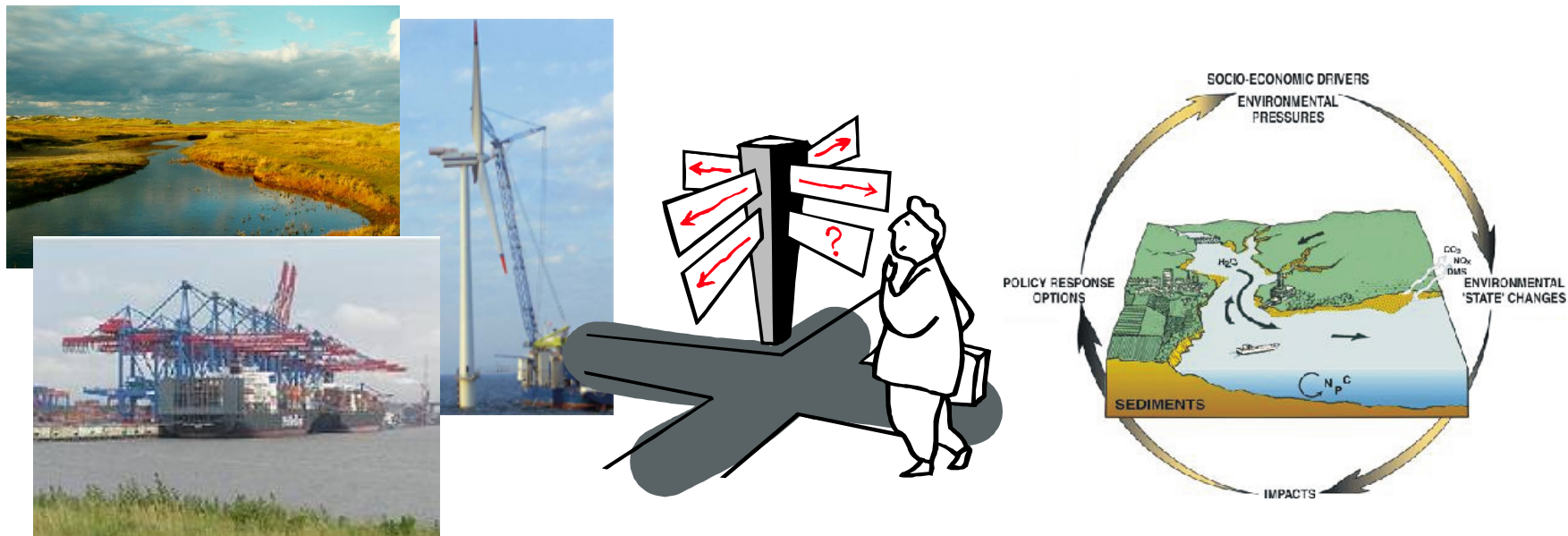


## Integrated Coastal Zone Management (ICZM): The Coastal Futures Project and ICZM approaches in Germany



## What is ICZM?

**ICZM is a dynamic, continuous and iterative process designed to promote sustainable management of coastal zones.**

ICZM seeks, over the **long-term**,  
to **balance** the benefits from **economic development** and **human uses**  
of the Coastal Zone,  
the benefits from **protecting, preserving, and restoring** Coastal Zones,  
the benefits from **minimizing loss of human life and property**, and  
the benefits from **public access to and enjoyment of** the Coastal Zone,  
all within the **limits set by natural dynamics and carrying capacity**.

(EU 1999)

## European Policy Context

- **EU Maritime Policy (Green Paper)**
- **EU Marine Strategy (Directive)**
- **ICZM recommendations**
- **Water Framework Directive**
- **Environmental directives**
- **embedded in Regional Seas frameworks**

## Looking into the term, what does ICZM include?

### I C Z M

#### Integration:

- **Vertical between administrative scales**
- **Horizontal between sectors**
- **Territorial between neighbouring areas**

## Looking into the term, what does ICZM include?

### I C Z M

#### Coastal Zone:

- **seaside boundary (in Germany incl. EEZ)**
- **landside boundary (no clear definition)**
- **land-sea interactions, sea-land interactions**

## Looking into the term, what does ICZM include?

### ICZM

#### Management:

- management related to a range of policies
- management consists of a range of statutory and non-statutory instruments

 ICZM does NOT replace administrative settings, but complements the established planning system

## ICZM in Germany

- 1999 first national conference on ICZM
- 2002 EU recommendation followed by
- 2002 ICZM Strategy for Schleswig-Holstein and
- development of legal framework for extending spatial planning into the sea
- 2003-2006 national stocktake (assessment of trends and structures)
- 2005-2006 national strategy, approved by cabinet and reported to EU
- 2006 Targets and principles of spatial planning in the EEZ are under development

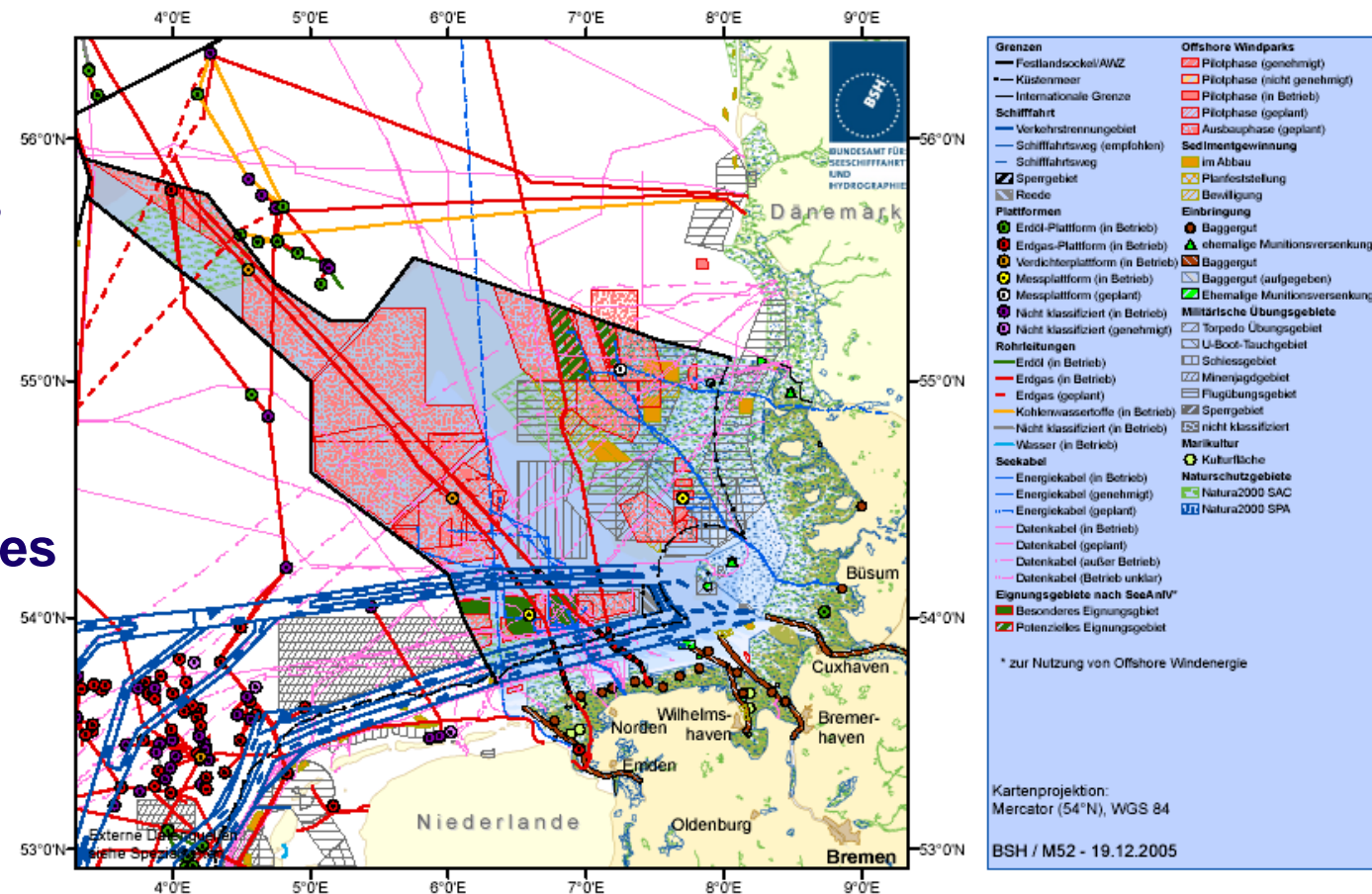


## Federal Maritime and Hydrographic Agency 2006

## Coastal and marine areas in Germany

### Multitude of

- sea use,
- human activities
- interests





## How to manage multiple use situations?

- **Extending spatial planning into the territorial waters (Länder)**
- **Extending spatial planning into the EEZ (national government)**
- **Spatial planning as important component for ICZM**

## The North Sea coast of Schleswig-Holstein



- Rural area, low population density,
- High importance of coastal defence,
- Wadden Sea protected as National Park,
- Agriculture as dominating land use,
- Tourism as dominating economic sector,
- emergence of wind energy as a new challenge

## Breaking ICZM down: Activities at local level (Example: North Frisian Wadden Sea islands)

1. Information about ICZM;
2. Identifying local priorities and urgent local problems in 3 workshops for the different parts of the area;
3. Pilot projects for local problems (ICZM in practice);
4. Identifying common issues for all islands in the Wadden Sea (international network of local institutions, EUREGIO “Die Watten”);

## Breaking ICZM down: Priority issues at

**National level (from national  
assessment, based on a specific  
criteria matrix)**

- **Offshore Wind farms**
- **Marine Protected Areas**
- **Access to large ports**
- **Shipping safety**
- **Maritime Industry**

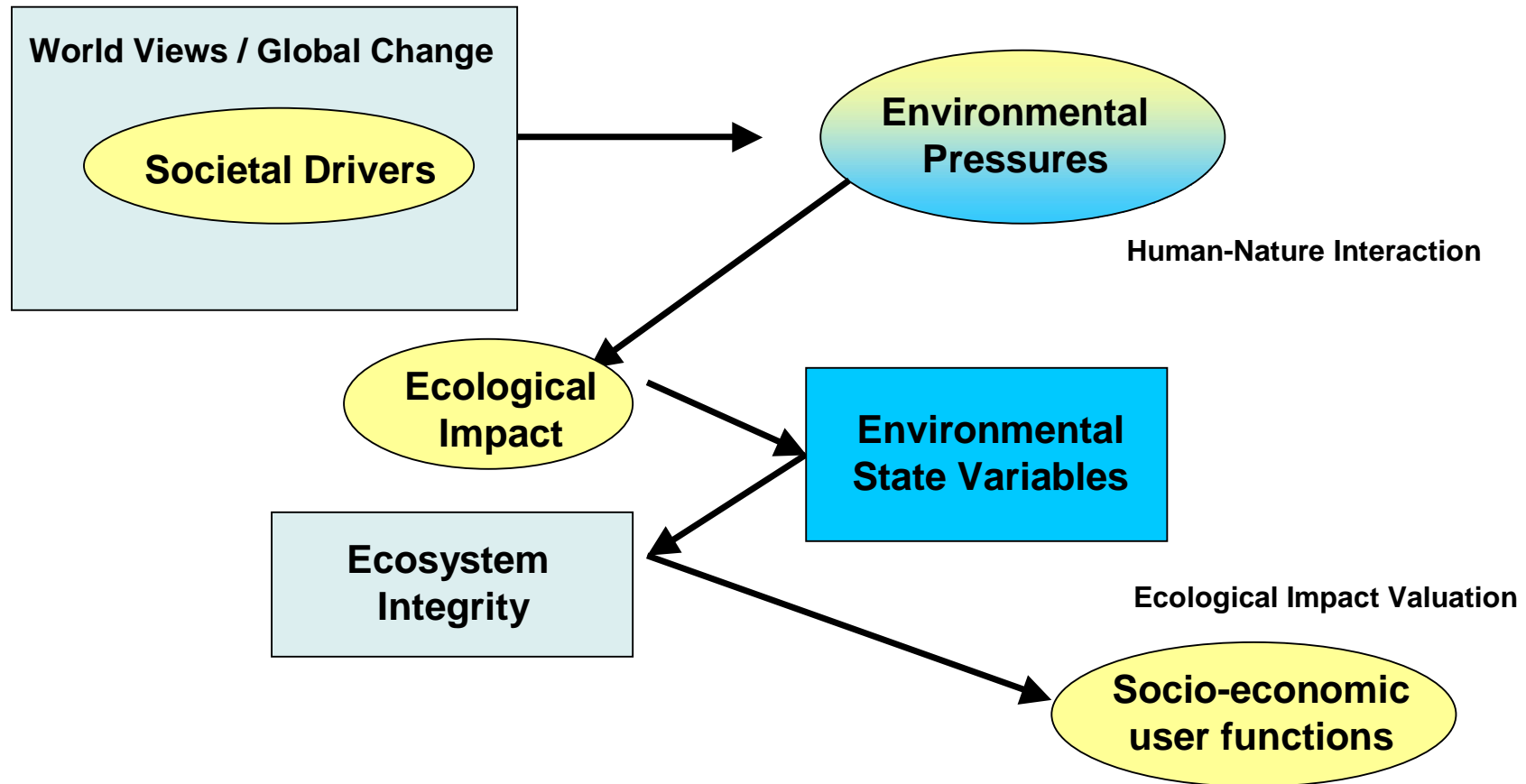
**Regional/local level  
(from workshops)**

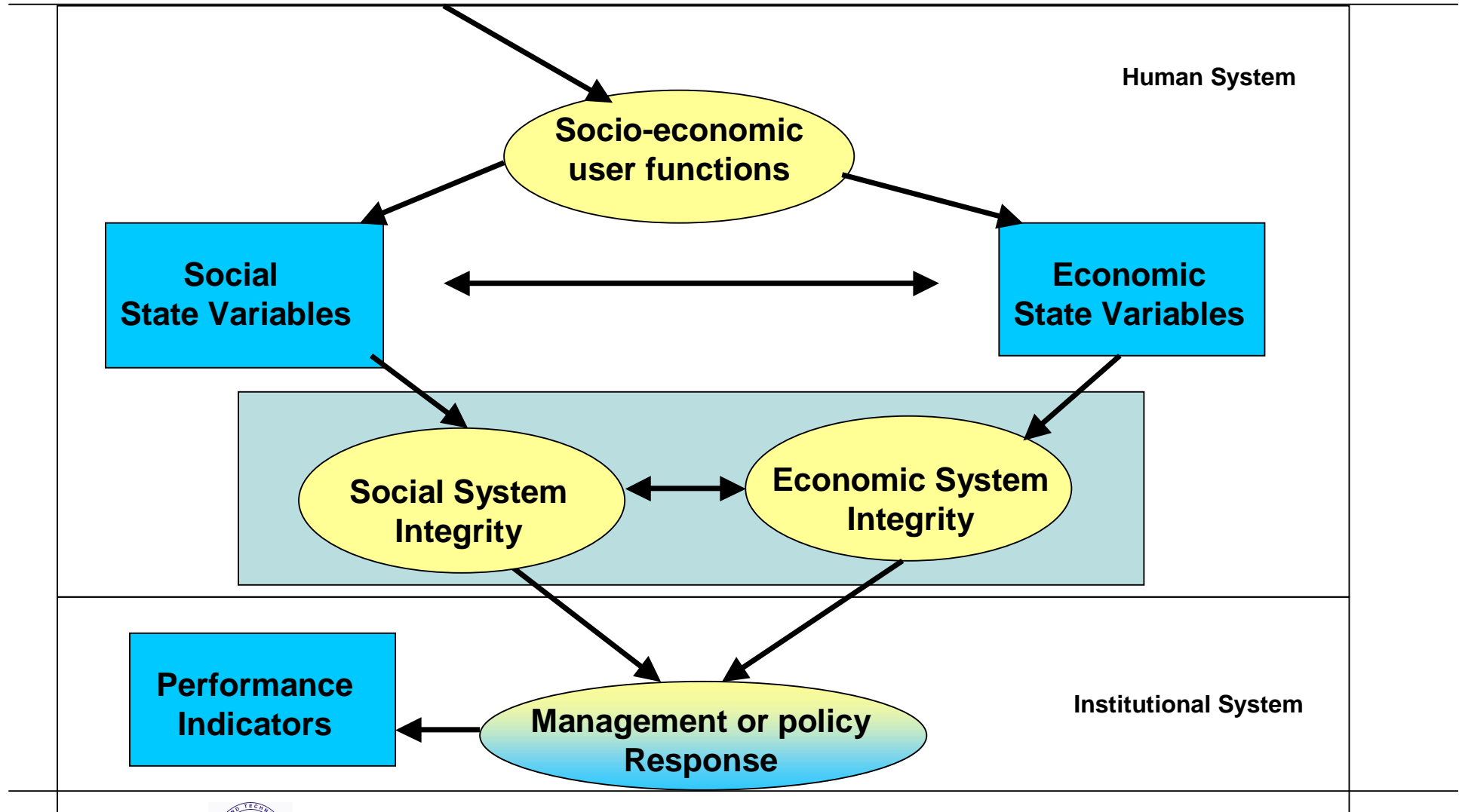
- **Shipping safety**
- **Regional development  
and infrastructure**
- **Coastal defence**
- **Tourism**
- **Access to island ports**
- **Regional identity**

## The Methodology of Coastal Future:

- **DPSIR approach as analytical framework;**
- **Holistic / Integrated approach covering;**
  - **land-ocean and ocean-land interactions,**
  - **socio-economic and ecological perspectives;**
- **Looking into the future using scenarios;**
- **Development of a toolbox for Integrated Assessment;**
- **Assessment of management options taking stakeholder interests into account;**

## The Concept: DPSIR as framework for integrated assessment



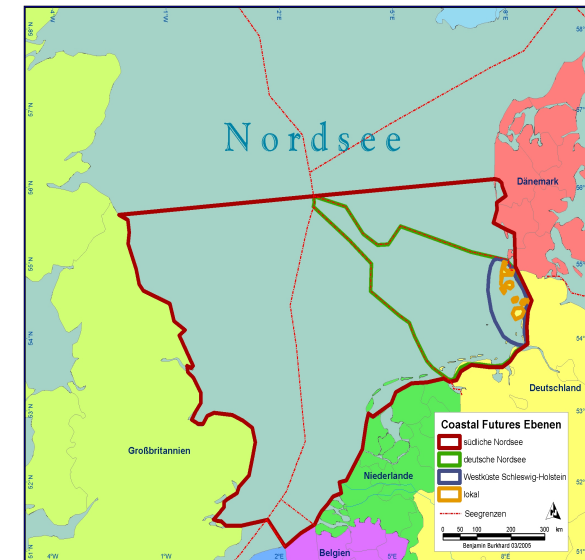




## Use pattern of the future?

### Scenarios and development directions

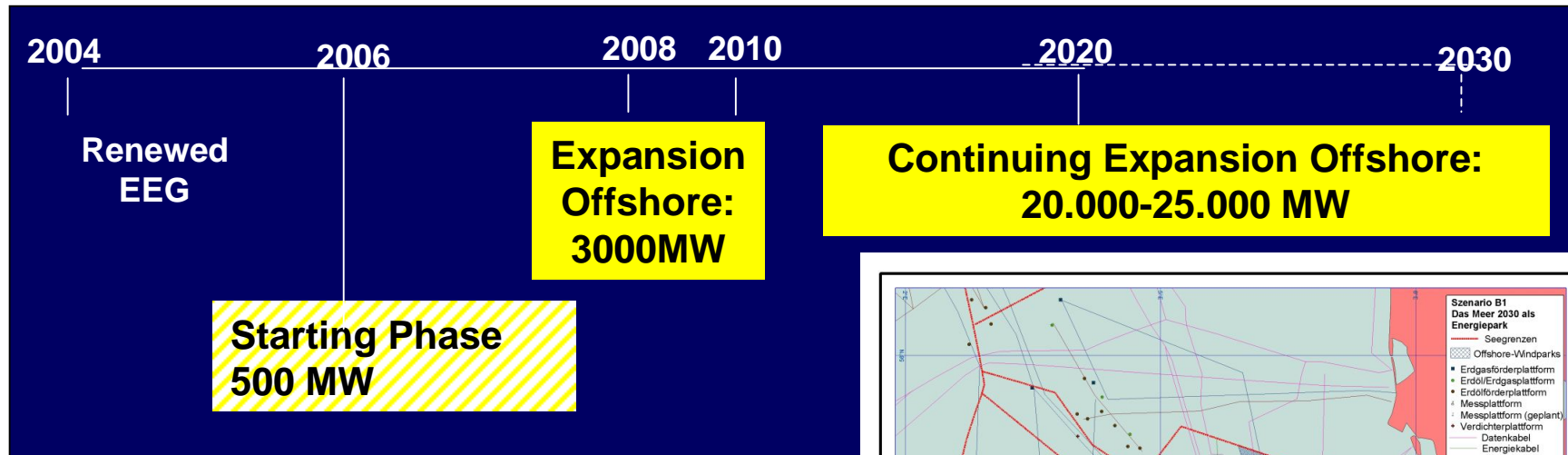
- Sea and coast as **natural** area,
- Sea and coast as **tourism and leisure** area,
- Sea and coast as **energy production** area (renewables),
- Sea and coast as **industrial** area,
- Sea and coast as **shipping** area;



Burkhard 2005

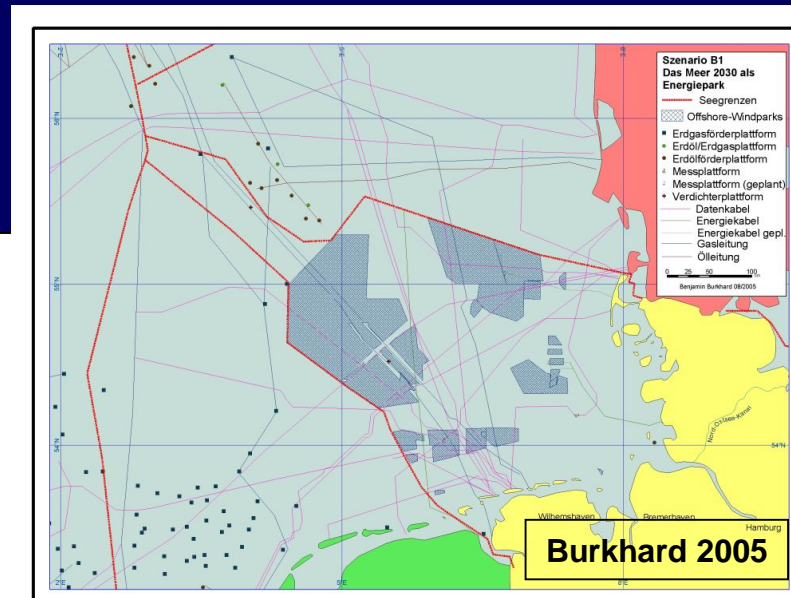
- ➔ Modelling und assessing ecological, economic and social impacts
- ➔ Dialogue concerning development directions

## Scales in ICZM:



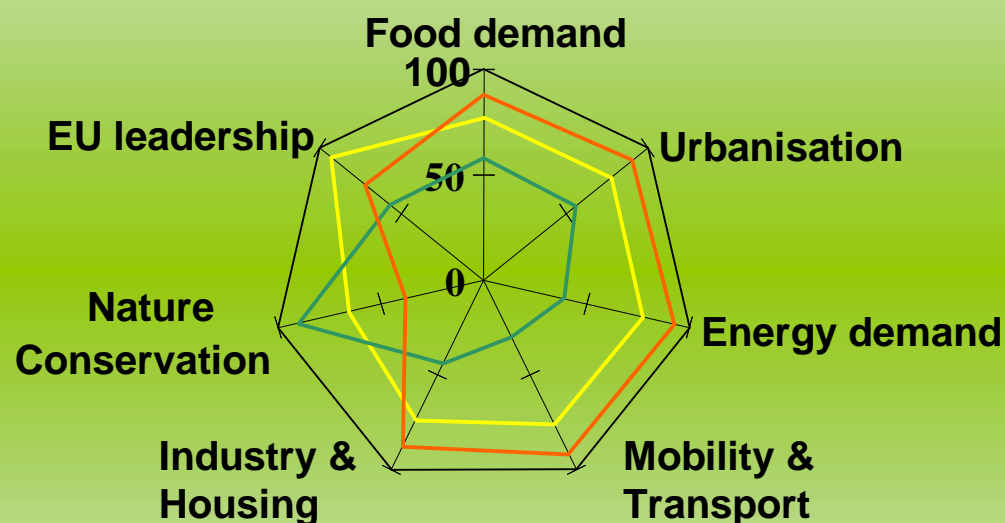
- Energy and climate change policy
- Chance for coastal development
- Local concerns

➔ Trade-offs, transparency



# Drivers, Pressures & Scenarios Societal Drivers

## Pressures Coast



— Global Markets — Strong EU — Green Regions

— Reference

## Riverine input ...

*Matter exchange with Greater North Sea ...*

*Atmospheric input ...*

*Extraction of sand and clay...*

*Loss or conversion of coastal habitats...*

*Fisheries ...*

*Shipping and Ports ...*

*Oil and Gas ...*

*Offshore Windfarms ...*

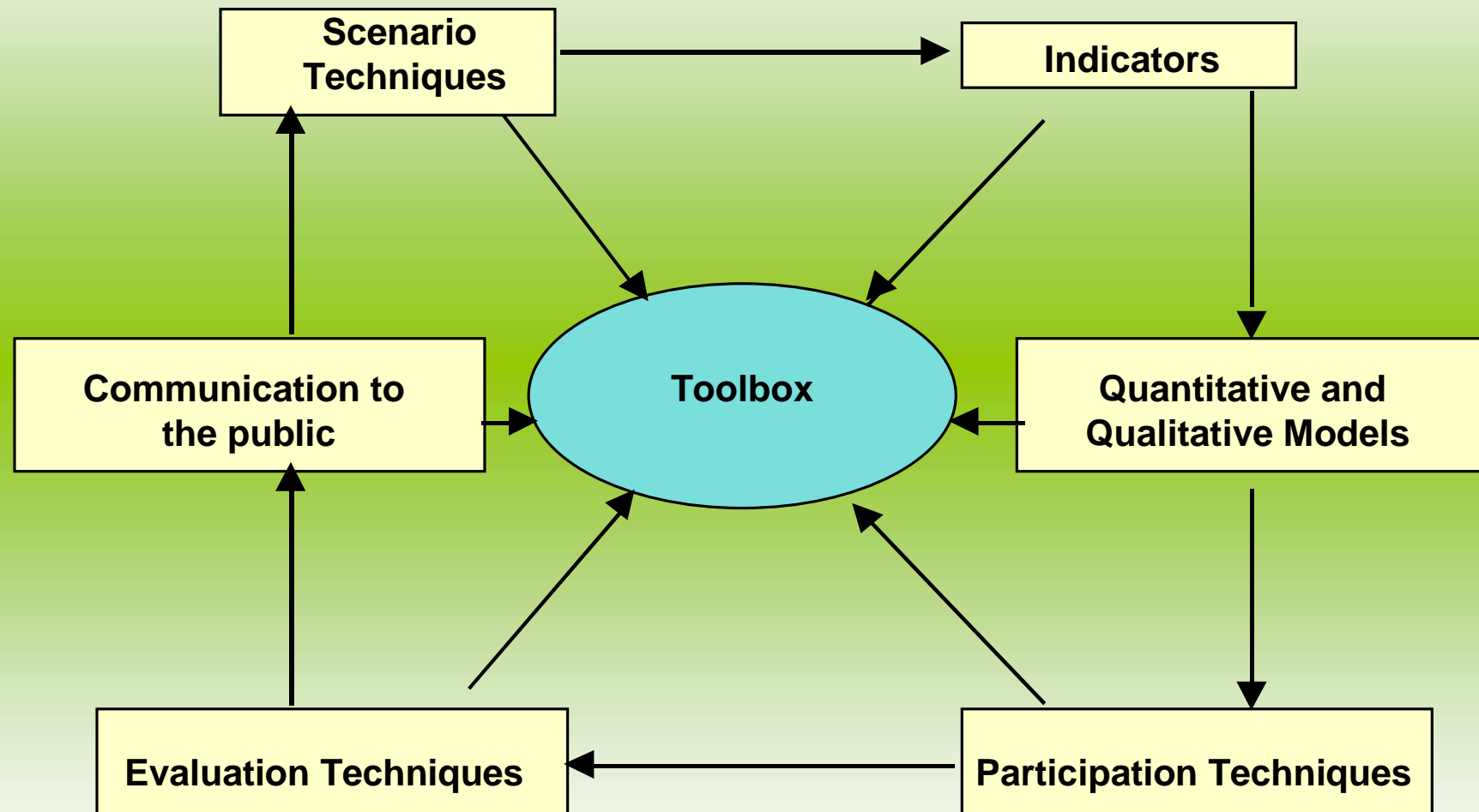
*Waste Disposal...*

*Recreation and Tourism ...*

Possible reference values:

maximum value, average value, recent or former situation,  
wanted situation, expected situation, scenario situation, etc.

## The Vision: A Toolbox for Integrated Assessment in ICZM



## Summing Up: Demands for ICZM and coastal planning

- **Use patterns should be in the focus**
- **Pressing issues need to be identified at all relevant scales**
- **Issues need to be understood including their background and interactions with other issues**

 **Planning and ICZM need to link international / national AND local interests (multiscale ICZM)**

- **ICZM based on various sectoral policies, laws and guidelines and a set of sectoral and cross-sectoral policies constitutes ICZM**

## Summing up: Tackling the demands

- Dialogue at and between all decision making scales
- Transparency, participation and openness
- Visions can serve as base for consensus
- Linking strategies to concrete action
- Statutory and non-statutory instruments need to be combined



**ICZM needs to be based on communication processes**