

**Committee:** Special Conference on Reaching Net-Zero (SPECON)

**Issue:** Discussing the contribution of heritage institutions in the race to achieve Net-Zero

**Student Officer:** Konstantinos Vikelis

**Position:** Deputy President

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## PERSONAL INTRODUCTION

Dear delegates,

My name is Konstantinos Vikelis and I am a 16-year-old, IB-1 student at Geitonas School. Since I started my MUN journey one year ago I have attended five conferences in total and made a lot of amazing memories. This conference will be my first time participating as a Student Officer. MUN has given me the opportunity to look into exciting topics and learn more about the world we live in. It has also helped me academically by introducing me to different perspectives on how to look at something and has helped me enrich my understanding of the world. When I was a delegate I learned how to communicate effectively with others and how to compromise with people with different ideas and beliefs.

I hope you find this study guide helpful. If you have any questions about the topic, feel free to email me ([kv11916@geitonas.edu.gr](mailto:kv11916@geitonas.edu.gr)). Keep in mind that this study guide covers the topic generally and you are expected to conduct your own research, diving deeper into each of your country's stances and beliefs.

Kind regards,  
Konstantinos Vikelis

## TOPIC INTRODUCTION

In our day and age global warming has come out as an emerging threat towards all of humanity. According to the General Assembly President María Fernanda Espinosa Garcés stated that we only have 11 years to prevent irreversible damage to the planet and it is of utmost importance to limit carbon dioxide emissions to the point that it can be removed from the atmosphere through natural means. One of the most significant roles in combating it will go to heritage institutions. Museums, libraries, and other social and cultural establishments aimed at preserving cultural history are key due to their important role as

information hubs. As article 6 of the UNFCCC<sup>1</sup> seeks to achieve for society to be part of this solution the program created by it, 'Action for Climate Empowerment (ACE)'<sup>1</sup> divides its work into six different sectors, climate change education, public awareness, training, public participation, public access to information and international cooperation. All of these sectors are closely connected to heritage institutions as Heritage institutions provide a vital link between communities and the government.

Heritage institutions can contribute directly by cutting their CO2 emissions and using sustainable energy, but they can much more importantly contribute indirectly by using their influence to educate people. Heritage institutions are responsible for preserving the past as much as for preserving the future, close community ties are required in order for the world to collaborate to achieve net zero.

## DEFINITION OF KEY TERMS

### Net zero

"A state in which the greenhouse gases going into the atmosphere are balanced by removal out of the atmosphere"<sup>2</sup>

### Heritage institutions

"An organization that operates under a culture/subculture to preserve or promote cultural heritage"<sup>3</sup>

### Carbon dioxide

"The gas formed when carbon is burned, or when people or animals breathe out"<sup>4</sup>

### Sustainable energy

"Energy that is produced using the sun, wind, etc., or from crops, rather than using fuels such as oil or coal which cannot be replaced"<sup>5</sup>

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<sup>1</sup> "Cooperative Implementation." *UNFCCC*,

<https://unfccc.int/process/the-paris-agreement/cooperative-implementation>

<sup>2</sup> "What is Net Zero?" *Net Zero Climate*, 22 Sept. 2023, [www.netzeroclimate.org/what-is-net-zero-2/](http://www.netzeroclimate.org/what-is-net-zero-2/)

<sup>3</sup> "What is Cultural Heritage Institutions | IGI Global." *IGI Global: International Academic Publisher*, [www.igi-global.com/dictionary/technological-impact-on-public-engagement-in-alternative-educational-and-heritage-institutions/91343#:~:text=An%20organisation%20that%20operates%20under,Portraying%20Minorities%20Therough%20Interactive%20Exhibits](http://www.igi-global.com/dictionary/technological-impact-on-public-engagement-in-alternative-educational-and-heritage-institutions/91343#:~:text=An%20organisation%20that%20operates%20under,Portraying%20Minorities%20Therough%20Interactive%20Exhibits)

<sup>4</sup> "Carbon Dioxide." *Cambridge Dictionary | English Dictionary, Translations & Thesaurus*, [www.dictionary.cambridge.org/dictionary/english/carbon-dioxide](http://www.dictionary.cambridge.org/dictionary/english/carbon-dioxide)

<sup>5</sup> "Sustainable Energy." *Cambridge Dictionary | English Dictionary, Translations & Thesaurus*, [www.dictionary.cambridge.org/dictionary/english/sustainable-energy](http://www.dictionary.cambridge.org/dictionary/english/sustainable-energy)

## Greenhouse gasses (GHG)

“Gases in the earth's atmosphere that trap heat”<sup>6</sup>

## BACKGROUND INFORMATION

### History of global warming

Since the early 19th century global temperatures have been rising consistently due to the industrial revolution and its consequences. In 1896 Swedish engineer Svante Arrhenius first observed the negative effects of carbon dioxide. However, it was not until 1938 that Guy Callendar managed to prove the connection between global temperature and carbon dioxide.

Climate change first entered the UN agenda in 1968 in the Economic and Social Council in which it was decided to host the first United Nations Conference on the Human Environment. The conference which was held in Stockholm, set principles and recommendations regarding the protection of the environment but more importantly it raised the issue of climate change<sup>7</sup> for the first time as a direct threat to humankind. Later, in 1987 the ‘Environmental Perspective to the Year 2000 and Beyond’ framework first introduced the term sustainable development to the world. In 1992 the United Nations Framework Convention on Climate Change (UNFCCC) was already signed by 150 member states which was then improved in 1997 when the Kyoto Protocol was adopted by the UNFCCC. After that, the Paris Agreement played a big role in the fight against climate change with 196 parties signing the treaty. With 3.3 to 3.6 billion people living in areas highly vulnerable to climate change<sup>8</sup> and its effects, it is vital to find ways to counter the rising temperature and move towards net zero.

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<sup>6</sup> "What Are Greenhouse Gases? | GHGs Explained | National Grid Group." *Welcome to National Grid Group | National Grid Group*, [www.nationalgrid.com/stories/energy-explained/what-are-greenhouse-gases#:~:text=Greenhouse%20gases%20\(also%20known%20as,greenhouse%20gases%20in%20the%20atmosph](https://www.nationalgrid.com/stories/energy-explained/what-are-greenhouse-gases#:~:text=Greenhouse%20gases%20(also%20known%20as,greenhouse%20gases%20in%20the%20atmosph) here

<sup>7</sup> "The science of global warming" Victor M Ponce, [https://ponce.sdsu.edu/global\\_warming\\_science.html](https://ponce.sdsu.edu/global_warming_science.html)

<sup>8</sup> "Piece dignity and equality on a health planet" United Nations, <https://www.un.org/en/global-issues/climate-change>

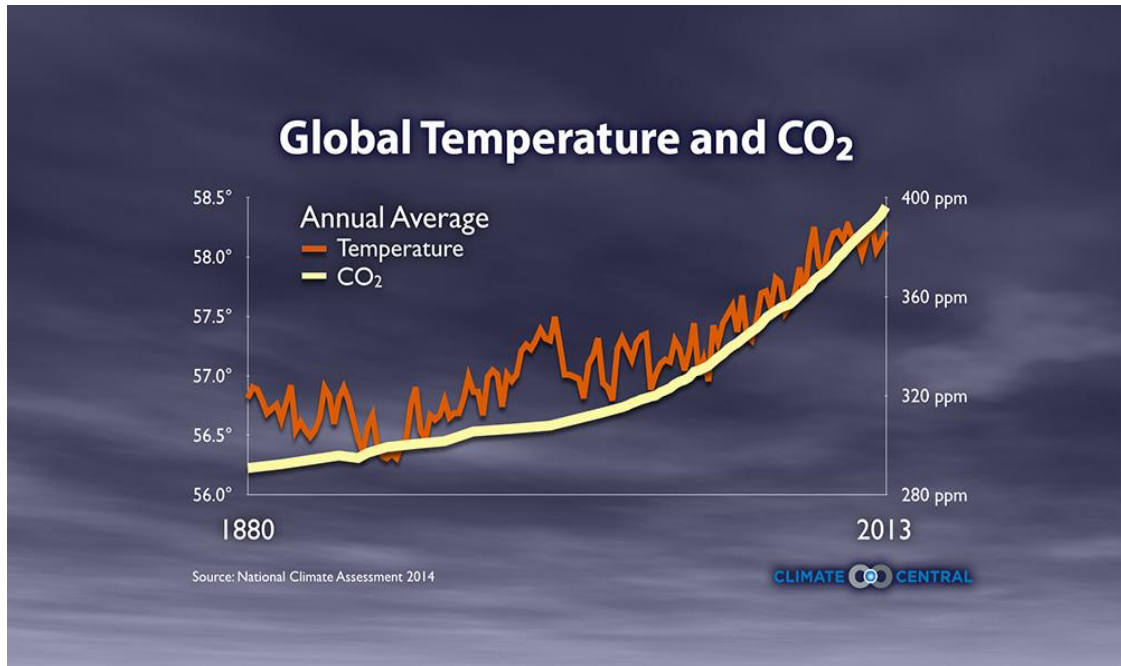


Figure 1: Global temperature and carbon dioxide emissions<sup>9</sup>

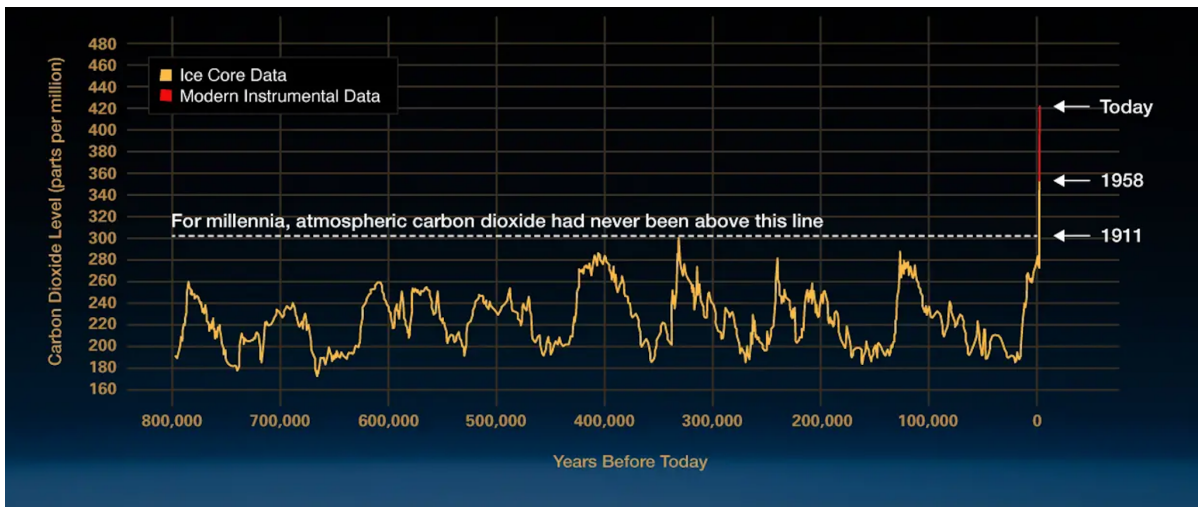


Figure 2: Rise of carbon dioxide in the atmosphere<sup>10</sup>

### Funding and statistics

Even though more than 70 percent percent of museums say that climate change is closely linked with their future agenda, only 10 percent are aware of climate policies that

<sup>9</sup> "The science of carbon dioxide and climate" Columbia university, <https://news.climate.columbia.edu/2017/03/10/the-science-of-carbon-dioxide-and-climate>

<sup>10</sup> "There is unequivocal evidence that Earth is warming at an unprecedented rate. Human activity is the principal cause" NASA, <https://climate.nasa.gov/evidence/>

include their role. Half of museums acknowledge the importance of sustainability in their plan for the future but most of them fail to use renewable energy sources while the other half does not have any climate-friendly infrastructure at all. Most of the heritage institutions have not even calculated the cost of their transitioning to net zero due to a lack of funds and expertise. In the Netherlands, a 425-meter-long underground connection between the Hermitage Amsterdam and the Hortus Botanicus was constructed<sup>11</sup>. The completion of this underground tunnel is part of the sustainability project “between Art and Greenhouse”, where the Hermitage Amsterdam and the Hortus Botanicus share heat in the winter and cold in the summer in order to save energy by giving one another surplus resources. This is a great example of how heritage institutions could work together to achieve net zero when they are aware of what it takes to achieve it. Most of the heritage institutions especially those in coastal regions are at direct risk of global warming consequently funding should be seen as an investment because not only is achieving net zero better for the world but it is crucial for the institutions as well.

### **Problems with transitioning to net-zero**

4 out of 10 museums have set principles and guidelines regarding their efforts for sustainability and around 50 percent of them are required to report these results to their funding organization. Government-operated heritage institutions are not encouraged enough to achieve sustainability and their efforts are not taken into account. Most of them also lack the autonomy to make their own decisions and more importantly they are not collaborating and sharing information with other institutions. Moreover, most heritage institutions require significant energy to function, and having to reevaluate how they use their energy and having to limit their energy consumption could prove to be a difficult task.

### **Funding**

Heritage institutions often operate on a fixed budget and are sustained only by donations and government support. This fixed budget covers multiple aspects of their functions and thus its allocation is also fixed most of the time. Consequently, heritage institutions often struggle to invest in new technology even when it could significantly improve their function. The same thing is true for sustainable technology which is essential for the transition to net zero. Additionally, heritage institutions often focus on completing short-term goals instead of long-term goals.

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<sup>11</sup> “Museums in the climate crisis” Network of European museums organizations, [https://www.nemo.org/fileadmin/Dateien/public/Publications/NEMO\\_Report\\_Museums\\_in\\_the\\_climate\\_crisis\\_11.2022.pdf](https://www.nemo.org/fileadmin/Dateien/public/Publications/NEMO_Report_Museums_in_the_climate_crisis_11.2022.pdf)

## MAJOR COUNTRIES AND ORGANIZATIONS INVOLVED

### International Council of Museums (ICOM)<sup>12</sup>

The International Council of Museums is an international organization of museums that has created a Working Group on Sustainability (WGS) aimed at assisting ICOM in considering how to mainstream sustainability, both within ICOM and for its individual and institutional members. It was established in 1946 with its headquarters being in Paris. Programs implemented by different institutions that tackle conservation, documentation, education, and ethics of museum work are focused on maintaining sustainable practices with this process. This is highly impactful in the battle toward reaching net zero with the heritage institutions as it covers important factors of the institutions' purpose while at the same time achieving such initiatives in a sustainable way.

### Climate Heritage Network (CHN)<sup>13</sup>

The Climate Heritage Network was established in 2019 during the Global Climate Action Summit held in San Francisco. This network seeks to scale up culture-based climate action and to make climate policy people-centered through coordination and cooperation among its members. "Empowering people to imagine and realize low carbon, just, climate-resilient futures through culture- from arts to heritage"<sup>14</sup>. In 2022, the network realized its 2022-2024 action plan. It is a build-up of their earlier works where experts help people in communities to adapt to changes in climate while at the same time drafting plans to mitigate future climate change. They argue that despite work already done to combat such issues, it has failed to build desirable ways of living that support the current culture and heritage of communities. Henceforth, they have stepped up and created this action plan to tackle it. Although its full impact is still unknown, according to reports, it has proven to be extremely impactful in several communities.

## TIMELINE OF EVENTS

Date	Description of event
24 October 1945	Foundation of the United Nations.

<sup>12</sup> "History of ICOM" ICOM, <https://icom.museum/en/news/call-for-papers-museum-international-museums-sustainability-and-sustainable-development/>

<sup>13</sup> "About the climate heritage network" CNN, <https://www.climateheritage.org/actionplan>

<sup>14</sup> *Climate Heritage Network*, [www.climateheritage.org/](http://www.climateheritage.org/)

1968	UN Conference on the Human Environment raises climate change as a direct threat
1987	Environmental Perspective to the Year 2000 and Beyond' I introduce the term sustainable development
1992	United Nations Framework Convention on Climate Change (UNFCCC) signed by 150 member states
1997	Kyoto Protocol adopted to the UNFCCC
2015	Paris Agreement to limit temperature increase to 2°C above pre-industrial levels
2021	Glasgow Climate Act

## RELEVANT UN RESOLUTIONS, TREATIES AND EVENTS

### Culture 2030 Goal Campaign<sup>15</sup>

The Culture 2030 Goal Campaign is one related to global goals set for sustainable development and part of the broader initiatives of the Sustainable Development Goals set by the United Nations. More specifically, it advocates for the importance of culture in sustainable development. "Looking Ahead Culture in Sustainable Development in 2024 and Beyond"<sup>16</sup> is a webinar organized by the campaign with the aim of sharing the background and achievements of the campaign while at the same time opening conversations with key partners and global cultural networks. This campaign has been highly successful with ever growing government recognition of the role of culture in sustainable development and cultural goals being set for global agendas. Similar campaigns and initiatives may further be adapted given the success of such a campaign.

## PREVIOUS ATTEMPTS TO SOLVE THE ISSUE

### EU action to protect museums and their collections

From January 2021 to April 2022 a group of 50 experts were present in the open method of coordination (OMC) meetings in which the attention was shifted to 'sustainability in cultural heritage'. The report of this group highlighted the museum's role in engaging with people on the decarbonization challenge. However, despite this report, no direct action was taken to work with heritage institutions to combat climate change. Moreover, more general

<sup>15</sup> "The vision" Culture 2023 goal, <https://culture2030goal.net/>

<sup>16</sup> "#Culture2030Goal." *Culture 21 | Agenda 21 for Culture*, [www.agenda21culture.net/advocacy/culture-2030-goal](http://www.agenda21culture.net/advocacy/culture-2030-goal)

discussions were made on the initiatives taken to protect cultural artifacts. The EU established funding programs to support cultural heritage preservation such as the Creative Europe program. The EU also announced 2018 as the designated year titled “European Year of Cultural Heritage” (EYCH). This initiative did not only bring forth and encourage action by organizations and institutions but also raised awareness of the issue to the public. Apart from such the EU in general has supported research programs, drafting networks, and collaborations with others.

### **Sustainable building design**

The Natural History Museum in London implemented sustainable building practices when constructing the Darwin Center. The Darwin Center’s design is in such a way that is energy efficient, including features that minimize energy consumption through heating, ventilation, and air conditioning systems which ensure sustainable temperature control, constituting reduced energy use. This contributes to the fight of involving heritage institutes in the fight of reaching net zero, should such initiatives be implemented by other such organizations. Furthermore, the center has what it called a “Green Roof” referring to the planting of vegetation on the building’s roof. In this way, the vegetation absorbs rain and creates a habitat for wildlife, further creating a more sustainable institution. Another example is the Louvre solar panel installation in January 2022. The Louvre introduced green energy through the installation of photovoltaic (PV) panels that convert sunlight into electricity. Once again, such an imposition is not only aiding in reaching net zero, given the popularity of the Louvre it also acts as an example for other organizations, promoting renewable energy.

## **POSSIBLE SOLUTIONS**

### **Raising awareness**

As mentioned before heritage institutions provide a vital link between the government and communities. In order for the world to achieve net zero all the sectors of society must contribute including the cultural one. Even though the environmental situation has become worse by the day, there are still a lot of people who either do not believe in climate change or do not consider it a serious issue. Raising awareness through heritage institutions could be targeted to those people specifically or to the broader public to inform them about the seriousness of the situation. Consequently, people might lower their individual carbon footprint and apply pressure on large corporations to adopt more eco-friendly policies. An issue that might be brought up is how will all these heritage institutions work together so you have to consider this when creating a resolution. You should also try to think of innovative ways to raise awareness that have not been tried before or ways to raise awareness that have succeeded in other issues.



## Move to sustainability

Heritage institutions besides protecting cultural history act as a safe place where people can socialize and learn. People trust heritage institutions as they prioritize knowledge over anything else. If heritage institutions become net zero themselves they would act as an example to the people who trust these establishments of the seriousness of climate change, people would start to wonder and research the topic learning more about it. They would be inspired to help and realize that achieving net zero is not a hard thing and everyone could do it starting from their home. This would also directly help in the race to achieve net zero since there are over 300.000 heritage institutions worldwide and if they become self-sustainable they would greatly help limit carbon dioxide emissions. A problem that could arise again is how the heritage institutions would achieve net zero and who could help them with that.

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