



Stavanger 2050: Urban resilience through nature and knowledge

Desired future scenario

In 2050 Stavanger is resilient to flooding from the rising sea level and storm water. Nature is integrated in the city and water is valued as a positive element. In the vision this is visualised by water and green as the veins of Stavanger.

The 'green and blue' structures are connected and function well to deliver a wide range of benefits for citizens, such as healthy living, well being and biodiversity.

In 2050 the social fabric of Stavanger enables a holistic approach to climate resilience, with the inclusion of all the knowledge in the region used for the same purpose: creating a resilient and livable city through nature-based solutions. Knowledge flows freely through the veins of the city, and is shared and further developed through citizen involvement and co-creation. This allows for new solutions to the future challenges of Stavanger.



Key elements of the desired future scenario:

Storm water and nature as a resource

The lakes in the city are connected through a green and blue infrastructure. This ensures resilience to flooding and at the same time creates all sorts of co-benefits for citizens. Nature is a key element in the city, and this nature is highly valued.

All actors accept the natural water pathways. Streams are opened where it is natural and valuable to do so. New developments, roads and installations can deal with extreme rainfall. Densified areas are carefully positioned and feature buildings with green structures. Different shapes of roads (v-shaped) or swales and lawns create invisible water pathways.

Water is used – directly where it falls – for different purposes, e.g. recreation in buffer zones (small lakes and occasionally canoeing), generating electricity in water dynamos, use for agriculture or watering plants, or for aesthetic purposes such as fountains.

Resilience to flooding

The city is resilient to sea level rise through nature based solutions. Different areas have different solutions.

The people of Stavanger have learnt to live with water and not to fight it. Waterproof buildings are 'happy with wet feet' and smartly designed, e.g. with electrical systems positioned above the rising sea level and using sustainable materials. Floating houses or houses built on stilts can resist temporary flooding.

In this way the water surface is used and green areas are protected.

Knowledge and living

The general mindset is flexible and people are able to live with change and make sustainable decisions for the future and for society at large.

People have knowledge of the actual value of natural elements and value nature. The knowledge from the cultural heritage of farming and fisheries is captured. Facts and data to support that knowledge stem from living labs, in which we have experimented and learnt the (unforeseen) effects, benefits and impact of nature-based solutions. This has eventually led to knowledge of the monetary and economic value of green and water.

Co-creation

Society has found new ways of organising itself, nurturing co creation, involvement of all citizens and bottom-up initiatives. The general mindset is: 'what can we do?'

Climate resilience is a joint effort, shared by companies, NGOs, start-ups and citizens. Awareness and knowledge are gained by using everybody's expertise and experience.

People are actively participating in mapping the potential, e.g. engaged citizens map their living environment and the potential for green façades and roofs in their neighbourhood. Small 'pocket parks' are created as a string of pleasant places for all kinds of groups. Insights into biodiversity are gathered through collective actions such as counting bees, bumblebees and birds. Schools and children contribute as part of their educational programme.