



# Seminar

## Climate Impact and Risk Awareness





sustainable coastal development





# Outline for the End Product of WP 5: “Climate Impact & Risk awareness”

By Region Zealand  
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Key words in this part of the project is awareness and impact of the expected effects of climate change such as sea level rise and more often storms and more erosion and a good way to work with it in the daily practical work.

Hopefully WP5 will contribute to sustainable development of coastal zones by the application of an approach that respects the limits of natural resources and ecosystems, the so-called ‘ecosystem based approach’.

## Subjects and products

In WP 5 4 partners and 1 sub partner have each delivered case studies within the thematic headline for the WP. The subjects for these case studies have been widely spread and concerns very different aspects of dealing with the consequences of climate change.

During the project life time project meetings have been held to discuss with all partners this issue into depth, to assess and develop the results of the pilot cases and to visit pilot locations. We have along the way helped each other and analyzed the usefulness of the pilot project in relationship to work with a practical Integrated Coastal Zone Management (ICZM) and the 8 principles.

The main subject of this work package, climate impact and risk awareness and improved awareness of the expected effects of climate change along the coast and identified key issues, is divided in the following topics:

- 1 Simulation and visualisation (key issues, demonstration, communication tool and functional design)**
  - Simulation storm and wave effects: development
  - Simulation storm and wave effects: testing
  - Visualisation of storm and wave effects: development
  - Visualisation of storm and wave effects: testing
- 2 Assessment (overview and key issues) analysis assessments in relation to climate effects**
  - Coastal Climate Impact Profile
- 3 Challenges (Regional analysis)**
  - Anticipation climate change in coastal area in a region
  - Analysis of regional ICZM challenges in the light of climate change and key issues
- 4 Coastal Towns (Risk analysis and key issues)**
  - Development and testing of instruments for inner-city development and sea level rise
  - Challenges
- 5 Awareness (activities of plan implemented and monitored) Noord-Holland**
  - Development of a communication strategy
  - Implementation and testing of communication strategy

The focus in WP5 has been to focus on specific solutions and adaptive measures and at the same time combining the long term perspective with short term protection.

**WP5 has had the following participants and cases:**

North Holland – Seaside towns (protecting them and making them more attractive The situation is that, that sea level rise is combined with coast subsidence, so defense consists of beach nourishment.

Fife Coast – Protecting 400 year old golf courses and urban areas. Soft engineering is the answer, go back to the natural beach and voluntary work is a good way of securing active involvement.

Flanders – Engineering and modeling of sea defenses in coastal towns. Coupling of beach nourishment and strengthening of existing sea dykes.

Region Zealand – Regional analysis including valuation method including protection of seaside towns, tourist areas and infrastructure.

Slagelse Municipality – Protection of seaside towns against flooding. Value Mapping has been carried out in order to prioritize economical values and solutions to the main problems.

All the cases showed that visualization of the problems faced, active involvement of stakeholders, crosscutting cooperation between authorities, scientific institutions, consultants and ordinary citizens is a must in order to get work carried out in the future.

Also soft engineering is the answer for most of the cases but also a combination of hard engineering (dykes etc.) and beach replenishment is the protection measures that seem most viable in the future.

An expert seminar was held at Korsør in Denmark on 3rd September 2013 to wrap up WP5 of the SUSCOD project – **“International seminar on Climate Impact and Risk Awareness working together while Integrated Coastal Zone Management (ICZM) powered by the SUSCOD project”**.

Main issues for the final expert seminar with key words Climate Impact and Risk Awareness, is the following question debated and discussed with international experts and within the work group and invited guests. The video can be seen on the website [www.iczmassistant.eu](http://www.iczmassistant.eu).

# International seminar on Climate Impact and Risk Awareness working together with Integrated Coastal Zone Management (ICZM) powered by the SUSCOD project

Best Western Hotel Baggesen Korsør, Denmark

3 th September 2013

Questions to the panelists and participants.

Panelists:

Per Sørensen, The Danish Coastal Authority

Jan Dietrich, NIRAS

Renaat De Sutter, Ghent University

Karen Edelvang, GEUS

## Dialogue

### *1 Launching the panel dialogue*

Each of the panelists presents him-/herself and give a short initial statement on the following entry question: What do you see as the major challenges when it comes to working with a) Climate Impact and Risk Awareness, b) Creating basic understanding of climate change, and c) How local action is developed on the basis of expert knowledge on climate impact.

*Four main challenges were addressed by the panel:*

- *There is a significant need for (better) coastal planning, and ICZM delivers an eminent approach.*

- *It remains a challenge to “translate” results and knowledge from the research sphere into the policy sphere, i.e. decision making, planning and implementation*
- *It is important to define - based on best available knowledge and national/regional/local priorities - what kind of efforts should be planned for - coastal protection or coastal adaptation?*
- *Just as long term plans for the energy sector - such as Energy 2050 - exist at EU and other administrative levels, it would be a good idea to elaborate similar policy instruments in the field of coastal protection/ adaptation.*



## II Questions to be posed by the moderator

- 1 It is obvious to link Climate Impact and Risk Awareness on the one hand with Integrated Coastal Zone Management and the other hand ("theory vs practice"). Which are the key challenges to be tackled – seen from your field of expertise?
  - *See above statements*
- 2 Is the ICZM assistant an appropriate/useful instrument for assessing the future coastal development and the need for coastal protection?
  - *The panel characterised the ICZM assistant as an innovative tool, which deserves to be disseminated to a wider audience throughout Europe.*
  - *Structuring the ICZM challenges into 8 groups according the similar ICZM principles works very well.*
  - *The model's two layers - quick scan and full assessment - are seen as a good feature!*
- 3 Which are the key advantages related to the practical application of ICZM? The ICZM approach promotes
  - *Cross-ministerial and cross-sectoral cooperation*
  - *Multi-stakeholder involvement and partnerships - creating ownership in the area/municipality/region*
  - *Instead of implementing a totally new concept the ICZM principles may also be integrated in existing planning processes, which might make it easier for the planners and decision-makers*
- 4 Can you highlight some good practice examples where the newest best available climate change/ impact knowledge has been applied?
  - *Legislation is best when it is based not only on regulatory mechanisms, but also on biological and geological knowledge and research.*
  - *To achieve a quicker and successful effect it is a good idea to integrate ICZM thinking into existing instruments*
- 5 Where do you see the biggest challenges/ barriers concerning the translation of new (expert) knowledge into practical solutions / new and better practices?
  - *The most significant bottleneck seems to be the lack of understanding and capacity in the municipalities. Here an upgrade is needed.*
  - *Opportunities to acquire and prioritize funding to develop and lead projects into reality*
- 6 In which way can international cooperation contribute to local decisions-making processes in the field of ICZM?
  - *The panel stressed that EU/international projects are essential in order to create new knowledge among ICZM stakeholders at all levels. This is a unique knowledge base for inspiration and dissemination of existing knowledge, methods and tools. And for both practitioners and researchers this is an important opportunity for promoting the ICZM efforts.*
- 7 International coordination – across borders, in macro-regions etc. – regarding climate change in coastal areas seems to be important in the future. Which are the key challenges to be addressed? *The panel came up with several suggestions:*
  - *There might be a need for a EU Coastal Directive to generate more resources and focus on (improved) integrated and sustainable coastal planning.*
  - *Another opportunity for promoting ICZM in the EU member countries is to establish the Regions as drivers of ICZM development and implementation.*
  - *It was clear to the panel that SUSCOD makes people understand the risks related to climate change - and similar EU projects should be developed in the future.*



