte Moderno (Gran Canaria, Spain), Museo Universitario de Ciencias y Artes (MUCA) Roma and Casa del Lago UNAM (Mexico City, Mexico), Pilchuck Glass School (Seattle, USA), ARTPORT_making waves (Frankfurt, Germany), ARTSail (Miami, USA), Society, Work, and Politics Institute, University of the Witwatersrand (Johannesburg, South Africa) and Božidar Jakac Gallery (Kostanjevica na Krki, Slovenia). This collaboration should ensure the long-term legacy of the project – the creation of a new, integral ecology awareness.

Rijksmuseum (Amsterdam, Netherlands)

Established in 1800, [the Rijksmuseum Amsterdam](#) in The Netherlands has evolved over decades into one of the main pillars of Dutch identity. As a significant cultural institution, the Rijksmuseum not only preserves and showcases artistic treasures but also serves as a platform for educational engagement and social and cultural exchange within its strategies and initiatives. Various aspects of the museum's operations and infrastructure underline its commitment to eco-sustainable practices by reducing its ecological footprint while maintaining its cultural significance, and synchronising its activities with the principles of environmental responsibility.

Efforts towards achieving eco-sustainability by focusing on key areas of action resulted in a [BREAAAM](#) (Building Research Establishment Environmental Assessment Method) certificate with a



five-star rating, making it the first museum in the world to achieve the highest score for the management of an existing building. By assessing the Rijksmuseum's approach to energy efficiency, waste management and conservation practices, one can analyse the broader implications and importance of integrating eco-sustainability into the cultural heritage and museum sector. Within its energy-efficient strategy and action plan, the museum has implemented measures to minimise its carbon footprint, including the installation of energy-efficient lighting systems, climate control technologies, and the incorporation of renewable energy sources such as solar panels. These initiatives not only reduce the museum's energy consumption but also serve as educational tools for visitors, highlighting the potential for sustainable technologies. Efficient waste management practices have been integrated into the museum's operations: through waste reduction, recycling programmes and composting, the Rijksmuseum aims to minimise waste sent to landfills. The Rijksmuseum's building design and its recent renovation and modernisation have integrated new technologies while preserving the historical dimension, incorporating sustainable elements such as natural lighting, ventilation systems and eco-friendly materials. The Rijksmuseum features state-of-the-art laboratories and applies meticulous restoration processes and conservation techniques that prioritise the use of environmentally friendly materials.

The Museum of Contemporary Art Belgrade incorporated energy-saving plans into exhibition planning and prioritised sustainable art work transport

Recognising its role in educating and involving audiences/society in the ecological sustainable framework, the museum integrates sustainability themes into its exhibitions, providing visitors with insights into the historical context of environmental practices. Additionally, educational programmes for schools and the public emphasise the importance of ecological conservation and inspire positive social change.

Vasa Museum (Stockholm, Sweden)

[The Vasa Museum](#), as a part of the Swedish National Maritime and Transport Museums (SMTM) agency, is a renowned cultural institution in Stockholm, Sweden, dedicated to preserving and displaying the warship Vasa, which sank on its maiden voyage in 1628 and was salvaged in 1961.

The Vasa Museum's strategies, practices and environmental sustainability initiatives demonstrate the success of sustainable museum management in the context of cultural heritage preservation, contributing to the minimisation of its ecological footprint and the fostering of different attitudes to a more sustainable future. Since 2009, the museum's eco-sustainable approach has included systematically working on environmental strategies based on an ["environmental management system"](#) (EMS), followed by certification under the voluntary international environmental standard ISO 14001.

The museum's architecture and design play a crucial role in its environmental impact. The building's design incorporates energy-efficient features,

such as passive heating and cooling systems, natural lighting optimisation, and the utilisation of sustainable construction materials. This not only reduces the museum's energy consumption but also sets an example for integrating historical preservation with modern, sustainable design. Efforts to reduce energy consumption and enhance energy efficiency within the museum are evident. The installation of solar panels, efficient lighting systems and smart climate control systems has significantly lowered the museum's energy requirements. Continuous monitoring and adjustment of energy usage further exemplifies the commitment to sustainability. Effective waste management practices have been implemented to reduce the museum's waste generation and promote recycling. Preservation methods for artefacts, including humidity and temperature control, contribute to extending the lifespan of historical items, aligning with the principles of conservation and reducing the need for resource-intensive restoration.

The museum's commitment to sustainability extends to its visitors. Interactive displays and educational programmes raise awareness about environmental challenges and the importance of cultural heritage preservation. Through these initiatives, the museum promotes sustainable behaviours beyond its premises.



**The Vasa
Museum's commitment
to sustainability extends
to its visitors through raising
awareness about environmental
challenges and the importance of
cultural heritage preservation**

Get started

Our research of national and local EU climate and sustainability policies, as well as the examples of good practice in the sustainable transformation of museums mapped in this report, show the presence of initiatives and interventions that contribute to sustainable transition, but also reveal a considerable lack of cultural and environmental policies that are directly inclusive of the cultural and creative sectors. Furthermore, it is important to note that the contributions of museums to the development of a sustainable, inclusive and equitable society are not always explicitly recognised. Museums are occasionally viewed as separate from other social actors, and there is often a lack of awareness that museums are integral components of a multifaceted and interconnected system.

In light of this, one of the tasks of modern museums is to develop a platform for advocating for the sustainable transition of their institution, by not only encouraging cultural actors and artistic initiatives to act within the principles of sustainable transition, but also developing systemic solutions that are currently lacking. Initially, it may seem beyond the capacity of many museum professionals to position themselves in the political climate context, particularly when many are not aware of whether policies supporting a sustainable transition are addressed to them. With this research, NEMO presents opportunities for museums to become more fit to the task at hand. Museum professionals can determine the appropriate policies in place within their region and use these as a basis to plan a project to support their institution's sustainable transformation, later presenting the findings and needs to policymakers and funders – explicitly connecting intended results with the ambitions of the local, regional or national policies in place. And in the scenario where applicable policies are lacking, museum professionals can collectively turn to policymakers and argue that museums must be included, using the examples

from different regions compiled here, alongside a campaign highlighting the projects and initiatives supportive of a sustainable transition that are underway in their museum.

The following guide is designed to help museums that are ready to support their community and advocate their role and potential in contributing to a sustainable transition by better positioning themselves as agents of change. Together, we can develop recognition and support for the role of museums in addressing the climate crisis.

7 tips for advocating the sustainable transition of your museum

1. Awareness and Acknowledgement

Acknowledge that many museums use huge amounts of energy, may benefit from polluting funds, can employ wasteful practices, and might exist in a structure reluctant to change.

Recognise that climate change requires rapid action across all sectors, including museums, and that the current pace of transformation is not nearly fast enough.

Recall that a sustainable transition means more than environmental impact measurements and energy management. Gender equality, social inclusion, decent working conditions, access to education, etc., are also elements of a just and sustainable transition.

2. Putting the institution on the map for stakeholders

Analyse existing policies and targets in terms of climate protection, reducing greenhouse gas emissions, and other sustainable goals. Consider how you can incorporate local, national or global goals into your practices and the value chain you create.

Engage with your community and consider how to prioritise actions based on local needs while expanding public awareness on the topic of climate change. The impact of your project and campaign can extend beyond exhibition walls and benefit your local community.

Research how to contact policymakers in your area, particularly those with profiles relevant to cultural policy, urban development and sustainability. Plan to reach out to local, regional and national representatives, and any other actor or funder with potential impact on your museum.

Get inspired by initiatives and best practice from the cultural sector and beyond, and benchmark progress with examples and guidance shared by national museum organisations.

Collaborate with other museums, cultural organisations and institutions, companies, and community stakeholders who are interested in the sustainable transition and climate action.

Join a network already dedicated to the cause and act collectively with museum professional colleagues. With local partners, you could form an alliance to advocate necessary changes. A successful sustainable transition requires everyone to get involved!

3. Networking and learning from each

4. Investigating and restructuring museum operations

Evaluate what your museum is already accomplishing when compared to relevant sustainable development policies or climate adaptation ambitions. Build on the exemplary educational or social inclusion programmes that your museum may already have in place.

Integrate the sustainable transition with an official manifesto and accompanying strategic/action plan, and extend responsibility to a 'green team' or other representative. Ensure that employees, board of directors, founders, financiers, partners, and friends of the institution are all informed about this.

Determine what else your institution can do to contribute to the sustainable transition while maintaining the standards of its offers and responsibilities. For example, organise workshops or public forums to discuss the link between heritage and sustainability.

5. Taking the next steps

Act on your findings: get started with a project (big or small) that adheres to the values of your institution and supports the sustainable transition of your community.

Apply existing assessment frameworks to measure your efforts and justify your demands.

Identify key areas of improvement and arguments for your project and campaign. For example, if performing an energy audit, determine the best ways to enhance energy efficiency or transition to renewable energy and determine the cost to make that transition.

6. Advocate your position to stakeholders

Present your results to decision-makers and funders while telling the story of your institution, its value to the community and its ongoing commitment to the sustainable transition.

Highlight what your museum is already doing well and share your assessment of how to improve by combining your requests with existing data and a good story about the museum.

Demonstrate the need to make changes on a systemic level and integrate your findings into existing policies or future funding programmes.

Incorporate the media in the process by organising media briefings and distributing timely press statements to inform the public of your initiative and its progress.

Share your progress with your network to continue the cycle of inspiration and collective action in the sector!

7. Inspire others!

Methodology and sources

The methodology of this report encompassed research of primary sources such as laws, acts, strategies, action plans and other officially published government documents in the field of climate protection and culture, with an emphasis on museums and the cultural heritage sector.

The climate policy papers were obtained through the website [Climate Policy Radar](#), which contains profiles for each country, listing the entire legislation in this area, as well as through the official websites of the relevant ministries. Papers analysed for each country included the [National Energy and Climate Plan](#) (NECP), the [National Recovery and Resilience Plan](#), and the [National Long-term Climate Neutrality Strategy 2050](#), since these documents are mandatory for all EU member states, while the other policy papers analysed varied from case to case (general climate law if adopted, action plans on medium or long-term climate strategies, etc). Insights into the legislation on culture were obtained through the country profiles in the [Compendium of Cultural Policies & Trends](#), whose fourth section provides an overview of a country's legal system for cultural policymaking and vital pieces of legislation, the [UNESCO database of National Cultural Heritage Laws](#), and official websites of competent authorities. Papers analysed in this regard include general laws on culture, cultural institutions, museums, and heritage protection, as well as available strategies, policy guidelines, and official government programmes. Terms used for searching the climate policy papers included the following: culture, cultural, cultural landscape, museums, heritage, and art. Terms used for searching cultural policy papers were: climate, climate change, environment, environmental protection, ecology, sustainability,

and energy. It is important to emphasise that a majority of cultural policy papers recognise the phrase and concept of sustainability, but in terms of financial or cultural sustainability, or else in relation to the UN's Sustainable Development Goals (primary social ones), without taking into account ecological sustainability in regard to climate change, hence these findings were excluded as non relevant to the research subject.

When it comes to the introduction of the territorial division and general political framework, information was compiled through the European Committee of the Regions official website, [Division of Powers](#) section. Secondary sources were used to confirm and complement the primary findings and they encompassed the [Culture in the EU's National Recovery and Resilience Plans](#), a publication developed by the [Culture Action Europe](#) network, [Towards Sustainable Arts: European Best Practices and Policies](#), published by the [Boekman Foundation](#), and [Climate Laws in Europe Essential for Achieving Climate Neutrality](#), published by the [Climate Action Network](#) Europe. It is important to point out that climate policy is a rapidly changing field due to the continually emerging EU regulations (under the [European Green Deal](#) and [Fit for 55 package](#)), and more and more legislative changes can be expected in the future that will presumably affect the cultural sector. Therefore continuous monitoring of these processes is required in order to ensure successful adaptation and contribute to the mitigation efforts.

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1. The program is financed by Austria's Recovery and Resilience fund.
2. https://www.belgium.be/en/about_belgium/government/federal_authorities/competence_federal_government
3. <https://www.culturalpolicies.net/database/search-by-country/country-profile/category/?id=5&g1=1>
4. <https://climat.be/actualites/2023/mesures-federales-d-adaptation>
5. More on the EU Recovery and Resilience Facility: https://commission.europa.eu/business-economy-euro/economic-recovery/recovery-and-resilience-facility_en
6. More information and document in original language: <https://climat.be/politique-climatique/belge/nationale/plan-national-energie-climat-2021-2030>
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7. Press release 07/07/2023 from the office of the Minister for Culture: <https://linard.cfwb.be/home/presse--actualites/publications/la-renovation-energetique-de-batiments-culturels-pour-suit-son-chemin--25--projets-valides-par-le-gouvernement.publicationfull.html>
8. More on long-term strategies: <https://unfccc.int/process/the-paris-agreement/long-term-strategies>
9. Summary of the Strategy in English: https://ec.europa.eu/clima/sites/lts/lts_be_summary_en.pdf
10. The Fit for 55 package is a set of proposals to revise and update EU legislation and to put in place new initiatives with the aim of ensuring that EU policies are in line with the climate goals agreed by the Council and the European Parliament. It refers to the EU's target of reducing net greenhouse gas emissions by at least 55% by 2030.
11. United Nations Framework Convention on Climate Change.
12. The call is open until December 23rd 2023.
13. Environmentally conscious tourism.
14. It is important to emphasise that the work areas listed on the agency's official website include cultural heritage, international focus, libraries and literature, media, and museums.
15. <https://en.kefm.dk/the-ministry>
16. https://www.culturalpolicies.net/wp-content/uploads/pdf_short/hungary/Hungary-Short-2022.pdf
17. Law on Administrative Territories and Populated Aries, 2021: <https://faolex.fao.org/docs/pdf/lat206632.pdf>
18. <https://portal.cor.europa.eu/divisionpowers/Pages/Latvia-Culture.aspx>
19. As of January 1st, 2023.
20. <https://www.culturalpolicies.net/2022/05/08/cultural-policy-news-from-latvia/>
21. <https://www.germanwatch.org/sites/default/files/climate-laws-briefing-eng.pdf>
22. <https://www.gov.pl/web/civilservice/basic-information-about-poland>
23. One out of nine integrated strategies resulting from the Strategy for Responsible Development.
24. <https://www.portugalglobal.pt/EN/InvestInPortugal/RegionsofPortugal/Pages/TheRegionsofPortugal.aspx>
25. Portugal doesn't have general Law on Culture: <https://www.historico.portugal.gov.pt/pt/o-governo/arquivo-historico/governos-constitucionais/gc19/primeiro-ministro/pm/secretarios-de-estado/sec-querer-saber-mais/sobre-o-ministerio/leis-da-cultura.aspx>
26. <https://www.dresden.de/de/stadtraum/umwelt/umwelt/klima-und-energie/klimaschutz/klimaschutz-konzept.php>

Endnotes

27. Carbon neutrality indicates a balance between emitting carbon and absorbing it from the atmosphere in carbon sinks.
28. Carbon zero implies that no carbon emissions will be produced.
29. Removing carbon from the atmosphere.
30. <https://helsinginilmastoteot.fi/en/city-act/helsinki-climate-objectives-monitoring/>
31. https://research-and-innovation.ec.europa.eu/funding/funding-opportunities/funding-programmes-and-open-calls/horizon-europe/eu-missions-horizon-europe/climate-neutral-and-smart-cities_en
32. The EU goal is to be an economy with net-zero greenhouse gas emissions by 2050.

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