

## Spiekeroog, Germany

### Energy and Climate Protection Concept

#### Project description on the island

With this project the Municipality of Spiekeroog intends outline a strategy for a self sufficient supply of energy on the island. In regard to the special situation on the island many renewable energy techniques are not suited for use on Spiekeroog: Because of the status as a national park it is not allowed to build more wind turbines; the production of biological gas is not possible because there is no agriculture; to install photovoltaic cells on every suitable roof can detract the character from the historical townscape; geothermal heat systems can result in a collapse of the fresh water lens. This special situation on Spiekeroog requires particular strategies for using energy on the island with a mixed concept of sustainable energy consumption, applying of renewable energy sources and possibilities for reducing CO<sub>2</sub>-emissions.

the Cradle to Cradle® concept. Also, it should be tried to integrate projects of other beneficiaries in the concept, for example the 'Energy SWOT Analyse Tool' elaborated by Aalborg University or 'Design of an Energy Efficient Swimming Pool' elaborated by Delft University of Technology. With the concept it could be demonstrated that sustainable use of energy is also possible in areas with a high status of nature or culture protection. The results of the concept can be transferred to other islands or regions with a comparable sensitive landscape.

#### Start and end date of the project

01-01-2009 - Summer 2012

#### Project leader

Municipality of Spiekeroog  
Birgit Schade  
tel.nr.: +49 (0)4976/9193316  
e-mail: schade@gem.spiekeroog.de

#### Targets of the project

The Municipality of Spiekeroog's political goal is to preserve the special ecological and cultural features on the island. Therefore, one of the main targets of the Municipality in project Cradle to Cradle Islands is to develop a sustainable energy supply. Additional intentions of the Municipality are to initiate social-cultural sustainable initiatives and to strengthen the environmental education. Moreover, the Municipality works in cooperation with the project beneficiary Oldenburgisch-Ostfriesischer Wasserverband (OOWV) which has the goal to assure that the water supply on the island will be self sufficient and independent from the mainland on a long-term basis. To realize these targets the Municipality started several projects. One of the projects is to develop an Energy and Climate Protection Concept.

#### Innovation and value of the project

The goal of the Energy and Climate Protection Concept for the Island of Spiekeroog is to carry out strategies for a sustainable use of energy in an area with special ecological and cultural features under the consideration of



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#### Partners

- EPEA, Hamburg
- OOWV, Brake
- Region Uthlande, Nordfriesland
- Stakeholders from the island of Spiekeroog
- Nordseebad Spiekeroog GmbH
- CvO University of Oldenburg
- Aalborg University, Denmark
- Delft University of Technology, The Netherlands

[WWW.C2CISLANDS.ORG](http://WWW.C2CISLANDS.ORG)

[WWW.SPIEKEROOG.DE](http://WWW.SPIEKEROOG.DE)

*"The Energy and Climate-Protection Concept is a very important tool for the sustainability and the future developments on the island of Spiekeroog."*

Bernd  
Fiegenheim  
Mayor



WATER



ENERGY



MATERIALS