Aurora

Demonstrating trAnsformative solUtions to empower climate Resilience tOwards impRoved public health stAtus in the EU Boreal Region

Newsletter 2

Welcome to our second newsletter!
August 2025

We are excited to share insights into our project, including its ideas, key roles, latest news, upcoming events, and much more.

Website	AuroraClima.eu
LinkedIn	@auroraclima
X	@AuroraClima
Facebook	@aurora-clima-project
Youtube	@AuroraClimaProject

Funded by the European Union

Funded by the European Union (AURORA under the Grant Agreement n° 101157643). Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the granting authority. Neither the European Union nor the granting authority can be held responsible for them.

Presenting Aurora Demo Cities

How can AURORA help? The project helps demo cities plan for climate change by testing different solutions in virtual simulations. It brings together data on health, weather, and local communities to show what works best. Local experts also get training and tools to make smart decisions that protect people's health.

Riga, Latvia

The capital of Latvia faces increasing flood risks, with projections pointing to more severe events in the future. Some areas already experience recurring floods, leading to significant economic losses and emotional distress. Rising sea levels present a particularly serious threat.

Latvia's natural floodplains offer valuable flood mitigation potential, but governance remains fragmented, especially in the capital. In long term, rising flood risks threaten public health through waterborne diseases like gastroenteritis and cholera, and vector-borne diseases such as West Nile virus and dengue fever. Floods can already trigger anxiety, depression, PTSD, and can worsen access to care, and cause respiratory issues like asthma and allergies due to mould exposure.

Strengthening flood resilience in cities like Riga requires addressing fragmented governance and advancing integrated risk management approaches. Enhancing cross-sectoral coordination, improving urban planning, and ensuring access to healthcare are essential to reduce the health impacts of flooding, including disease outbreaks, mental health challenges, and service disruptions. Proactive adaptation measures are vital to protect urban communities in the face of intensifying climate related flood risks.

- Flood risks
- Fragmented governance
- Natural floodplains
- Mental health impacts
- Waterborne & vector-borne diseases

Vilnius, Lithuania

The capital of Lithuania is increasingly affected by shifting climate patterns, driven by both global influences and local geography. With its humid continental climate and rising annual temperatures, Vilnius faces growing variability in precipitation, temperature, and unusual weather events. Climate change poses complex risks for the city's residents and infrastructure.

Changing climate dynamics heighten health threats in the capital. Vector-borne diseases like encephalitis and Lyme disease are expected to spread with expanding tick and insect populations. Shifts in pollen distribution worsen allergy conditions. More frequent heatwaves endanger vulnerable groups, while cold spells raise the risk of cardiovascular diseases and acute myocardial infarction (AMI). Additionally, floods can cause mould-related respiratory problems such as asthma and allergies, and hinder access to healthcare facilities during emergencies.

To build resilience in the face of increasing climate pressures, it is essential to promote integrated adaptation strategies and strengthen health system preparedness. This includes identifying health vulnerabilities, improving the resilience of infrastructure, and enhancing cross-sectoral coordination to protect public well-being. These measures are vital to ensure that communities, especially in urban areas like Vilnius, are equipped to respond to the escalating impacts of climate change.

- Climate variability
- Tick-borne diseases
- Heatwaves & cold spells
- Allergy intensification
- Health system preparedness

Tallinn, Estonia

Climate change is already affecting Tallinn, not just through rising temperatures, but through extreme weather events, shifting ecosystems, and growing pressure on public health systems.

While the city's coastline is still rising, sparing it from immediate sea level rise, persistent winds and severe storms are causing dangerous water surges. Combined with more frequent floods, droughts, and seasonal shifts, the risks to water systems, buildings, and community wellbeing are growing.

Drinking water safety is a top concern. Lake Ülemiste, Tallinn's main source of drinking water, is particularly vulnerable. Any contamination, whether from polluted runoff or drought-related changes, could disrupt access across entire districts. At the same time, tick-borne diseases like encephalitis and Lyme disease are increasing as milder winters extend tick activity. Parks and low-lying areas are becoming more suitable habitats, especially after flooding.

Marine water quality is also at risk. Intense rainfall and runoff activate sewer overflows, sending pollutants into the sea and threatening seafood safety. On land, mould growth in flood-prone buildings, especially in Tallinn's Old Town and heritage wooden districts, is affecting indoor air quality and historic preservation alike.

- Storm surges
- Drinking water vulnerability
- Marine water quality
- Tick-borne disease expansion
- Heritage building risks

Tampere, Finland

Even in a country like Finland - known for its clean environment and strong healthcare – climate change is creating serious health challenges. In Tampere, rising temperatures and more frequent heatwaves can increase health risks, especially for older adults and people with chronic illnesses. More rain and less snow may cause moisture problems in buildings, leading to mould and poor indoor air quality that can trigger asthma and other respiratory issues. Warmer weather and changing rainfall can also affect water quality, increasing the risk of infections like Campylobacter. Ticks that carry Lyme disease and encephalitis are spreading further due to milder winters. On top of this, people may face mental health effects l ike depression and climate anxiety, especially during long, dark winters.

To protect public health, Tampere needs to be better prepared for climate impacts by strengthening healthcare services, improving indoor environments, and tracking infectious diseases more closely. Public awareness, smart data use, and support for at-risk groups are key steps to making the city more resilient and better prepared for the future.

- Heatwaves
- Indoor air quality
- Vector-borne diseases
- Water quality
- Mental health

Pori, Finland

Flood risk

Moisture damage

Waterborne infections

Vector-borne diseases

Vulnerable groups

Although Finland is known for its strong social infrastructure and high-quality healthcare, it is not immune to the growing health impacts of climate change. Rising temperatures and shifting weather patterns are introducing new risks – even in cooler climate areas of Southern Finland, like Pori.

Prolonged heat waves, though less common than in other regions, pose risks for older adults and people with chronic conditions. Wetter winters and more rainfall may lead to moisture damage and mould, affecting indoor air quality and causing respiratory issues and asthma. Increased rainfall and rising sea levels also heighten the flood risk along the Kokemäki River, which can lead to significant structural damage, harmful indoor air quality issues, and even disruptions in the availability of healthcare services during crisis situations.

Changing precipitation and warmer waters increase the risk of waterborne infections such as Campylobacter and Cryptosporidium. Vector-borne diseases, including Lyme borreliosis and tick-borne encephalitis, are also spreading due to milder winters. Climate change can further impact mental health, contributing to depression, winter-related mood disorders, and climate anxiety. Vulnerable groups—including children, youth, and indigenous Sámi communities – may face disproportionate impacts, especially in sectors affected by environmental stress.

To protect public health in the face of climate change, Pori must strengthen its climate resilience through proactive adaptation. This includes preparing the healthcare system for extreme weather events, improving indoor air quality in response to increased moisture, monitoring the spread of infectious diseases, and addressing the mental health effects of a changing climate. Public awareness, data-driven decision-making, and inclusive support for vulnerable groups – such as children, the elderly, and indigenous communities – are all critical for building a healthy, climate-resilient future.

News

Meetings, events and public articles

Plenary Meeting in Riga

6-7 March, 2025

Partners meet in one of the project's Demo cities - Riga, Latvia.

The first day of the Plenary Meeting was dedicated to a dynamic and very useful discussion during the Design Thinking workshop, focusing on ensuring that the AURORA system remains flexible and scalable to meet the needs of all end-users of the project. The second day of the meeting was filled with deep technical discussions. Partners dived into the details, mapping out dependencies between work packages and identifying the essential inputs and outputs at every step. Collaboration and clarity are key as we move forward!

The meeting took place at 'Koka Riga' - an inspiring venue in one of Riga's historic wooden buildings. This beautifully restored space (managed by the Riga City Council's Property Department) reflects the city's rich architectural heritage and serves as a cultural hub for creative initiatives. Thank you to the historic and vibrant city of Riga for hosting us these past days!

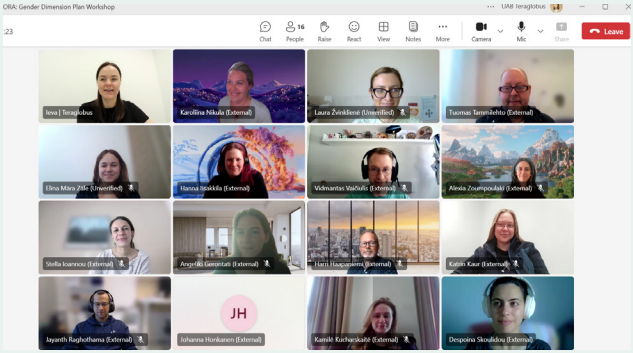
Online Gender Dimension Plan Workshop

23 April, 2025

Aurora consortium's productive online session on the gender equality topic.

On April 23rd, the Aurora consortium had a very fruitful and inspiring session at the Gender Dimension Plan Workshop. Partners explored crucial topics around equality, many of which are often overlooked but essential, from gender perspectives to broader ethical dimensions like accessibility and inclusivity in research. One of the highlights was the use of the Padlet tool for idea sharing, which created a space for open, real-time input.

The breakout discussions in separate Teams Rooms led to some incredibly insightful exchanges, showing just how powerful collective reflection can be. From raising awareness about gender equality to embracing diverse voices and experiences, today's session reinforced that true innovation comes from diversity, awareness, and intentional action.



The Finnish DIGI360 event

7 May, 2025

On May 7th, the Aurora project was proudly represented at the DIGI360 event in Turku, Finland, by our valued partner Prizztech Oy.

DIGI360 is a leading Finnish hybrid event that brings together experts to explore how digital transformation, artificial intelligence, and cybersecurity are shaping the future of society, business, and public services.These focus areas are also crucial in tackling the growing health challenges posed by climate change.

Photo © Prizztech Oy | Johanna Honkanen

Aurora at the Security Sector Negotiation Days #TN40

13-15 May, 2025

Aurora was proudly presented at the Security Sector Negotiation Days #TN40, held from 13 to 15 May 2025, in Helsinki (Finland).

Our partner, Laurea University of Applied Sciences, hosted a presentation table at the networking event, showcasing its Safety, Security, and Risk Management education programs and project activities, including Aurora.

Aurora featured in the Mission Project Catalogue

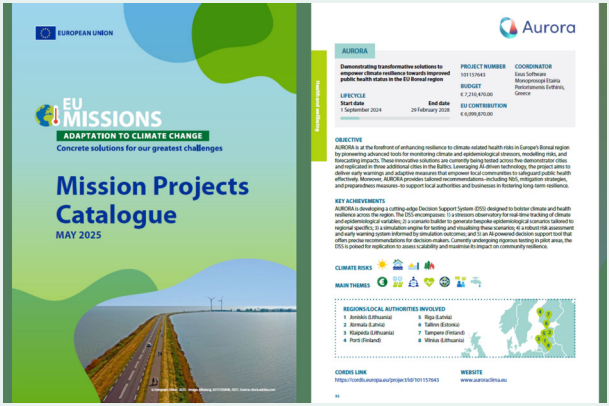
15 May, 2025

Aurora project features in the Mission Project Catalogue (2025 May) under the category 'Health and Wellbeing'.

Written by CINEA - European Climate, Infrastructure and Environment Executive Agency, this catalogue brings together key information on Mission-funded initiatives that are shaping a more climate-resilient communities – showcasing innovative practices, transferable models, and tangible impacts on the ground.

Whether you're a policymaker, local authority, researcher, practitioner, or citizen, we invite you to explore how these Mission Projects are helping to build a climate-resilient future across Europe:

https://climate-adapt.eea.europa.eu/en/mission/news/news/new-mission-projects-catalogue-showcases-europes-drive-towards-climate-resilience-1



Aurora joins the EU Climate and Health Observatory

16 May, 2025

We're proud to announce that Aurora project has been officially published in the European Climate and Health Observatory under Research and Knowledge Projects.

The European Climate and Health Observatory is a partnership between the European Commission, the European Environment Agency (EEA), and several other organisations.

The Observatory aims to support Europe in preparing for and adapting to the impacts of climate change on human health by providing access to relevant information and tools. This recognition highlights AURORA's contribution to European Green Deal and EU4Health vision, helping build a more resilient and healthier European Union!

About the Observatory:

https://climate-adapt.eea.europa.eu/en/observatory/About

AURORA publication:

https://climate-adapt.eea.europa.eu/en/metadata/projects/demonstrating-transformative-solutions-to-empower-climate-resilience-towards-improved-public-health-status-in-the-eu-boreal-region

Aurora Meeting in Vilnius City Municipality

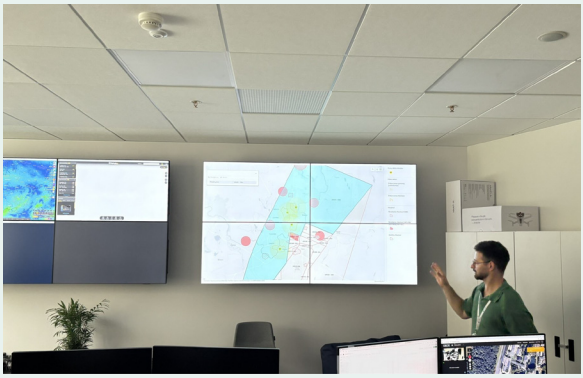
22 July, 2025

On July 22nd, Aurora partners came together in Vilnius city municipality to discuss preparations for our second Design-Thinking Workshop, happening this September in Greece.

The meeting was a crucial moment for clarifying shared goals and aligning visions among the project's technical partners - tailored to meet the unique needs of Vilnius, one of our demo cities.

Participants included: Vilnius City Municipality, Vilnius Health Bureau „Vilnius sveikiau" , ID Vilnius - a company for health data in Vilnius, AdCogito, and TeraGlobus.

A special highlight was Vilnius ID's presentation of "City Lungs" – an innovative, real-time air quality and pollen map that supports smarter decisions for a healthier Vilnius. We were discussing how this public system can use the upcoming Aurora platform data and other possibilities for future collaboration.



Media Articles

Article on Gender Awareness in the project

24 March, 2025

AURORA project partner Laurea University of Applied Sciences (LAUREA, Finland), which is leading the project's Data Management, Ethics, and Legal Compliance work, has published a media article titled 'Gender Awareness as Part of the Development Work of the AURORA Project'.

Find the full article on LAUREA journal page:

https://journal.laurea.fi/sukupuolitietoisuus-osana-aurora-hankkeen-kehittamistyota/#ccd3471a

"We promote open discussion on gender-related issues in the project, as well as other ethical issues related to the project. Gender and its impacts are at the heart of our ethical considerations during the project. Our goal is to promote equal opportunities for all genders and to pay attention to gender in different phases and activities of the project."

Written by Karoliina Nikula.

Article on Aurora's Real-Life Need

14 April, 2025

Project's partners at iED - Institute of Entrepreneurship Development - have published a media article offering an insightful overview of Aurora and its vision.

Full article Link:

https://ied.eu/project-updates/projects/aurora/aurora-climate-health-resilience/

"Climate change is no longer a distant threat; it's a present-day crisis that is reshaping our world. Rising temperatures, extreme weather events, a nd shifting disease patterns are beginning to affect human health and well-being in ways we cannot ignore. The AURORA project is here to address..."

Article on MIP4Adapt platform

8 May, 2025

We are pleased to share that our project's main ambitions and vision were highlighted in the Mission Implementation Platform for Adaptation to Climate Change (MIP4Adapt) News section:

The full article could be found on the official MIP4Adapt website:

https://climate-adapt.eea.europa.eu/en/news-archive/project-aurora-aims-to-demonstrate-transformative-solutions-to-empower-climate-resilience-in-the-european-boreal-region

"Project AURORA aims to demonstrate transformative solutions to empower climate resilience in the European Boreal Region."

A MIP4Adapt Platform supports European regional and local authorities to prepare and plan their adaptation pathways to climate resilience.

Article in Laurea Journal

8 May, 2025

AURORA project partner Laurea University of Applied Sciences (LAUREA), which is leading the Data Management, Ethics, and Legal Compliance work in the project, has published a media article titled 'How to develop the ethical thinking and ethical agency of project actors as part of international project work?'.

Find the full article on LAUREA journal page:

https://journal.laurea.fi/miten-kehittaa-han-ketoimijoiden-eettista-ajattelua-ja-eettista-toimijuutta-osana-kansainvalista-hanketyota/#ccd3471a

"What makes ethical development work challenging is that we may not even really have a clear idea of what each partner is doing. This highlights the ethical thinking of each organization and project actor. It is essential for everyone to practice their own ethical thinking as part of the project work – and in this case, especially their gender-related ethical thinking."

Written by Karoliina Nikula.

Upcoming events

24-25 September, 2025

Plenary meeting + Design-Thinking Workshop in Larissa, Greece

26-27 September, 2025

InnoHealth Forum in Larissa, Greece

7-10 October, 2025

Participation in conference: the 7th Planetary Health Annual Meeting - PHAM 2025 in Rotterdam, the Netherlands

16-18 October, 2025

Participation in conference: ENEBL 2025 conference Tallinn, Estonia

Aurora

Discover up-to-date information on our site:

www.auroraclima.eu

Our dedicated partners:

Coordinator

EXUS AI LABS

Partners

AINIGMA technologies

UBITECH ubiquitous solutions

Tallinn

TAL TECH

PORI

Prizztech

ILMATIETEEN LAITOS METEOROLOGISKA INSTITUTET FINNISH METEOROLOGICAL INSTITUTE

LAUREA

TAMPERE. FINLAND

RISA Sicherheitsanalysen GmbH

EnvE-X

iED institute of Entrepreneurship Development

GEOSYSTEMS HELLAS

Jūrmala

LIETUVOS SVEIKATOS MOKSLŲ UNIVERSITETAS

VS VILNIUS SVEIKIAU

KLAIPĖDOS MIESTO VISUOMENĖS SVEIKATOS BIURAS

JONIŠKIO RAJONO SAVIVALDYBĖ

VILNIUS

TeraGlobus SAVE THE EARTH

AdCogito

SInopsis

KTH VETENSKAP OCH KONST

ResilienceGuard Business Continuity | Crisis Management

Associated partner

Funded by the European Union

Funded by the European Union (AURORA under the Grant Agreement n° 101157643). Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the granting authority. Neither the European Union nor the granting authority can be held responsible for them.