



Klimatorium

The International Climate Centre of Denmark



This is how we work

The way Climatorium approaches new projects is based upon the Quadruple Helix model, where below sectors must be represented, every time a new climate challenge is approached:

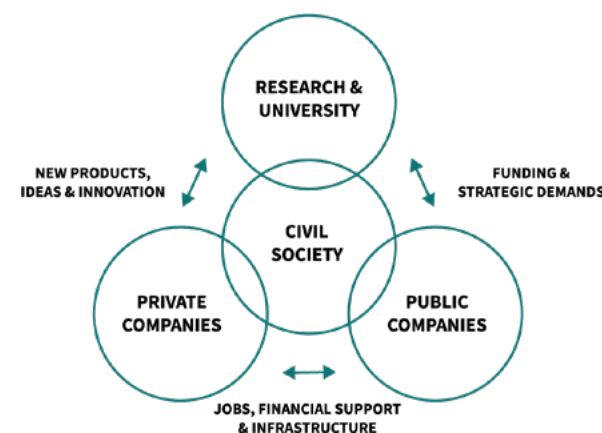
- **Research & Universities**
- **Public companies**
- **Private companies**
- **Civil society**

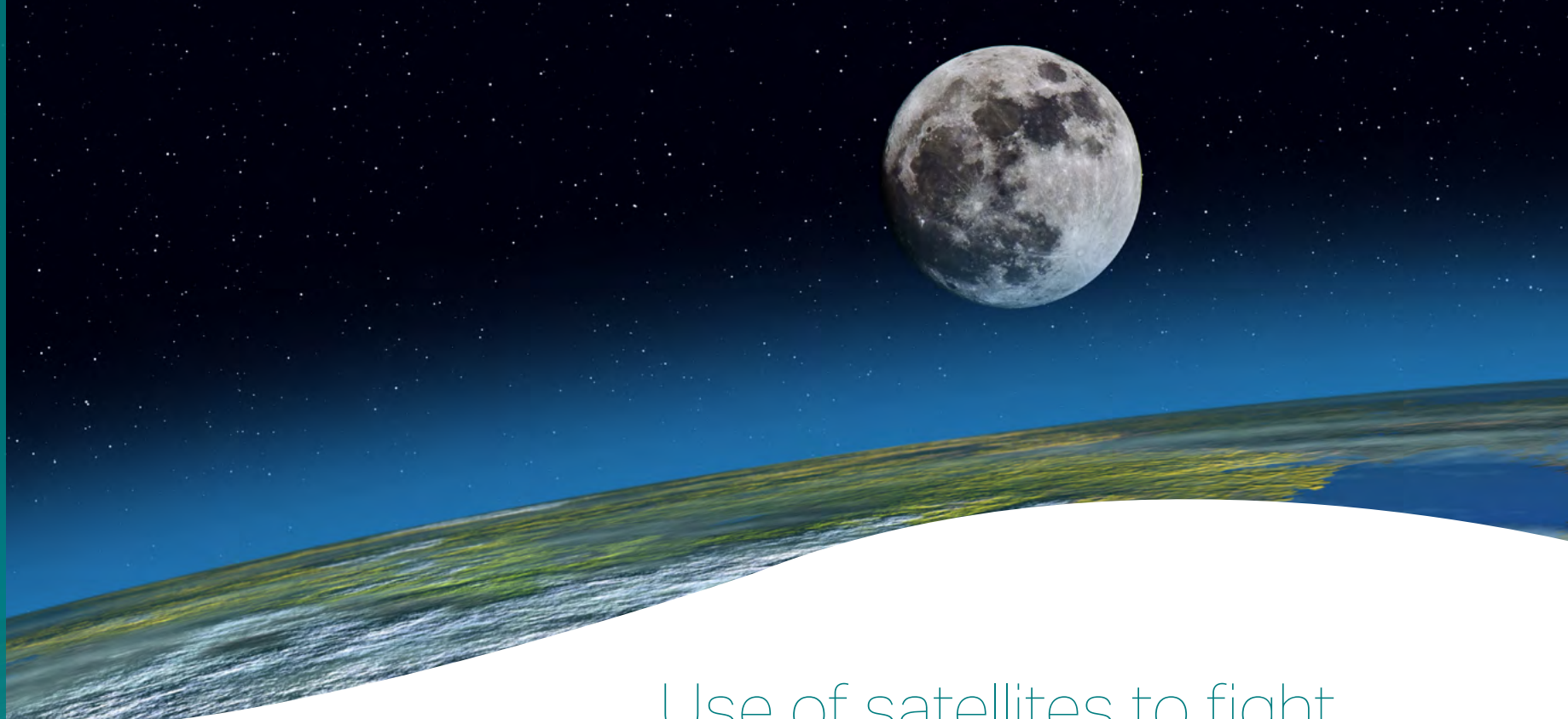
Innovation is the focal point of Climatorium's work. But it is crucial that solutions are developed according to the needs and queries of civil society. In cooperation between the four sec-

tors, the four parties in the Quadruple Helix model develop innovative climate solutions. It is crucial for Climatorium that each project is communicated in an inspiring way which is easy to understand for anyone, not only the technical experts, as this will ensure engagement and help grow new projects nationally as well as internationally.

Read more here:

<https://klimatorium.dk/en/projekter/>





Use of satellites to fight **climate change**

Many exciting projects are anchored at Klimatorium in Lemvig, Denmark. One of them combines satellite knowledge with smart investments in water infrastructure. Extremely accurate measurements and readings save millions of kroner by, among other things, excavation work and replacement of pipes. Data from space and reflectors on the ground show exactly where soil layers shift and destroy pipes and sewers which allow them to be replaced before they burst and cause extre-

me damage. DTU Space, Geopartner Landinspektør A/S and Lemvig Utility are the key players in this project. As the first Danish project, support is given by the European Space Agency, ESA. The satellite reflectors are produced locally and create jobs. Great interest is shown in the projects from throughout the world and Klimatorium is currently collaborating with two New Zealand companies, Hynds and Morphem Environmental, on how to expand the project even further.



Circular economy is taking off

Circular economy is finally getting momentum and Climatorium is doing its part. Climatorium has together with the Central Jutland Region and Lemvig Municipality signed a collaboration agreement with the influential Māori-owned Wakatū Group and Nelson City Council in New Zealand.

A Climatorium similar to the one in Lemvig is to be established in the city of Nelson in New Zealand. The parties have agreed to collaborate and to share knowledge on how to adapt to climate change and implement solutions on climate challenges with a spe-

cial focus on contributing positively to citizens' daily lives and health.

Secondly, the parties will work together to equip current and future generations with the best possible knowledge on climate adaptation and circular economy.

Circular economy is very important in today's world. A sector which is investing heavily in this is the healthcare system as major environmental gains can be achieved if it is done right. Climatorium is involved in this project which is a collaboration between Den-

mark and New Zealand as well as a handful of other countries.

A Climatorium member, the company Plastix A/S, located in Lemvig, is also doing its part within circular economy. Plastix is collecting old fishing nets from the ocean and turn them into pellets which can be used for a wide range of products. Now old fishing nets end up as new packaging in supermarket stores and it is also recycled fishing nets from Plastix, which have been used for all of Climatorium's 150 conference chairs.

<https://klimatorium.dk/en/projekter/>



The road ahead – **climate road**

A Klimatorium project sets the standard for the road ahead – a climate road.

The climate road addresses some of the great climate challenges in one solution. The road deals with large amounts of rainwater and produces sustainable energy at the same time. On top of that, the climate road cleans polluted water from the road.

By using so-called permeable asphalt, which the rainwater penetrates through, the rainwater is prevented

from causing flooding or running into the sewer.

Hedensted municipality, VIA University College, Aalborg University and NCC are the key players in this project, and latest PhD study has been added to the project, looking into microplastic issues.

Read more here:

<https://klimatorium.dk/en/projekter/>





We fight **flooding** together

Seven western Limfjord municipalities have gone together to fight flooding. Research shows that seawater rises combined with the so-called morphology (form and development) in the Thyborøn Canal on the Danish West Coast, will within 50 years lead to storm surges, where the water level will be 60 cm higher than the storm surges we see today. This creates massive challenges.

But one common solution may prove to solve the challenges. The project

named "Thyborøn Canal and the western Limfjord" is working on a narrowing of the Thyborøn Canal, which in one fell swoop will counteract destructive floods.

A very complex project which shows the importance of municipalities working together and agreeing on one solution.

Read more here:

<https://klimatorium.dk/en/projekter/>



From long term pollution to an **export success**

"Høfde 42" is one of Denmark's largest long term pollutants. The Danish company Krüger A/S has succeeded in removing all pesticides and 99.5% of the mercury with a new method where the soil is heated to 350 degrees by means of electric heaters. The vapors are then treated so that they can be purified of pesticides and mercury. Thus, as there is now a solution to the pollution problem, it is only a matter of financing the treatment, which will extend over two to

four years. The method of gene purification can be a great export success as it can be used elsewhere in the world.

Half a liter of mercury that was extracted from the soil from the experiment at Høfte 42 is exhibited at the Climatorium building in Lemvig.





Visit the **climate exhibition**

The climate exhibition at Klimatorium is called "Climate without borders". The exhibition takes place at the Klimatorium building but also extends along the waterfront of Lemvig harbor. The exhibition consists of more than 40 different climate situations and challenges. You can enter a rain room with rain pouring down but without getting wet, you can learn how mercury works, feel a powerful storm on your own body and via your smartphone experience storm surges.

Lemvig Harbor is known for its flood protection wall by the name 'Le Mur'.

Along this wall you will find 10 QR codes through which you can test your knowledge in the 'climate quiz'. You can also burn off some calories and have a bit of fun exercising at the outdoor multi-track and play a game of climate cricket before you end your visit at the skating rink.

Visiting the exhibition is free of charge.

See you in Lemvig.

Read more here:

www.klimatorium.dk/en/klima-uden-graenser



Who are **we**

The chairman of the Climatorium is Jørgen Nørby, who is also chairman of Regional Development in the Central Jutland Region.

Below a selection of the Climatorium members are listed:



Information about staff and a potential opportunity to become a volunteer climate-guide can be found on the Climatorium website:

www.klimatorium.dk/en/kontakt-klimatorium



*Manager
Lars Holmegaard*



*Chairman
Jørgen Nørby*

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