



**A 24-hour Hackathon in the city of Athens**

**Climathon is a global movement dedicated to solving city climate challenges**

Date: **25th October 2019** at 11.30am

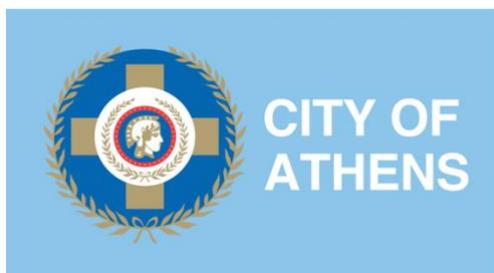
Venue: **HFAISTOS Educational Association of Athens**

Address: Tsiller 61, 11144, Athens

### Organizers



### Main city partner





## **Challenge: Creating bikeways in Athens as a solution to air pollution and climate change**

*"Athens is the capital of Greece and its largest city. A densely populated city that has been continuously inhabited for over 3,000 years.*

*Rising sea levels, higher ocean temperatures, more frequent earthquakes, fires and storms and higher health risks are some of the direct consequences of man-made climate change. Adding to these potential threats, we have also been contributing to air pollution and global warming through our resource-intensive lifestyles. As well as being a leading source of greenhouse gas (GHG) emissions, the transport sector is responsible for a large proportion of urban air pollution, being the biggest contributor of nitrogen oxides. Although they may seem to be two very different issues, climate change and air pollution are closely interlinked, and hence when addressing air pollution, we also address a critical and easy-to-implement solution to climate change.*

*Although scattered bike paths exist within city boundaries, they require strategic planning for their maintenance, management & further development. New collaborations should be encouraged with the private and public sector to achieve such a goal. The Municipality has already planned to set up a framework for the sustainable management of two important city landmarks, the Sustainable Urban Mobility Plan."*

### **How can Sustainable Design Principles, Technological Breakthroughs & Innovative Civic Engagement be combined to create bikeways in Athens?**

A major challenge for cities in the future will be to meet our need for nature-based solutions towards a more resilient city that will be able to withstand climate change and environmental challenges. Athens, a city that suffers from heatwaves, flash floods and poor air quality, has historically wasted, misused and mismanaged its potential. It needs a culture change to understand, support, and promote the decarbonization of the city.

The city needs to create, as well as, better manage transport infrastructure. Designing sustainable urban mobility and improving the air quality of the city is an integral part of Athens Resilience Strategy to raise the standard of living. An increase in cycling behavior is associated with numerous benefits for the citizens as well, from improving mental well-being and health to boosting someone's brain power, doing so, over other urban mobility options.

### **Challenge Description**

How concerned & active citizens of Athens, together with expert arborists & foresters, research students & members of the Academia, IT specialists & software programmers, innovative entrepreneurs & local businesses, design thinking facilitators & community-based organizations, along with city officials, can create an open data bicycle route that will provide information for analyzing indicators and trends, creating new knowledge, insights and applications, carrying out simulations or modelling as well as solving community or societal problems?

Creating cycling routes involves integrating sustainable design principles, available advanced technologies such as the use of AI applications, excellent knowledge of civil



regulations & civic land use, and innovative community engagement that encompasses collaboration and co-creation between city officials and citizens. The process to conduct a bike mapping can be divided into four phases: *planning, implementation, application, and maintenance*. A mapping of the bike path potential is a prerequisite in planning for and making sound management decisions including municipal budget strategies and local community priorities.

Through a **plan for sustainable urban mobility**, the **municipality of Athens** intends to devise a policy to support mild forms of transport by implementing the relevant urban renewals. The aim is to create a network of mild forms of green traffic, redistributing the road from pedestrian and cyclist vehicles, by creating a network of cycling routes where cyclists can move safely across the area, by strengthening the public transport (to reduce car use and the associated parking problems) and by connecting the network to the city's attraction poles (such as schools, sports venues, administrative services, town hall, squares / parks, cultural sites etc.). The aim is to connect and unite all Municipal Units and neighborhoods. In addition, the above projects will aesthetically and environmentally improve the area and overall living standards of the residents.

The implementation of an integrated plan for sustainable urban mobility aims at:

- upgrading the urban environment, the quality of life and public space, through interventions to restructure urban mobility conditions and infrastructures
- enhancing mild forms of movement
- enhancing the identity and accessibility of the city center, by providing suitable conditions for the development of economic activities
- protecting residential areas from disturbances
- reducing energy consumption for travel and reducing greenhouse gas emissions
- increasing the rate of use of public transport
- increasing the use of bicycles and walking
- reducing the use of vehicles
- ensuring the smooth and safe movement of all citizens without discrimination, with a focus on the mobility issues of Persons with Disabilities (PWD)
- exploiting new technologies (telematics, GIS, etc.) to manage urban mobility and inform citizens
- strengthening participatory and democratic decision-making on urban organization and mobility issues in the city

Solutions that Climathon Athens 2019 could focus on:

- **Developing a holistic approach to spatial planning for bicycle paths in the Municipality of Athens.**
- **Design a cycling route in predefined area of Athens considering existing policy framework and limitations.**
- **Identify motivation schemes in order to increase public awareness and change citizens behavior toward a more sustainable and healthier life style (i.e. to integrate cycling in their everyday life and eliminate car and public transport use)**
- **Adapting or creating business models that will support public-private sector collaborations**
- **Establishing co-creation opportunities between city officials, citizens, local businesses, research centers & universities.**



The aim of the Challenge this year is to fuel new thinking that will ideally include the holistic analysis of satellite, environmental, and socio-economic data and the interactions between bike paths, air pollution and spatial planning. Copernicus, EMODnet, Eurostat, Google maps are among the relevant datasets that will be made available to all participants.

The expected Solutions will include a vision to cope with a wide range of topics in the planning processes that include EU data services and follow National and EU Directives:

- How to increase accessibility and improve the standard of living?
- How to increase bike paths in the urban environment of Athens?
- How interdisciplinary research can provide solutions to complex problems?
  
- What are the common data needs for urban mobility planning?
- What are the perceived data gaps, and how can these be filled?

**Come and solve the climate challenges in a vibrant atmosphere, where energizing food & drinks, inspirational workshops and talks, like-minded people, a chill-out and sleep area, as well as many other surprises are awaiting you.**

Climathon is an initiative of EIT Climate-KIC: <https://www.climate-kic.org>

*EIT Climate-KIC is a European knowledge and innovation community, working towards a prosperous, inclusive, climate-resilient society founded on a circular, zero-carbon economy. The newly established [EIT Climate-KIC Hub Greece](#) is composed by a consortium of partners: "**Athena**" **Research & Innovation Center** (ATHENA RC), **Academy of Athens** - Research Centre for Atmospheric Physics and Climatology, **European Regional Framework for Co-operation** (ERFC) and **Uni.Fund**, and it is supported by the associate partners: **United Nations Sustainable Development Solutions Network Greece** (UN SDSN-Greece, hosted by ICRE8: International Center for Research on the Economy and the Environment), **Foundation for Economic and Industrial Research** (IOBE) and **Eunice Energy Group**. Professor Phoebe Koundouri is the Director of EIT Climate-KIC Hub Greece and Lydia Papadaki is the Manager of the Hub.*

*All 3 Climathons that will take place for 2019 in Greece (**Athens, Larissa, Mytilene**) are under the auspices of EIT Climate-KIC Hub Greece*

**Don't forget to bring your laptop and sleeping bag!**

**Register at:** <https://forms.gle/EV5ouX55fPhXTG9f7>

Find more at:



**Climate-KIC GR**



<https://climathon.climate-kic.org/en/>

<https://climathon.climate-kic.org/en/athens>