CLIMATE SCENARIOS - RCPs

BSR NOAH: January 2019 - December 2021

Protecting the Baltic Sea from untreated wastewater spillages during urban flooding

NOAH

THE REPRESENTATIVE CONCENTRATION PATHWAYS (RCPs) are scenarios representing different greenhouse gas (GHG) concentrations in the atmospehere. The four scenarios are used for making climate models, which predict possible changes in the climate over time. RCPs were first used in the fifth Assessment Report of the Intergovernmental Panel on Climate Change (IPCC).

WHAT ARE THE DIFFERENT RCP SCENARIOS?

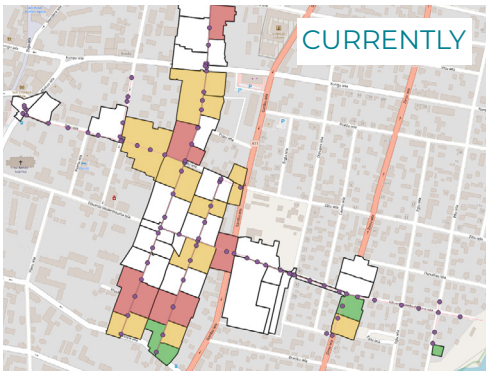
- RCP 2.6 – Optimal climate scenario. GHG concentrations decline greatly and emissions are net negative by 2100.
- RCP 4.5 – Moderate climate change scenario. GHG emissions start to slowly decline over time.
- RCP 6.0 – Moderate climate change scenario, but more extreme than RCP 4.5 scenario. Emissions peak 2080, then decline.
- RCP 8.5 – Extreme scenario. GHG emissions continue to rise over time.

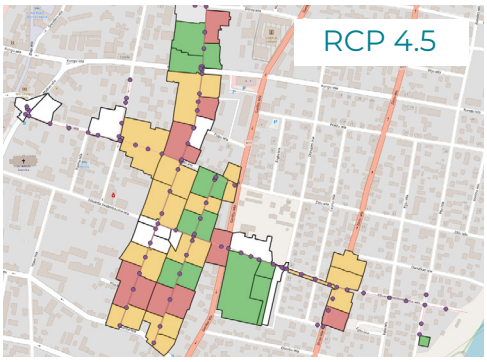
The more extreme the RCP scenario, the more extreme the climate change-induced temperature rise, storm, flooding, etc. is projected to be by the end of the century!

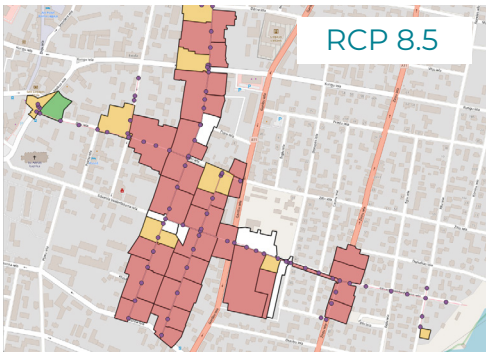
HOW ARE RCPS UTILIZED IN NOAH?

- The RCP scenarios utilized in the NOAH project are RCP 4.5 and RCP 8.5.
- Experts utilize the RCP climate scenarios as an input in the modelling of the NOAH Extreme Weather Layer (EWL) tool, which displays flood risk projections of the future. The flood risks are based on the different climate scenarios and are shown on the EWL map in traffic light colors from low to high risk (see images on the right).
- With the help of the NOAH tool and the RCPs, urban planners are able to develop solutions for more climate-resilient cities.

Example: Liepaja, Latvia







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SCAN QR CODE TO VISIT PROJECT WEBSITE!

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