

Climathon



Join the Climathon movement,
drive climate action

#Climathon
climathon.climate-kic.org

Climate-KIC is supported by the
EIT, a body of the European Union



“ Climathon is your opportunity to find solutions to create a cleaner, healthier, safer and more prosperous world. ”

Ebrahim Mohamed
Climate-KIC,
Director of Education

What is Climathon?

Climathon brings together the challenges of the world's cities with the people who have the passion and ability to solve them.

Climathon is a global 24-hour climate change event organised by Climate-KIC which takes place simultaneously in major cities around the world.

How Climathon works

Each city sets its own local climate challenge that reflects what affects their urban life the most. Challenges can vary from air quality, water and waste management, and extreme weather events, use of city satellite data etc.

Participants then tackle the set challenge for a full 24-hours, before pitching their ideas in front of relevant local stakeholders.

These ideas can develop into tangible sustainable solutions and businesses that address city climate challenges across the globe.

Climathon in 24-hours



Climathon cities

- 59 cities
- 6 continents
- 24 hours
- 1 goal



Setting the Challenge

The Challenge

Each city sets up its own local climate change challenge reflecting what impacts their urban life the most. These challenges include urban planning, infrastructure, housing and water/ waste removal, use of city satellite data etc.

Participants can come along with a pre-existing idea and work with a team to develop this during the 24-hours, or can develop an idea on the day. After 24 intense hours of collaboration, excitement and solution-finding, the best idea in each city will be selected by a jury of relevant local stakeholders.

Climathon gives participants the ability to showcase their climate change solutions on a global scale.

2016 Challenges

Venice, Italy

What kind of energy-efficient solutions can be imagined to increase Venice resilience to heatwaves? How to promote low-carbon adaptation measures? How to apply solutions and ideas in a "limiting" cultural heritage site?

Vijayawada, India

Undergo ideation that will help cultivate innovative business ideas that have minimalistic environmental impact and commit to transforming agricultural, tourism, industrial and transportation sectors.

The Hague, Netherlands

Each citizen produces more than one kilo of waste per day. Commercial and hazardous waste from large and smaller organisations add to this significant figure. The Hague wants to re-use some of the waste that the city produces and turn it into a resource so that rare raw materials are not needed.

London, UK

London's challenge is to successfully create smart solutions to tackle the sources of its air quality issues, be that: identifying and analysing air quality issues effectively, creating culture change through creative design and communication or enabling change through technical innovation.



London jury panel (left-right): Emma Wilson, Ebrahim Mohamed, Jack Connors and Eleanor Saunders

“ London Legacy Development Corporation ran Climathon to kick start action to tackle London’s air quality. Reducing the levels of CO₂, particulates and other pollutants has become a Mayoral priority, and demonstrating solutions to these problems on Queen Elizabeth Olympic Park is one step towards London wide action. ”

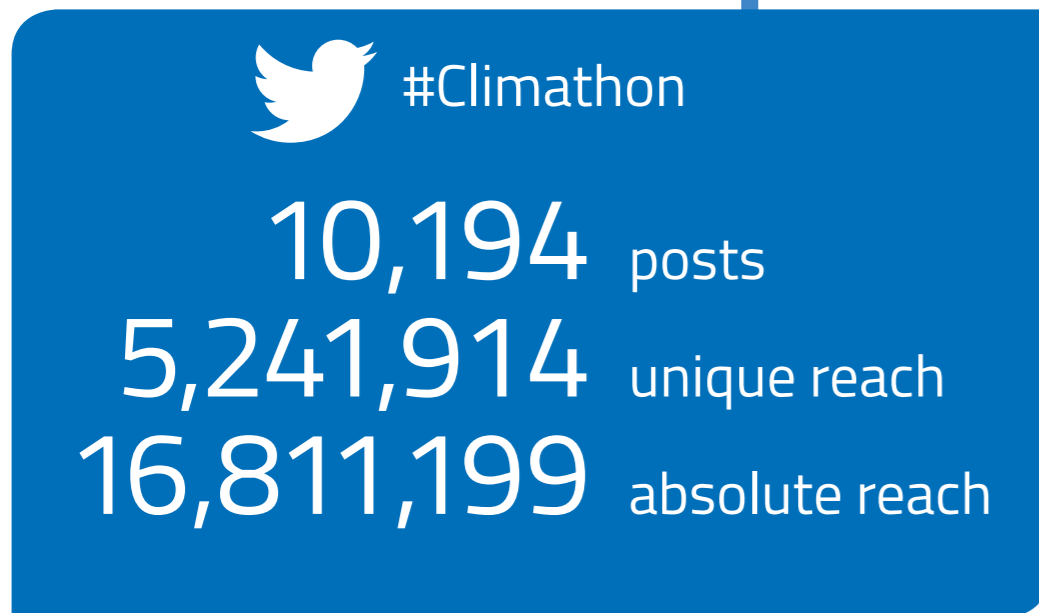
Jack Connors, London Climathon Organiser,
London Legacy Development Corporation

Global collaboration

Climathon brings together citizens around the world to solve city climate challenges. To make this a truly global event, we use digital tools to connect all locations across the world and make sure as many people as possible heard about the Climathon while it is happening live.

Twitter

During Climathon, social media acts as the main tool to communicate within the global Climathon community, in particular, Twitter. During the 24-hour challenge, Climate-KIC runs a 'Climathon Wall', which is a full-screen real-time feed of social media posts that use the hashtag #Climathon. Participants from all over the globe could see what other participants were doing and start a global conversation. #Climathon achieved over 10,000 posts, reaching over 16 million people.



Live Broadcasting

Free, live video streaming through smart phones is widely available, thanks to new Facebook and Twitter apps. This is a great way to expand your audience beyond your venue.

Participants and organisers broadcast their most exciting Climathon moments to the world, sharing what is happening within their city with other cities over the world! By including #Climathon in their video, participants all over the world can see their live broadcasts.

Instagram

They say that "a picture is worth a thousand words", and this is even more true for the Climathon! From all corners of the world, participants in different cities can take pictures of their progress and upload them to their personal social media accounts. By including the Climathon hashtag, participants can visually see how other's are experiencing Climathon across the globe.

Skype

As well as using social media channels to communicate with one and other, participants and organisers from different participating cities can use Skype to communicate with one and other. Due to different time zones, participants can Skype other cities who are further ahead in their challenges to share knowledge and ideate together.



The 24-hour Challenge

Staying up for 24 solid hours is most definitely a challenge in itself. As a way of encouraging participants to stay awake and motivated throughout the event, cities can organise energisers, talks and activities across the whole 24-hours.

Popular energisers include activities such as yoga, dance classes, such as Zumba and talks from experts.

However, some cities in 2016 opted for more alternative energisers such as tree mulching and making bike-powered smoothies.



Mini-Climathon

For the progressive city of Malmö sustainability is something that should be a goal for all of their citizens, so they took their 2016 Climathon challenge one step further. The City of Malmö invited a class of 17 junior school pupils to participate in their very own mini Climathon.

The children were able to propose their innovative ideas on how to make schools more climate friendly in front of a panel of judges. Ideas focused on how schools can minimise energy consumption in schools, which came to some interesting conclusions.

One student said: "We need to produce more sustainable energy to save the earth's resources. We can use solar and wind energy. It never ends. We can learn more about sustainable energy in school, and what kinds of energy the school uses. In that way, we will start considering what we can do to waste less energy."

Become a Climathon city host

Climathon offers participants the chance to create real solutions to their city's local climate challenge and take action in their city. Participants of Climathon also benefit from:

- Helping to make their city more resilient to climate change
- Networking with local leaders from academia, business and public authorities
- Developing their skills in public speaking, innovative thinking, prioritisation and exploring new tools and methodologies
- Joining forces with other like-minded entrepreneurs and innovators
- Generating ideas and solutions to climate change that can become real-life businesses
- Becoming a part of a global community working together to take climate action!



Become a Climathon innovator

Engage your city's citizens to take real climate action!
How will you benefit as a city host?

- Crowdsourcing local ideas to solve climate challenges in your city
- Engagement of local students, entrepreneurs and innovators
- Forge strong links between local businesses, academia and public bodies
- Empower and showcase your local community's climate action across the globe
- Engage with new global partners through Climate-KIC

“ With the help of this project, there will be smart city solutions for different districts. I think Climathon is a really great concept, and it is great that Climate-KIC is supporting so many innovative projects which are really helping in solving many different challenges in our cities. ”

Kanishk Chaturvedi
TU Munich

“ Young people play a vital role in combating global challenges such as climate change. We must ensure that they can fully participate in the change that Europe needs. If we remember, may EIT's Climate-KIC Climathon contribute greatly to train a new generation of entrepreneurs and innovators ”

Tibor Navracsics
European Commissioner for Education, Culture, Youth and Sport



CLIMATE SOLUTIONS

Air pollution

Chennai, India

CHALLENGE:

Building a climate resilient smart city addressing disaster management, urban transportation, air pollution and waste management

SOLUTION:

In India, 30% of the population have not been provided with electricity. In order to generate electricity, these citizens need to emit smoke which is known as flue gas. But, if you were to capture this gas from places such as thermal power plants using microalgae, you would achieve zero smoke discharge, as the gas would serve as food for the algae. This was the winning idea of team C2C in Chennai, India. In fact, not only would this solution be more climate friendly, but the fully cultured microalgae could then be sold to cosmetic, agricultural or wastewater industries, which in turn would boost their present economic benefits.

London (below); Malmö, Sweden (right)

London, UK

CHALLENGE:

Successfully create smart solutions to tackle the sources of its air quality issues

SOLUTION:

In London, air pollution is one of the city's biggest worries. It is clear that what the city needs is a mass air cleansing- but how? London Climathon winners, FiltAir, came up with the innovative idea of attaching pollutant filters to London buses, which will travel all over the city, all day long cleaning up the air quality in the city. FiltAir estimate that this method will take out 99 per cent of pollutants in London's air.



Green Buildings

Malmö, Sweden

CHALLENGE:

Adaptive and mitigating climate measures for the existing housing stock in Malmö.

SOLUTION:

Like many cities, Malmö is a melting pot of different cultural, religious and ethical backgrounds. In fact, over 30% of Malmö's population is made up of foreign citizens, and there seems to be a gap between them and the local Swedes. In order to get everyone to form together as one community, Co.Malmö, the city's Climathon winners, propose a new membership system, whereby people can make use of previously empty 'common areas'. By renting these on an hourly basis, less power would be needed to maintain the facility, meaning that less emissions will be released into the environment. Not only this, but these common areas will be an ideal location for pop-up stores to sell locally produced goods; good for the society and the environment.





Dublin (above); Tallinn (right)

CLIMATE SOLUTIONS

Green mobility

Dublin, Ireland

CHALLENGE:

How do we support employees to take more sustainable transport options to and from work?
What are the user-focused, smarter travel options that will support employees to make more sustainable choices in their daily commute?

SOLUTION:

Transport is one of the world's biggest contributors to the pollution levels, which is why so many counties and cities are trying to encourage more and more people to use transport in a more economical way. In Dublin, a company called CitySwifter has been set up which is a luxury public transport service that offers short commute times and free Wi-Fi onboard, meaning that you can relax or carry on working on your commute while also reducing your CO2 footprint.

Sydney, Australia

CHALLENGE:

How to get micro-communities to adopt electric vehicle use?

SOLUTION:

There is no doubting that electronic cars are better for the environment than cars that rely on fossil fuels. Not only do they release less emissions, but they also don't demand that the earth be rigged in order to keep them running. So, why aren't more people using electric cars? While petrol and diesel fueled cars are more damaging to our planet, they also are a lot more convenient to have, with a fuel station always close by. In Sydney, a company named ParkSpark are encouraging more people to opt for electric vehicles by offering citizens the chance to turn their driveway into a charging point for electric cars, which they will in turn make money off of.

Tallinn, Estonia

CHALLENGE:

In Copenhagen more people commute by bike than in the whole USA- why can't this be the case for Tallinn? During these 24-hours, we would like you to help us get more people on bikes in Tallinn.

SOLUTION:

While many citizens want to ride their bike to work and back, it can sometimes be that the suggested and quickest route is too noisy and dangerous, making the whole experience unenjoyable. Smyckling, Tallinn's Climathon winners, plan on designing a biking app that will take users the quietest and most enjoyable route, in an attempt to make the pastime more enjoyable and encourage city citizens to cycle more.

CLIMATE SOLUTIONS

Local community

Krakow, Poland

CHALLENGE:

Krakow needs to scale-up mitigation and adaptation actions taken by individuals and organisations, therefore there is a need to develop new cooperation and communication channels and increase overall awareness of climate change within citizens.

SOLUTION:

Traffic dominates much of Krakow city, especially in high tourist areas. By closing off certain highly populated areas to motor traffic and replacing it with pedestrian lanes, bike lanes and green infrastructure, the city becomes less polluted and more pedestrian friendly. The Krakow municipality has agreed to implement this plan in 2017.

Food

Zurich, Switzerland

CHALLENGE:

How can the citizens and households of Zurich be encouraged to buy and eat more climate-friendly food (less CO2 emissions) and reduce food waste?

SOLUTION:

Sometimes, it's hard to know what we can eat to make our diets more climate friendly. However, thanks to Max, it has never been easier. Max is a personal foodie-bot that gives you recommendations on what and where to eat to reduce your carbon footprint, meaning you can save up to 100,000kg of CO2 emissions. Max will even take into account any dietary and allergy requirements, too, as well as sending you seasonal recipes and giving you advice on what to do with your leftovers!



Zurich (below); Budapest (right)



Smart city

Budapest, Hungary

CHALLENGE:

How to utilize collected data from smart sensors in the city?

SOLUTION:

Trying to find a parking space in a busy city can seem impossible. Rather than finding a space easily, drivers waste time and energy trying to find a space, all while releasing more CO2 into the environment. As a way of resolving this issue, Climathon Budapest winners came up with the idea of a parking mobile app which identifies vacant spaces through smart sensors.

Melbourne, Australia

CHALLENGE:

How can you show the impacts of people's choices to make Melbourne more resilient and sustainable?

SOLUTION:

City centres are full with digital screens promoting all of the latest advertising campaigns; but why not also use these screens for something more important?

Melbourne's winning team, State of Power, proposes that digital screens around Melbourne and other Australian cities should show power consumption and sustainability scores by state. A corresponding app can then direct users to more information regarding their own power consumption, which in turn could spark a national conversation and sustainable revolution.



Venice (above); Birmingham (right)

Health

Birmingham, UK

CHALLENGE:

Identify climate innovations and solutions which can produce these health co-benefits for Birmingham through changing citizen behaviours.

SOLUTION:

Sometimes, all that the world needs is more of a focus on good and fun things to make a positive impact. This is the concept of the winning Birmingham Climathon team, who have created a festival called WellFest, that focuses on personal physical and mental health. By encouraging more people to take good care of their personal health in ways such as eating healthier and exercising more,

they are also taking better care of the planet.

The festival will give people a human MOT which will measure things such as their BMI, weight, blood pressure and blood sugar, as well as quizzing festival goers about their mood and dietary habits. Based on their results, participants will be advised on how to fill their lives with a bit more good, which will also be beneficiary to the planet.

Throughout the event, there will also be a screen showing the CO2, pollution and waste levels on planet earth.

CLIMATE SOLUTIONS

Extreme weather

Venice, Italy

CHALLENGE:

What kind of energy-efficient solutions can be imagined to increase Venice resilience to heatwaves? How to promote low-carbon adaptation measures? How to apply solutions and ideas in a "limiting" cultural heritage site?

SOLUTION:

How do you reduce the heat island effect in a city that is built on over 100 small islands? Well, believe it or not, you build more small islands. 'Float green à porter' is an idea born out of a combination of adaptation, mitigation and sociability- floating and modular islands that will reduce the heat island effect in Venice by adopting nature based solutions, like using trees on the islands to create more shade. Not only will the islands help towards a more climate friendly Venice, but they will also encourage citizens to be more sociable.

Energy

Vilnius, Lithuania

CHALLENGE:

How can we improve the rates of recycling and energy in Vilnius city by using ICT?

SOLUTION:

The amount of electricity that we use in our homes is a large contributor to pollutants in our environment and global warming, which is why communities are encouraged to be more energy efficient. As a way of encouraging and educating citizens on energy efficiency, the winning Vilnius team came up with the idea of E'ntanas.

E'ntanas is a chatbot service that helps users manage their electric appliances at home as well as giving advice and tips on energy efficiency queries, making users eco-friendlier and saving them money on energy costs.





Valencia (above); Vijayawada (right)

CLIMATE SOLUTIONS

Water management

Valencia, Spain

CHALLENGE:

In October 2015 Valencia reinforced its commitment to supporting the reduction of greenhouse gases by 40% by 2030. How could the city achieve to meet the Covenant of Mayors commitment and improve the previous values?

SOLUTION:

Water is something that is easily wasted, as is electricity. In fact, showers are one of the biggest wasters of water in your home (but that is not to say that they are not necessary). Valencian Climathon team, VALENSUN, propose using a thermal water tank and solar panel to provide hot water for the user's shower. At the same time as this, the shower will divert the initial flow of water that would normally be wasted. By using this product in just one third of Valencian homes, 1.8M tCO₂ eq will be reduced in the first three years, and enough water to fill 15,000 residential swimming pools will be saved.

Waste management

Vijayawada, India

CHALLENGE:

The challenge is to undergo ideation that will help cultivate innovative business ideas that have minimalistic environmental impact and commit to transforming the sectors.

SOLUTION:

Litter is both bad for the planet and horrible to look at. As a way of cleaning up the streets of Vijayawada, the winning Climathon team for the city thought of a mobile app to track waste litter and provide sanitation through the immediate cleaning of litter. This process would also ensure that the litter is correctly disposed of and recycled where possible.

The Hague, Netherlands

CHALLENGE:

The Hague is looking for solutions to re-use the waste that the city produces.

SOLUTION:

Part of the reason that people don't recycle is maybe because they don't know how much waste is produced in a city on a day to day basis, or what can be done with that waste. Team Afvallei feel that making a waste experience park, that shows people how much waste is produced a day and what can be done with it, would encourage people to be more responsible with their waste to make for a healthier and more environmentally friendly city.

Take part in Climathon 2017

Join a global community, help tackle your city's climate change challenges and help create sustainable businesses for the future. Take part in Climathon 2017.

Join the Climathon movement, drive climate action!

**Next Climathon:
27th October 2017**

To take part as a city organiser for Climathon 2017, simply email us to express your interest.

climathon@climate-kic.org

