

Climathon Agia Paraskevi 2022

18 & 19 November 2022

American College of Greece - ACG Events Hall

<https://www.acg.edu/>

Climathon

Agia Paraskevi

A 24-hour Ideathon in the city of Agia Paraskevi

Climathon is a global movement dedicated to solving the city's biggest climate challenges

Organized by



In collaboration with



**Center
of Excellence
in Sustainability**

Office of Public Affairs, The American College of Greece

The Challenge: Energy saving in the Municipality of Agia Paraskevi

What is climate change and how it relates to energy saving?

Technological advances since the Industrial Revolution have continuously increased the energy dependence of our cities and societies on energy for transportation, production of goods, cooling/heating, provision of services and maintenance of the living standards of citizens. At the same time, the production and use of energy from polluting sources leads to the release of large quantities of greenhouse gases into the atmosphere, thus exacerbating the phenomenon of anthropogenic climate change.

Why we need new solutions



In September 2015, the United Nations General Assembly in New York made a decision that could be described as a historic agreement that will affect the lives of millions of people, maybe even yours. It is the adoption of **17 Goals**, known as the **Sustainable Development Goals**, which express the contemporary global challenges in an effort to ensure that all countries respond effectively to global problems.

In this Global Compact, more than **190 leaders** representing almost all of humanity committed themselves to transforming our world into a world free of poverty, hunger and inequality. A world with decent work and good education, a world at peace without the threat of climate change, a world that, through the principles of sustainable development, takes care of the needs not only of the present generation, but also of future generations - in other words your own world.

Climate change and environmental degradation are a threat to the existence of Europe and the world. **The European Green Deal** is our roadmap to achieve the **sustainability of the EU economy**. This will happen if we turn climate and environmental challenges into opportunities in all policy areas and if we achieve a just and inclusive transition for all. A shift to new forms of energy is central to the European Green Deal, and energy savings, which is the energy equivalent of creating a new energy resource,

seeking to drastically reduce greenhouse gas emissions by 2050, and to save energy and water resources.

The climate crisis and its impacts can be addressed through the implementation of integrated multidisciplinary approaches and proposals that include Mitigation, Adaptation and Resilience building measures. Given the current situation, we are already seeing a 1.1°C increase in global average temperature compared to pre-industrial times, which suggests that the goal of mitigating the increase to 1.5°C by 2030 will not be met. The effects of climate change are much more pronounced in cities both because of overpopulation and because of the changes that occur in their microclimate, such as the creation of heat islands, the rain shadow effect due to tall buildings, the increase in the intensity and duration of heatwave days, prolonged drought affecting greenery, etc.

The effects of climate change are, therefore, increasing energy demands, while the dramatic developments concerning the war in Ukraine, the first on European soil in three decades, are leading to increasing instability in the food sector as well as, in energy and contributing to energy insecurity. At the same time, the phenomenon of energy poverty, i.e. the inability of a household to meet its energy needs, e.g. sufficient heating or air conditioning, cooking, lighting and the use of household appliances, is intensifying. Energy poverty is a particularly critical social issue, which is becoming more and more acute, especially among low and middle income households.

In this context, emphasis is placed on reducing greenhouse gas emissions produced by burning fossil fuels and switching to clean energy sources, but priority is also given to energy saving, and to removing excess carbon dioxide from the atmosphere through tree planting, which is also a saving measure as it contributes to increasing the sense of dew and controlling temperature in cities.

THE CHALLENGE

The challenge of this year's Climathon is to save energy in the urban setting with emphasis on the Municipality of Agia Paraskevi. Specifically, you are invited to formulate holistic proposals on energy saving and efficiency that will enhance sustainability in the city and address various areas of interest. By selecting one or more sub-challenges or a combination of them, you are invited to support the Municipality of Agia Paraskevi and its stakeholders in finding sustainable solutions that will a) contribute to the reduction of greenhouse gas emissions b) contribute to energy sufficiency c) eliminate energy poverty in the Municipality of Agia Paraskevi.

The following sub-challenges could give you some ideas/directions to the solution you propose.

Sub-challenges:

- Energy efficiency in public buildings (schools, public services)
- Energy efficiency in the public space
- Energy efficiency for domestic users through public information and awareness raising
- Energy efficiency in transport within the municipality (network and vehicles)