

Svolvær, Lofoten, Norway





## Framework

- Interreg IVB North Sea Programme
- 22 partners from 6 countries
- 11 islands
- knowledge institutes + EPEA
- regional/local governments
- 3,5 jaar: 1 jan. 2009 till medio 2012
- budget Euro 3,6 Million





## **Islands as labs and testing grounds for sustainable innovations**

- demonstration garden for sustainable innovations
- basis for broader implementation world wide

Samsø, Denmark



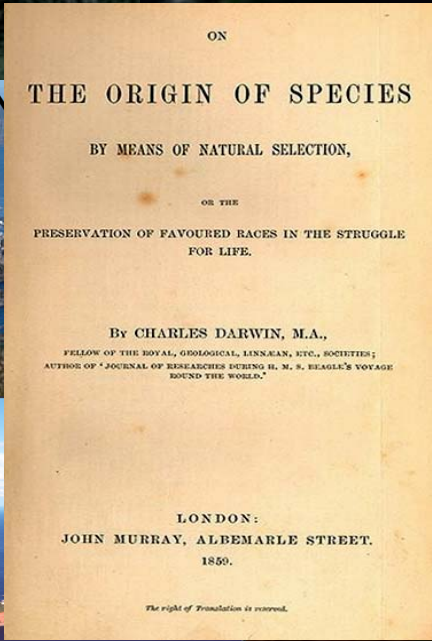
Shetland Islands, UK



Spiekeroog, Germany



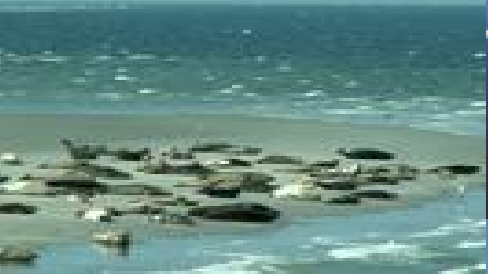
Svolvær, Iofoten, Norway



Helgoland, Germany



Ameland, NL



The Shetland Islands

Runde, Norway





## Why islands

- often depending on external resources
- such as water, energy and materials
- difficult to provide it in a sustainable way
- X factor: enormous amount of visitors
- promotional value



## Cradle to Cradle

- > Blue Energy
- > Solar/Wind/Wave/Tidal
- > Mobility (electric scooter)
- > Energy saving in housing

Energy

## Innovations

- > Desalination of sea water
- > Purification and re-use of effluent
- > Storage of rainwater
- > Separation of household waste water

Water

## Transnationality

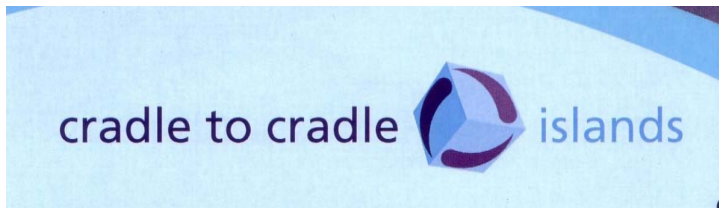
- > Energy producing Eternal Holiday House
- > Research Centre on Biopolymers
- > Local C2C material production
- > C2C solutions for marinas and accommodations

Materials

**Cradle to Cradle  
Islands**  
*Let the sunshine in*

Islands as catalysts for new developments and  
testing ground for sustainable innovations

## THE ROLE OF EPEA IN THE CRADLE TO CRADLE ISLANDS PROJECT



- **The role as a scientific expert**
  - Cradle to Cradle<sup>SM</sup> product development
  - Chemical assessment related to Cradle to Cradle<sup>SM</sup> principles
- **The role as a coach**
  - Cradle to Cradle<sup>SM</sup> consulting
  - Cradle to Cradle<sup>SM</sup> project management
- **The role as a jury**
  - Cradle to Cradle<sup>SM</sup> is a protected trademark
  - To secure all projects which call themselves Cradle to Cradle<sup>SM</sup> have to be authorized.





*wetsus*

centre of excellence for  
sustainable water technology



**combining scientific excellence with commercial relevance**

# BEST PRACTICES – Inventarisatie



DESIGN OF AN ETERNAL HOLIDAY HOME



cradle to cradle islands

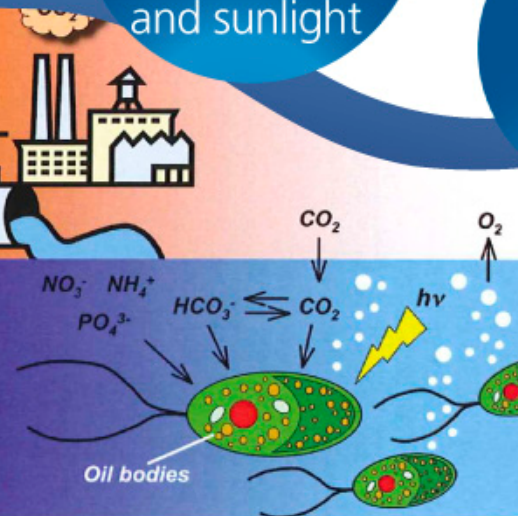
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RS

# water quality management



**Microalgae**  
Biofuels from  
wastewater  
and sunlight



**Aquatic  
worms**  
Reduction of  
waste sludge



**Aqualân**  
Innovative  
ecological sewage  
treatment plant



**DeSaH**  
Decentralized  
water  
purification





Demo- scale

32  
houses



Demo- scale



Demo-scale



Demo-scale



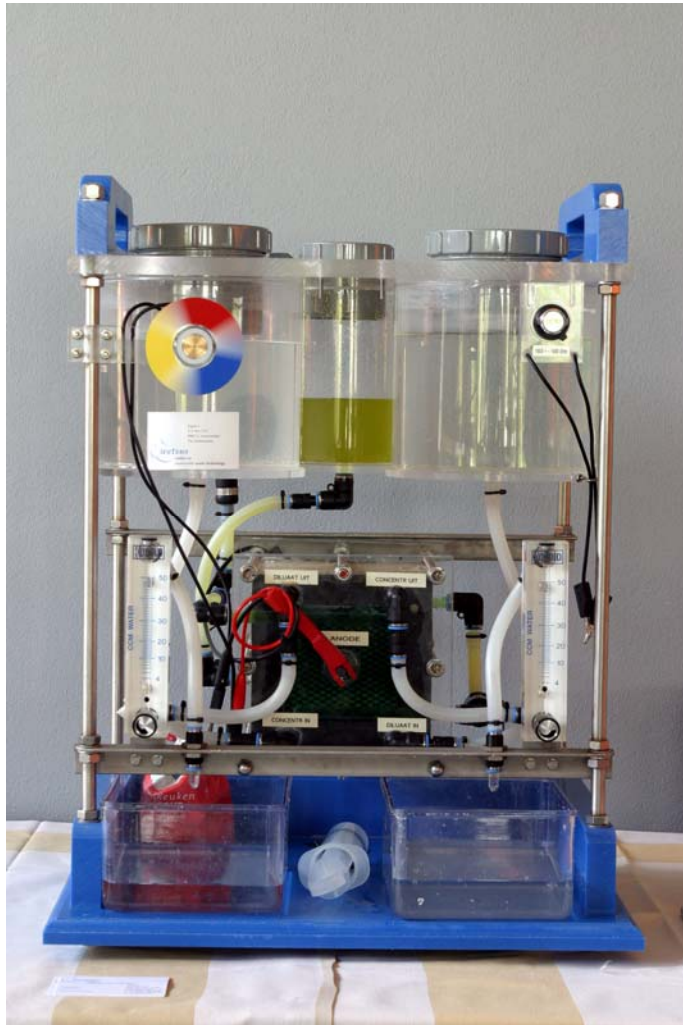
Demo-scale



Demo- scale

Bron: Grietje Zeeman, Katarzyna Kujawa, Brendo Meulman

# Blue Energy: electricity from the mixing of fresh and salt water



1 m<sup>3</sup>/s river/fresh water into the sea 'yields' 2.2 MW

Applicable?

- discharge of effluent in Wadden Sea
- surplus of surface water to Wadden Sea



# PROGRAM

September 9-10, 2009  
go to our website to update

Liberty Science Center, New Jersey • September 9-10, 2009

In 1609, Captain Henry Hudson arrived in New York Harbor and discovered the majesty of the Hudson River. Four hundred years later, on September 9 and 10, Haag Forum will commemorate this pioneering voyage by exploring water challenges facing coastal cities in the 21st century with experts from both sides of the Atlantic. While the focus will be on The Netherlands and the New York/New Jersey metropolitan region, solutions and ideas arising from the conference will benefit coastal cities worldwide. The venue for Haag is the Liberty Science Center, across from the Statue of Liberty.

### CONFERENCE THEMES

- OUR WATERFRONT: BALANCING COMMERCE, NATURE, AND COMMUNITIES
- CHANGING PERSPECTIVES: NEW OPPORTUNITIES FOR URBAN PLANNING
- THE POLITICS AND FINANCING OF INFRASTRUCTURE
- SOLUTIONS OUTSIDE THE BOX: APPLYING NEW TECHNOLOGIES TO WATER
- GREEN BRAINS: DRIVING THE ENVIRONMENTAL MESSAGE HOME
- RECRUITING THE NEW GENERATION OF WATER PROFESSIONALS



## Friese workshop:

# “Decentralized and Self Sufficient Water Systems”





water quantity management

water quantity management

water quality management

water quality management

cradle to cradle islands and water usage

cradle to cradle islands and water usage

WATER TECHNOLOGY

WATER TECHNOLOGY









# 1909 – 2009 100 Year







# zeers SOLARBOATS

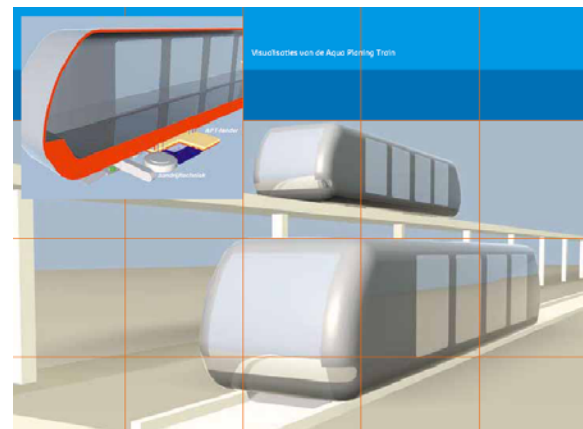
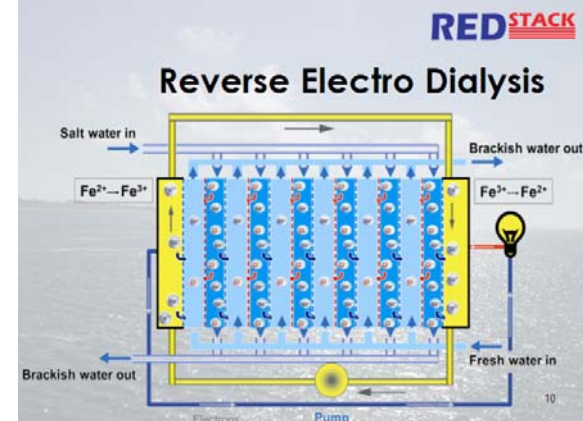
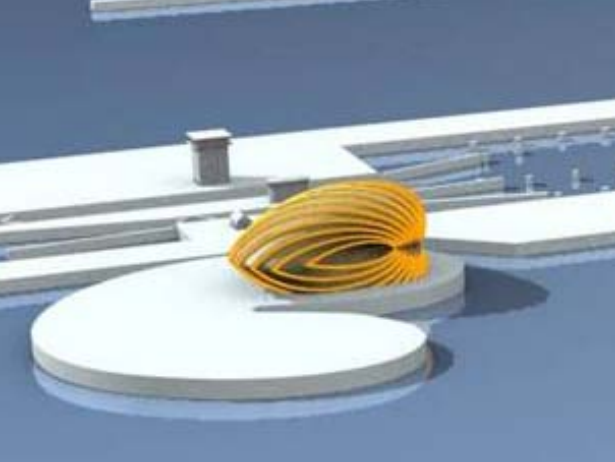












**Thank you for your attention!**

