



Climate Adaptation

Which role does the Region play?

The two European countries which will suffer the greatest losses as a consequence of climate changes are Switzerland and Denmark



Second to Switzerland, Denmark will suffer the greatest losses as a consequence of devastating weather incidents, according to the European Environment Agency. This, of course, is linked to our dense population and relative wealth.

Atlantic region

- Increase in heavy precipitation events
- Increase in river flow
- Increasing risk of river and coastal flooding
- Increasing damage risk from winter storms
- Decrease in energy demand for heating
- Increase in multiple climatic hazards

Continental region

- Increase in heat extremes
- Decrease in summer precipitation
- Increasing risk of river floods
- Increasing risk of forest fires
- Decrease in economic value of forests
- Increase in energy demand for cooling

The Agency has classified Europe into 5 zones with each their characteristics. 2 of the zones are represented in Central Denmark Region; the Atlantic Region & The Continental Region. As is evident the prospects of the future climate changes differ. Hence strategies and actions in central Denmark must deal with numerous challenges.

We have a relatively high number of internationally significant water corporations in Central Denmark Region. Kamstrup, Siemens & Danfoss to name some. They are among the corporations expected to deliver solutions to be deployed throughout Europe.

A number of fine examples of solutions of the future are already on display in Central Denmark Region



A large number of business tourists are already visiting our region to see the multifunctional solutions – solutions which concurrently handle many issues.

These – and many others within the region – are fine examples and important display windows which inspire at home and abroad.



The commercial potential is evident and must be incorporated into regional policies.



Water has no boundaries. Consequently, solutions must carry across borders.

Across municipalities
 The River Gudenå flows across 7 municipalities on its way to the Bay of Randers. Unless the city of Randers is to be flooded after each rain storm, preventative action must happen in all the municipalities. We have no legislation in place to govern this.



Across interests
 Flooding of cities is most often handled in the countryside. In practice, the farmer must endure flooding of his fields in order to prevent flooded basements in the city. Similarly, there are numerous other interests across various fields, and we have no legislation in place to govern these.

Addressing the water challenges incorporating holistic solutions requires interdisciplinarity and cross-organisational cooperation.

Central Denmark Region has assumed the role of facilitator in these cross-disciplinary processes. Today, we are doing so through the cooperative project Coast to Coast Climate Challenge, which has received a (approx.) GBP 6m subsidy from the EU. We have previously contributed by providing the municipalities with a uniform framework for mapping in order to plan the local authority climate adaptation, and by drafting a template for the climate adaptation plans in collaboration with the municipalities.



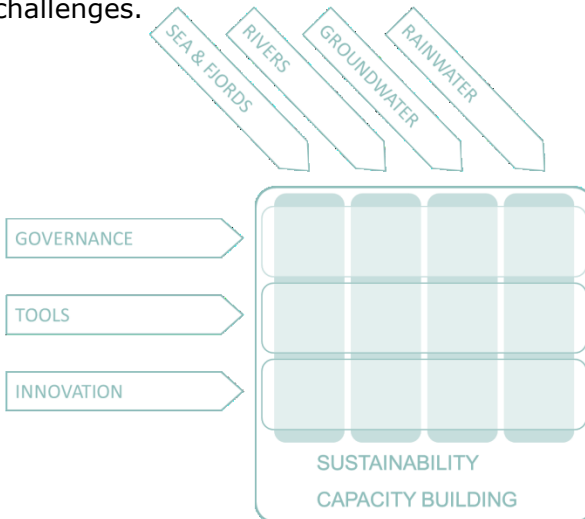
What is Coast to Coast Climate Challenge?

The overall aim of the collaboration is to safeguard central danish valuables from being destroyed by devastating weather incidents while concurrently achieving numerous other beneficial effects.

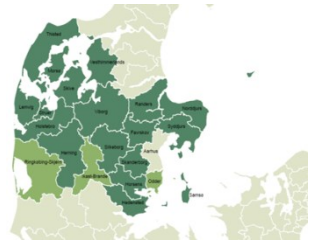
We anticipate the effects to result in Central Denmark Region being regarded as a strong, international brand renowned for its ability to sustainably deal with climate challenges. Central danish businesses want to be up-front when it comes to developing and exporting efficient solutions. In central Denmark we exhibit co-creation of good solutions. For that purpose we have 2 display windows:

Klimatorium in Lemvig (west), as an example of how to deal with salt water related challenges, and

AquaGlobe in Skanderborg (east), dealing with fresh water challenges.



The project involves the entire water circuit (the vertical topics) and across these; ways and means of developing new necessary tools for decision making, promotion of trade and the development of innovative ways in which to plan and propel solutions.



Facts about Coast to Coast Climate Challenge?

31 partners in total:

Favrskov Municipality
Hedensted Municipality
Herning Municipality
Holstebro Municipality
Horsens Municipality
Lemvig Municipality
Lemvig Vand & Spildevand A/S
Morsø Forsyning A/S
Morsø Municipality
Norddjurs Municipality
Randers Municipality
Samsø Municipality
Silkeborg Municipality
Skanderborg Forsyningsvirksomhed
Skanderborg Municipality
Skive Municipality

Skive Vand A/S
Struer Forsyning & Spildevand A/S
Struer Municipality
Syddjurs Municipality
Thisted Municipality
Thisted Spildevand Transport A/S
Vestforsyning Erhverv A/S
Vesthimmerland Municipality
Vesthimmerlands Vand A/S
VIA University College
Viborg Municipality
the University of Aalborg
The University of Aarhus
Central Denmark EU office and
Central Denmark Region as the
lead partner

Project period:

6 years from JAN 1 2017 to DEC 31 2022

Total budget:

GBP 10,5m of which GBP 6m are subsidised by EU LIFE

24 sub-projects:

The sub-projects are managed by the partners. They each cover larger or smaller parts of the matrix (see previous page). Learn more about the sub-projects on www.c2ccc.eu.

Brainwork:

The project "merely" comprises brainwork. It is expected (as well as required by the EU), that a number of associated projects will transpire. The establishment of solutions developed in the project as an example, but also a number of other evolving activities. Research and business promotion has already commenced.

The collaboration is relevant to all the municipalities

Municipality	Sea and fjords	Rivers	SUDS	Ground-water	Tools	Cooperation
Favrskov		●	●	●	●	●
Hedensted	●		●	●		●
Herning		●	●	●		●
Holstebro	●	●	●	●	●	●
Horsens	●		●	●	●	●
Ikast-Brande		●		●		●
Lemvig	●			●	●	●
Norddjurs	●		●	●		●
Odder	●		●	●		
Randers	●	●	●	●		●
Ringkøbing-Skjern	●	●	●	●		●
Samsø	●		●	●		
Silkeborg		●	●	●	●	●
Skanderborg		●	●	●	●	●
Skive	●		●	●		
Struer	●					
Syddjurs	●		●	●		●
Viborg		●	●	●		
Aarhus	●	●	●	●	●	●

By assessing the municipal climate adaptation plans, it was transparent, that the municipalities had a number of challenges in common. The project is based on this observation.

Water has no regard for regional boundaries either

As one of the most challenged geographical areas of the region is the Western Limfjord, the 3 municipalities (as well as the three water supply companies) north of our region are, of course, part of the overall Coast to Coast Climate Challenge project. They are a part of the sub-project "The Thyborøn Channel & the Western Limfjord". In this particular sub-project a total of 7 municipalities and 7 supply companies have partnered up and are co-operating closely with the Danish Coastal Authority.



Would you like to know more?

A Secretariat representing Central Denmark Region and its efforts in the field of climate adaptation has been formed. Representatives from the Secretariat are happy to come visit and to present the work.

A number of events will be held by the 24 sub-projects, where live cases will be debated with citizens and other stakeholders.

There may be an opportunity for you to get involved in a project near you.

Go to www.c2ccc.eu to obtain further information and to find relevant contacts. Sign up to receive our newsletter and relevant updates.

Climate Challenges are loaded with opportunities for Regional Development.

That is what we deal in!



We focus on holistic solutions in the project.

That is why we apply the sustainable development goals of the UN.