

## Vision for Proactive Climate Change Adaptation in the Danish Water Sector

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To inspire water utilities to develop climate change adaptation strategies and to implement CC adaptation solutions The Danish Water and Waste Water Association (DANVA) has developed a vision for Proactive Climate Change Adaptation in the Water Sector.

The vision is part of an overall development plan for CC adaptation which consists of a mission, a vision, 5 overall objectives and several strategies to ensure that we reach the goals. The mission defines the water utilities' core business and the utilities' role in CC adaptation and the vision expresses which ambitious and realistic adaptation scenario we want to achieve in 2100. To make the vision more operational an intermediate target has been set for year 2025.

The strategies are exemplified in a catalogue "Inspirations guide" with 21 cases on specific CC adaptation and mitigation initiatives in utilities and municipalities.

The DANVA **mission** for proactive CC adaptation:

is that we:

- supply clean, cold and tasty **drinking water** based on unpolluted groundwater abstracted in consideration of watercourses and valuable nature and wetlands and treated and transported with the least possible impact on the environment
- collect **rainwater** that cannot be locally handled nearby the connected consumers. We transport the water to discharge in the natural water environment in a quantity and quality that causes no health or environmental risk. The transport is performed in an environmental sound manner, taking mitigation of climate changes into account, by choosing sustainable technology and practices
- reduce the environmental impacts of transportation, treatment and discharge of **wastewater**

The DANVA **vision** for proactive CC adaptation:

- In year 2100 the climate changes have induced a society that **is** sustainable
- The proactive utilities contribute to a diverse landscape, where water is "grown", and the city is green and appealing to the citizens.
- The utilities supply clean drinking water for the citizens. Clean groundwater is a sustained resource, because specific areas have been allocated to groundwater formation.
- Agricultural waste is utilized without risk of polluting the aquatic environment.
- In the cities and industrial areas, we transport wastewater in a safe manner and discharge only to the environment when properly treated. The varying amounts of rain are utilized in different ways in the local environment.
- Already in the year of 2025 we treat water – including increased amounts of rainwater– as a valuable resource in all parts of the water cycle. The utilities

contribute continuously to reduce the global emission of greenhouse gases, through an intensified energy saving effort and in 2025 the water sector has become CO<sub>2</sub> neutral.

**Objectives:**

Each objective expresses the most important measurable overall targets to ensure that we keep the overview. Objectives are not listed in order of priority and for some objectives it is a prerequisite that the right conditions are established which must happen by achieving some of the other objectives.

- CO<sub>2</sub> neutral water sector in 2025
- Rainwater management without flooding
- Everybody understands the division of responsibilities
- New Act on Payment Rules
- All drinking water from groundwater

For each objective a list of strategies are described and exemplified in a catalogue, “Inspiration Guide on CC adaptation in the water sector” with 21 examples of CC adaptation and mitigation initiatives in municipalities and utilities.