

Interreg 
EUROPEAN UNION

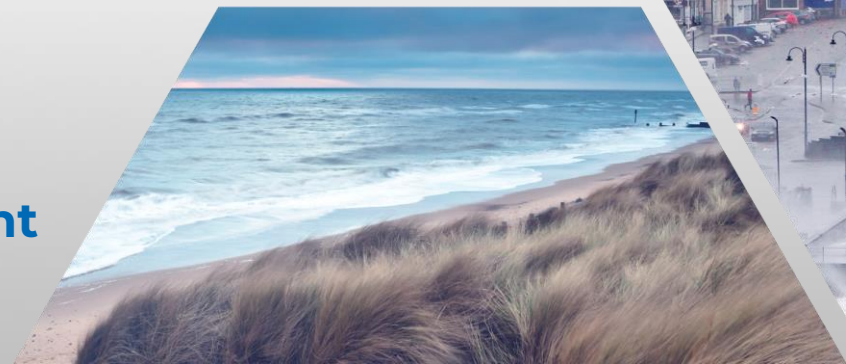
**2 Seas Mers Zeeën
SARCC**

European Regional Development Fund

Engagement with decision makers in charge of coastal management

Bert Van Severen and Elke Ramon

**Flemish Government – Department of Environment
and Spatial Development**



Key messages

- **Inform and engage**
- **Knowledge and actors intertwined**
- **A bespoke programme**
- **Results**



Where to begin?

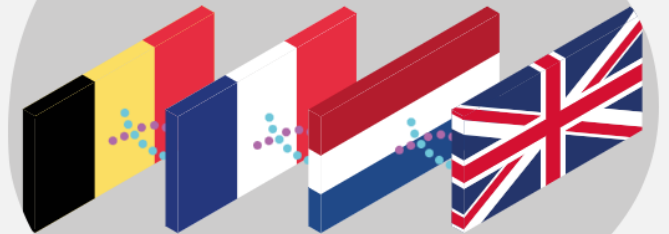
2 Seas - 4 Regions: differences and similarities

• Differences

- legislation
- governance
- approach to coastal protection

• Similarities

- coastal cities have similar challenges
- inhabitants have an influence on decision-makers



Where to begin?



Inform and engage

How to engage?

- understand municipalities and networks
- choose a good moment in the process
- transfer knowledge
- you can't do it alone



Inform and engage

How to reach decision-makers?

- **Every coastal city or municipality is different – understand the municipality's structure**
- **Inform the right people**
- **Inform at the right time**





Inform and engage

The inhabitant has an opinion

- **Influence on the decision-maker**
- **Opinion versus knowledge**
- **Increasing the knowledge/capacity of**
 - **the inhabitant**
 - **the decision-maker**
 - **everyone involved in the process**



Knowledge and actors intertwined

View the full picture to gain and disseminate knowledge – work together, look further

- **WP1: academics**
- **WP2: authorities**
- **WP3: citizens**

- **WP1: Implementation Framework and Monitoring**
- **WP2: Urban Decision-Makers Capacity Programme**
- **WP3: Visualisation and Community Engagement**
- **WP4: Pilots**
- **WP5: Project Management**
- **WP6: Communication**



Knowledge and actors intertwined

GOAL: evolve towards a Centre of Competence
a structured, long-term research and innovation
collaboration in strategically important areas
between academia and industry with frequent
interactions with the public sector
(and public)



Knowledge and actors intertwined

Gain knowledge

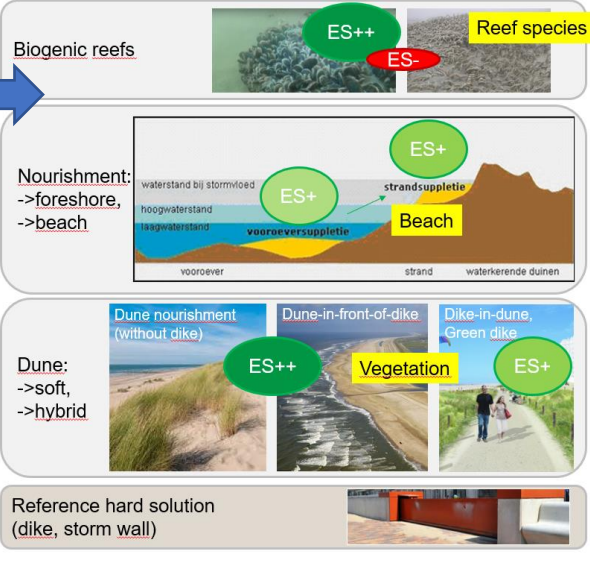
- Gather existing knowledge
- Identify gaps
- Develop studies
- Innovate, be creative



Fig. 5 Map of north pier. Extract from Cornwall LXXIV. NW, revised 1906, published 1908. (reproduced with the permission of the National Library of Scotland)



Fig. 6 Left: Old Tolcarne Bridge, Newlyn Henry, Penzance Tremenhoe 1804. (Image courtesy of Penlee House Gallery and Museum, Penzance) Right: Today, the Old Tolcarne Bridge, Newlyn Henry, Penzance, Cornwall, UK. (Image courtesy of Penlee House Gallery and Museum, Penzance)



Sea
forshore (<math><LM></math>)
Beach
Dune
Dike

Knowledge and actors intertwined

- **Spread knowledge – co-working WP1, WP2, WP3 and WP4**
 - **between experts**
 - **among policymakers and decision-makers**
 - **among citizens**
- **Bring people together and work together**



Knowledge and actors intertwined

- **Spread knowledge between experts**
 - lectures and courses
 - conferences and congresses
 - seminars and workshops



Knowledge and actors intertwined

- Spread knowledge among policymakers and decision-makers
 - seminars and workshops
 - climate lectures
 - letters of first refusal – ‘Decision-makers roadshow’
 - booklet



Knowledge and actors intertwined

- **Spread knowledge among citizens**
 - roadshows
 - climate lectures
 - **Pilots: public participation**



Knowledge and actors intertwined

Information is the key

- be informed and inform at the start of the NBS process and project
- bring all necessary actors together at the start of the NBS process and project

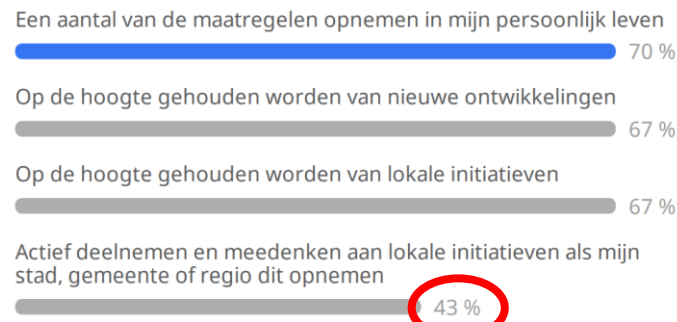


Inform and engage

How to engage citizens and inhabitants

- (The influence on decision-makers)
- The wish to be informed: slido results
- Give information, be transparent, clear and open
- Choose the right steps in the process to inform

9) Ik wil als burger aan de slag gaan met natuurgebaseerde oplossingen om de gevolgen van klimaatverandering tegen te gaan. Hiervoor wil ik graag: (1/2) 0 3 0



9) Ik wil als burger aan de slag gaan met natuurgebaseerde oplossingen om de gevolgen van klimaatverandering tegen te gaan. Hiervoor wil ik graag: 0 5 4



Inform and engage

How to engage decision-makers

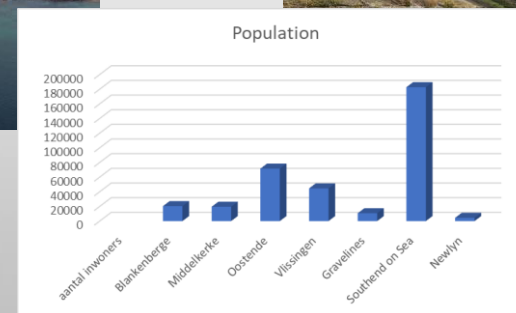
- (The influence of inhabitants)
- Decision-makers want results and concrete experiences
- Convince decision-makers
 - Importance of pilots and studies
 - Knowledge in het concept phase
 - Importance of an agent of change



A bespoke programme

Every coastal city or municipality is different and has different challenges

- size and number of inhabitants
- urban – rural
- facilities: industry, harbour, tourism, ...
- budget
- coastline
- climate conditions
- ...



A bespoke programme

Conclusion

- Different focal points in different regions
- Knowing the region is important
- A different approach is necessary



A bespoke programme

Original objective SARCC Capacity programme

Theming in Broader Categories

Theme 1: future impact of climate change and sea level rise (SLR via IPCC Scenario's and others)

Theme 2: financial impact of increased insurance premiums or damage to property

Theme 3: added value gained from increased economic activity and enhanced biodiversity

Theme 4: Explaining climate change causing sea level rise

Theme 5: Showing natural environments on the coast as dynamic process

Theme 6: Comparing dynamic NBS compared to hard static defences with respect to SLR

Theme 7: Use examples of best practice of NBS

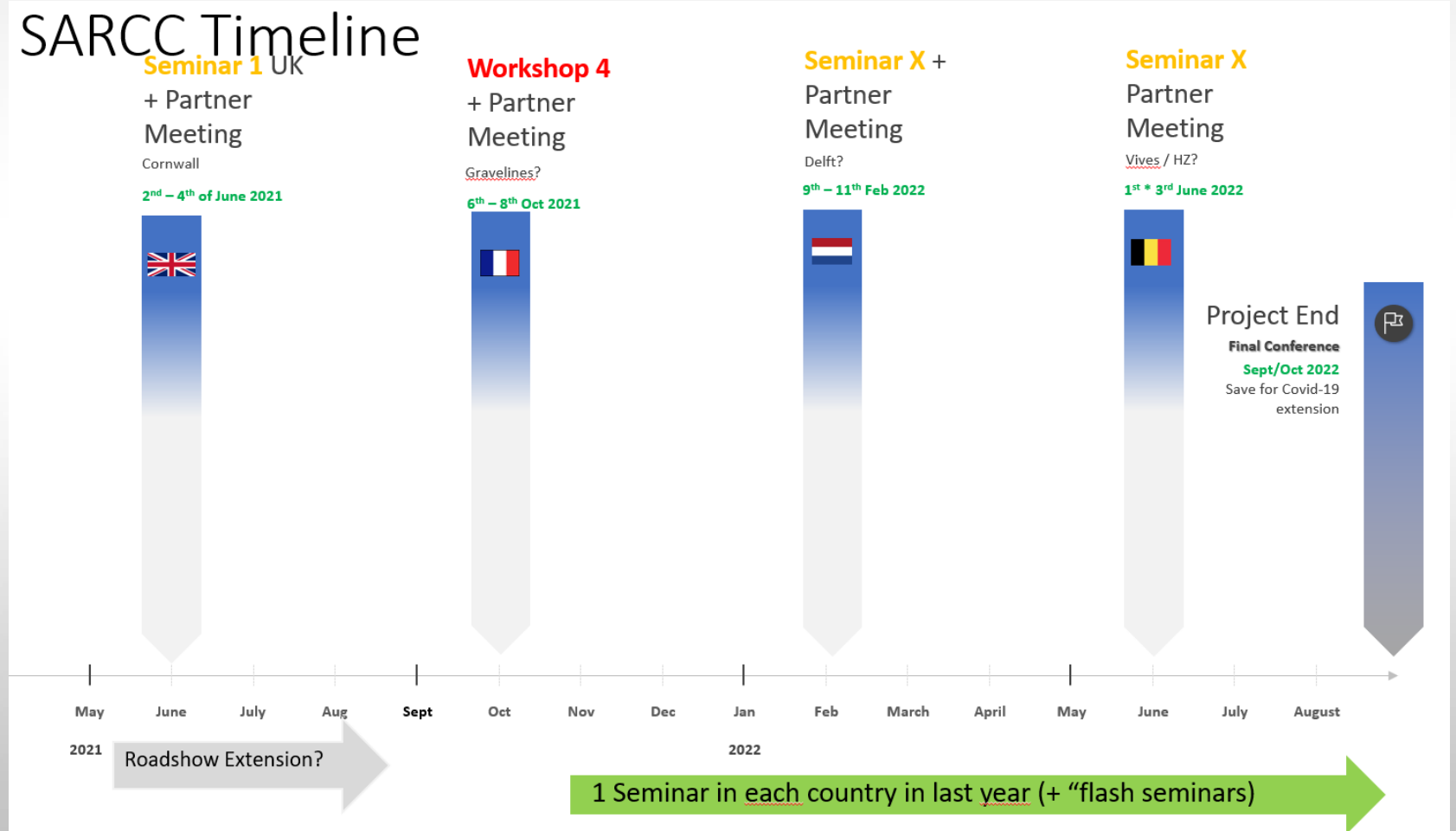
Theme 8: Showcase coastal change through historic trend analysis

Theme 9 (new): Capacity building & awareness raising



A bespoke programme

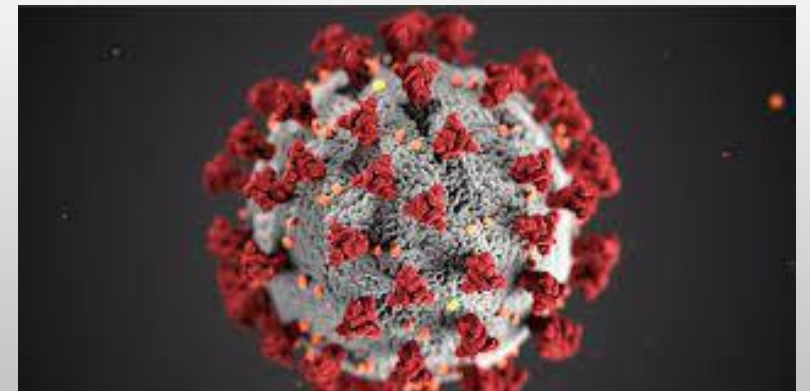
Original objective SARCC Capacity programme



A bespoke programme

Original objective SARCC Capacity programme

- seminars (informing) more general
- Workshops (engaging) more focussed
- Covid
 - More difficult to reach people and to interact
 - Less customisation



Results

2020-2023: 4 seminars (inform) and 4 workshops (engage) in 4 regions

SARCC 2021 OCTOBER WORKSHOP



SARCC 2021 OCTOBER WORKSHOP - STAKEHOLDER ENGAGEMENT AND NBS - SESSION ONE

Watch back the full webinar in English from 14th October 2021 here.

SARCC 2021 OCTOBER WORKSHOP - STAKEHOLDER ENGAGEMENT AND NBS - SESSION TWO

Watch back the full webinar in English from 14th October 2021 here.



SARCC April 2021 Seminar

The full live SARCC webinar took place on 28th April 2021. Below, you can find all of the videos from that seminar and the full webinar to watch at your leisure. In these videos a number of experts will touch upon a wide variety of nature-based solutions in coastal protection. The presentations can be watched in any order.



FULL SARCC 2021 WEBINAR [ENGLISH]

Watch back the full webinar in English from 28th April 2021 here.

FULL SARCC 2021 WEBINAR [DUTCH]

Watch back the full webinar in Dutch from 28th April 2021 here.

online seminars and workshops on

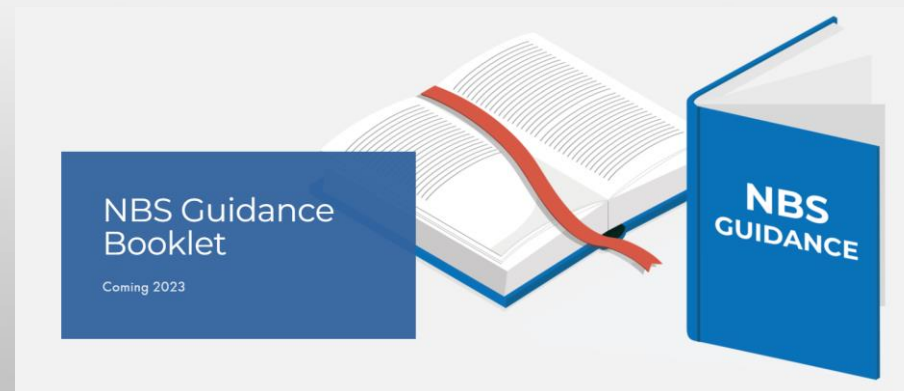
SARCC - Sustainable And Resilient Coastal Cities



Results

WP2 Nature-Based Solution Guidance Booklet for Urban Authorities

- **Inform and engage urban authorities**
 - **Part 1: Sea level rise**
 - **Part 2: The pilots**
 - **Part 3: 10 Lessons learned**



Results

Part 1: Sea level rise

- Facts and challenges of climate change and sea level rise
- Storm surge
- Sea defense: hard infrastructure vs NBS
- Ecosystem services
- European policy and goals
- 2 Seas 4 Countries 7 cities: characteristics and national policies
- The long durée



Climate Change & Sea Level Rise

Facts and Challenges
Historical Trends and Long-term
Patterns of Coastal Change

NAAM
Functie

10
Duin-voor-dijk

Duinen vormen een natuurlijke en solide zeeverering. Ook als er al een dijk aanwezig is – bijvoorbeeld in badreiden – kan een duin zeewaarts van de zeedijk extra bescherming bieden tegen overstromingen en golfslag. Bovendien zorgt het duin voor een grotere zandbuffer (zand storage) die strand en voorreef beschermt tegen erosie. In een slecht scenario zorgt het duin ervoor dat de dijk niet verder verhoogd moet worden. Tot slot is het duin voor-dijprincipe gunstig voor de biodiversiteit en kan het ook een toeristische meerwaarde hebben.

11
Zandmotor

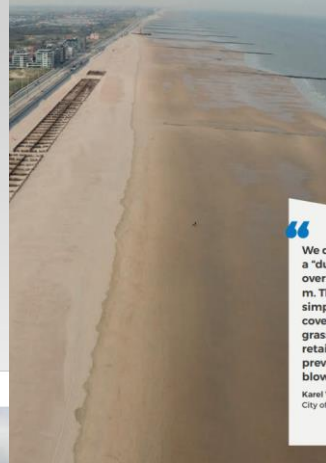
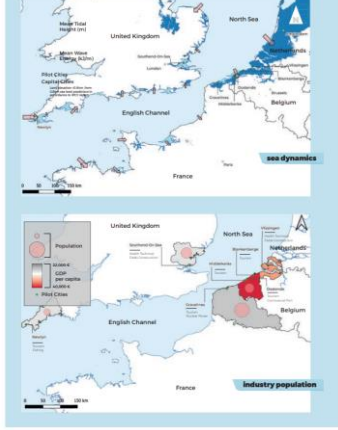
Een alternatief voor regelmatige zandsuppleties is de aanleg van een 'zandmotor'. In plaats van het zand naar te leggen op de plaats waar men wil dat het komt, legt men het elders neer. Bijvoorbeeld dieper in zee of als een groot schiereiland langs de kustlijn. Vervolgens

The Long Durée

Historical Trends and Long-term Patterns of Coastal Change

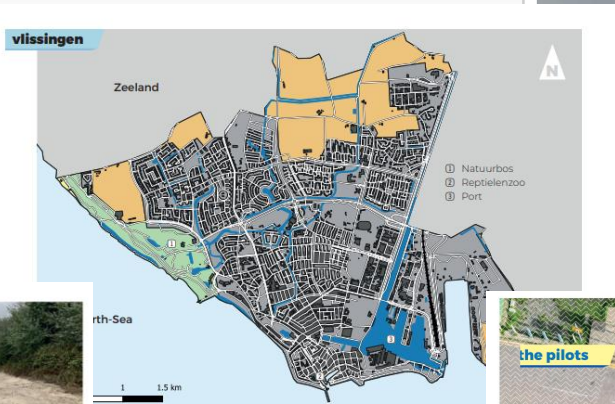
GARRY MOMBER
Director Maritime Archaeology Trust

Results



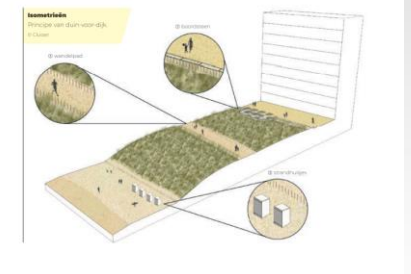
“ We decided to build a “dune-before-dyke” over a length of 700 m. The principle is very simple thanks to the covering of marram grass, the dune will retain the sand, preventing it from blowing inland.
 Karel Vanacker
 City of Ostend

Part 2: The pilots



Seven pilot cities

along the North Sea and English Channel are experimenting with innovative nature-based coastal protection solutions.



be an SWB This will take the form of a low reed promenade between the existing sea wall and the beach. On the beach side, the lowered boardwalk has a wide breaking element that also serves as a rampart. When the water breaks during storm surges, it is collected in the lowered zone and flows back to the sea through openings at the bottom of the breaking element. In the more residential zones, by contrast, we realized the so-called grass dyke. In total, we laid out 300 m of grass dyke. It is this grass dyke that has been included as a pilot project within SARCC.

The grass dyke is a natural but controlled system of low dunes in front of the existing dyke. The dune is an artificial dune, very different from the pilot projects in Gravelines or Ostend.

where the dune arises and grows naturally. In Middelkerke, the dune has been “modelled”: the engineers calculated that the dune is more stable and effective thanks to a parabolic form. Marram grass and other dune vegetation fix the dune and prevent the sand from blowing away.

Unique for Flemish coastal towns
During the design process, Middelkerke engaged a participation process with residents and merchants. This process was necessary because the idea of a dune-before-dyke is unique for Flemish coastal towns. Van Nieuwenhove: “There were a lot of concerns. Many people, especially the residents of the



Gravelines Great results with limited means

Bestaande toestand
De Koninglijke Ewaan is eerst dubbel en daarna verdubbeld. De diepte afgraving van de achtergrondgebied is 10 meter.

Onderaan
Een voorbeeld van het afgraven van de achtergrondgebied van de Koninglijke Ewaan met een lengte van 100 meter in de achtergrond. Het wordt toegevoegd aan de afgraving.

Nieuw ontwerp
Er zijn er twee met een rechte afgraving van ongeveer 10 meter diepte.

Deeln
Het is een afgraving die kan om te worden toegevoegd aan de afgraving.

been depaved, we will have to see how the dune evolves further. Will the dune grow by itself thanks to the wind, sand and vegetation, or will we have to give it a hand? We don't know yet. There are still many unknowns, but that's what makes it so interesting. Our

Intervention strengthens biodiversity in the nature reserve. Moreover, the pilot project in Blankenberge will be a test for other cities and towns. If the project is successful, it could provide an impetus for further during the Flemish coast and making it more sustainable.

the pilots

Southend-on-Sea
Small Things Add Up

This pilot is an investigation of the use of innovative technology and an opportunity to monitor and gather evidence of their effectiveness for future coastal management schemes which “green” traditional forms of hard coastal defence infrastructure. Carry: “The eco-blocks will be continuously monitored and the knowledge gained will be shared with environmental and coastal managers from various organizations in the future. The intention is to develop proof of concept which can support deployment of the eco-blocks elsewhere on the UK coast, as a low-carbon and nature-inclusive alternative to traditional engineered defences.”



Mayor's Statement
Jonathan How

Historically Newlyn has always been vulnerable to flooding and damage from coastal storms. With climate change and the resulting sea level rise, both the frequency and consequences of these storm events will increase over the coming decades and beyond. As such, I welcome the Newlyn coastal research and development project demonstrating an innovative and sustainable coastal management option for Mount's Bay. I look forward to observing how the innovative eco-blocks provide a low-carbon, hard-engineered coastal defence, but also how they act as a nature-based solution, helping to enhance intertidal habitats and improve biodiversity in future years.

In the north of France, between Calais and Dunkirk, lies the ancient fortified town of Gravelines. Due to heavy urbanization and industrialization combined with sea level rise, the need for enhanced protection against maritime incursion has become crucial. The pilot in Gravelines is achieving great results with limited means. It consists of little more than placing wooden piles in strategic places. This in turn enables the dune to thicken and enhance its height. From then on, nature does its work.

Results

Part 3: 10 Lessons learned

1. Choose NBS when possible
2. Incorporate the ecosystem services approach
3. The design and implementation of NbS needs co-creation
4. Quadruple Helix
5. Find, or be the agent of change





Results

- 6. Look across borders and learn**
- 7. Remember the long durée to recall the historical patterns of change**
- 8. Ongoing monitoring and evaluation of both project and process is necessary**
- 9. Establish an accessible platform or tool for knowledge sharing and capacity building**
- 10. Find co-finance and create new businessmodels**



Results

WP2 Nature-Based Solution Guidance Booklet for Urban Authorities

- **Online: English version (today) + Dutch version (January 2023)**
- **Printed: March 2023**

<https://www.sarcc.eu/results>



Take home messages

- **Inform and engage**
 - ***know the right people***
 - ***choose the right moment***



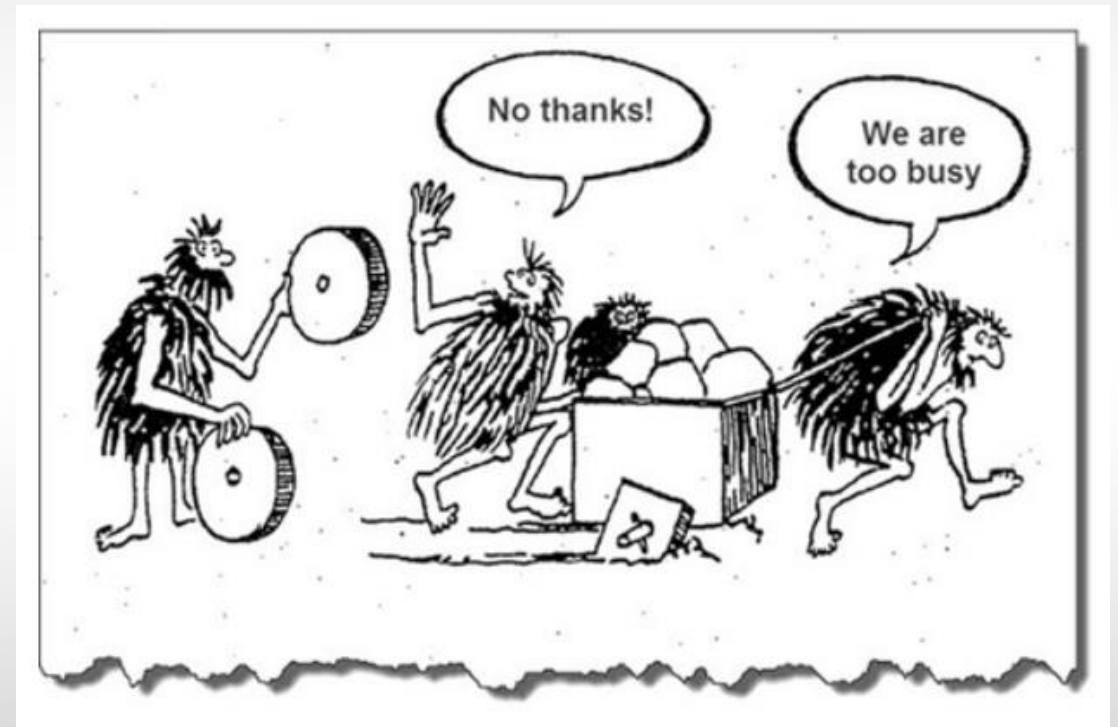
Take home messages

- **Knowledge and actors intertwined**
 - *work together, learn together*
 - *you are not alone!*



Take home messages

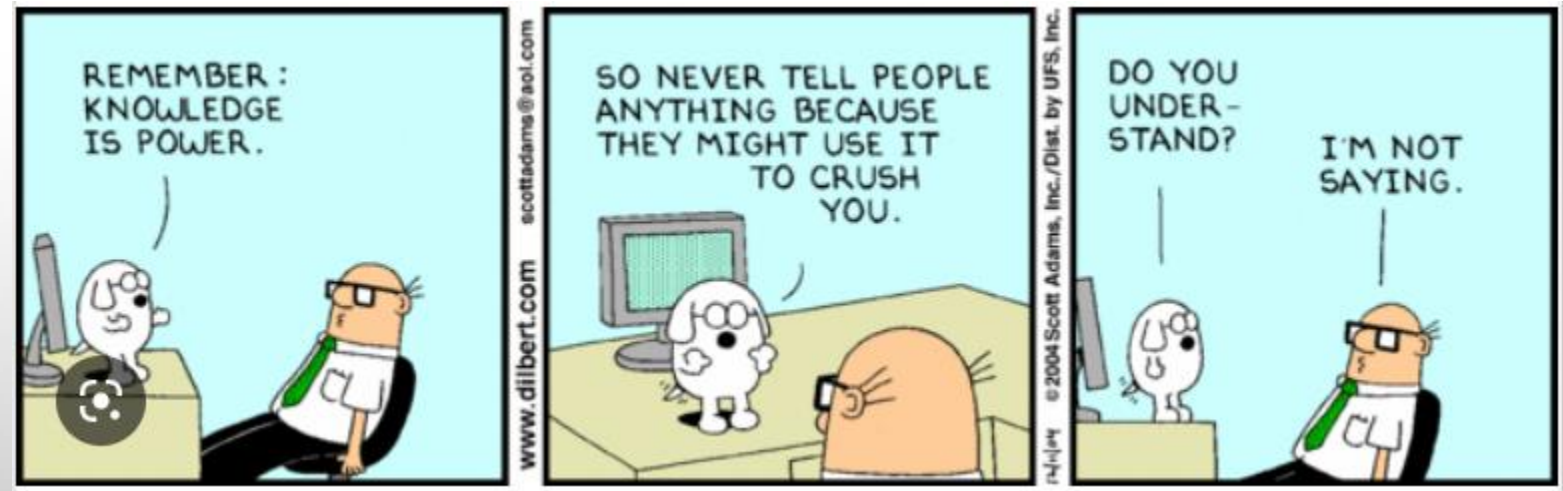
- **A bespoke programme**
 - *know your city*
 - *know your challenges*



Take home messages

- **Results**

- *use the lessons learned*



Interreg 
EUROPEAN UNION

**2 Seas Mers Zeeën
SARCC**

European Regional Development Fund

Thank you for your attention

Bert Van Severen and Elke Ramon

