Regional policy strategies for climate proof spatial transformation in Flanders

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Objective

By acknowledging that land use as well as spatial planning relates to climate change impacts, the Flemish Government has started a research project to understand which policy strategies in spatial planning could be effective in anticipating climate change mitigation (2000 Watt ambition) as well as adaptation (heat island, drought and flooding).

10 transformation needs

Energy consuming buildings – inefficient locations of functions in the spatial network – asphalting – building on a large scale – fragmentation of nature – limit place for nature and water in city development – no resilient city development – only few building development that considers wind, sun and shadow - only limited space for renewable energy sources - sectoral measures

Methods

- State of the art in knowledge: scientific findings on climate change effects in Flanders
- Inspiration from best practices: Stutgart, Stockholm, Copenhagen, Zuidplaspolder, Baakse Beek
- Designing spatial solutions: DenkTank, guiding models and regional case study
- Stakeholder involvement: DenkTank with government, interest groups and academics

Best practices

- Few integration on mitigation and adaptation
- Various spatial impact of measures
- Role of national/regional government: metagovernance with principles and policy goals, being part of legislation and policy
- Instruments for planning and implementation: interaction, knowledge, funding, taxes and subsidies

Guiding models and DenkTanks

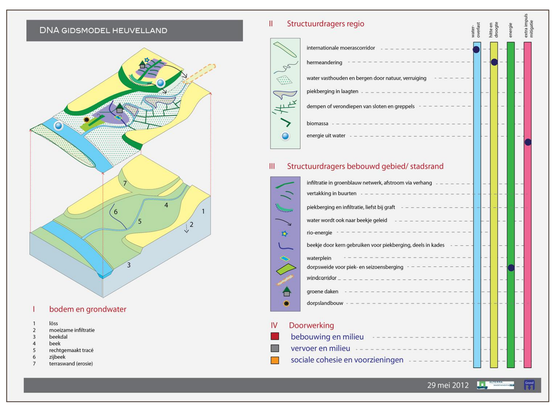

Figure 1. Guiding model to inspire conversation on regional solutions in the Dender Catchment

Figure 2. Designing solutions in the DenkTank May 2012, Gent

Guiding models:
- Structure complex issues
- Spatial design
- Identification of synergies

Results DenkTank

Spatial strategies:
- Green blue infrastructure combined with
- Compact city and decreasing urban sprawl combined with
- Energy landscapes

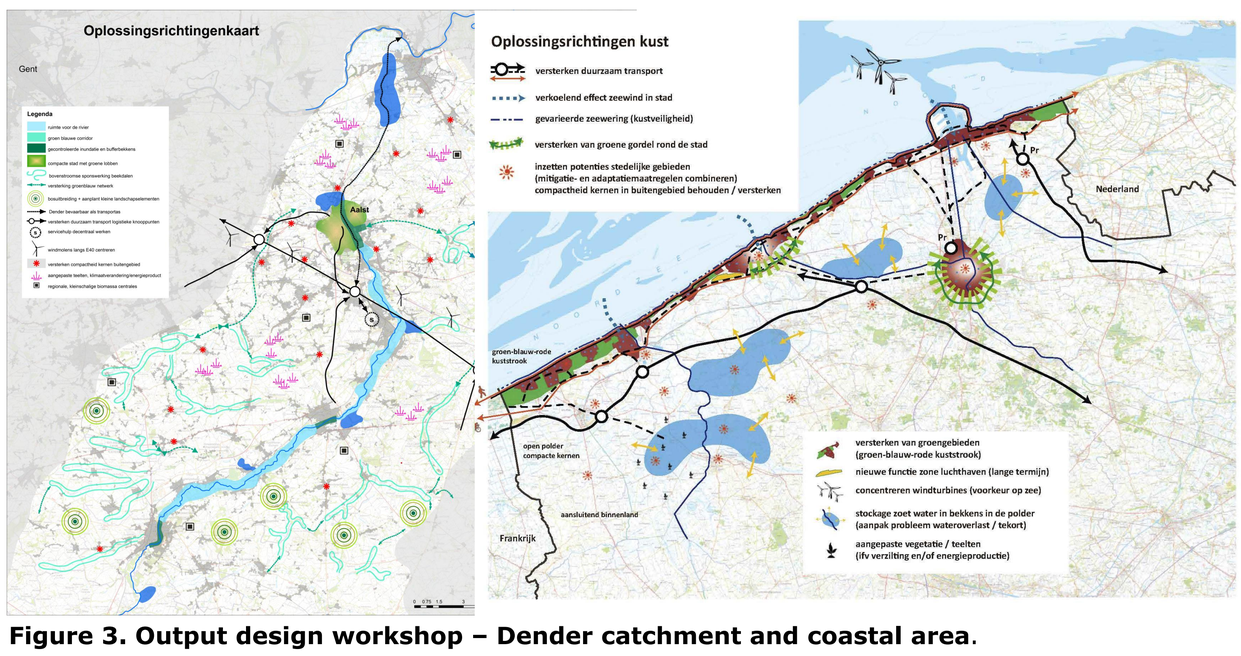

Figure 3. Output design workshop – Dender catchment and coastal area.

Conclusion regional policy strategies spatial planning department

Green blue infrastructure:
- Joining forces with departments in charge of nature and water
- Use spatial instruments to enable nature and water network development (identification of strategic locations, accelerating function change by land exchange and compensation regulation)
- Prevent decrease in adaptive capacity of nature and watersystem by buildings (legislation of perfomance obligations) – stimulate nature and water inclusive development/houses (stimulate regional design sessions, knowledge program, monitoring)

Compact city and urban sprawl:
- Identifying areas for growth based on accessibility, employability, economic growth, normal population distribution, redistribution of costs and benefits
- Transportminimalisation by ‘compactprofiles’
- Climate atlas to identify climate vulnerable areas to increase awareness of developers
- Supporting house owners to change building construction by interactive processes and funding

Energy landscapes:
- Space for renewable energy sources by location policy (energy potential map), efficient use of space (multifunctional use), guarantee of spatial quality (legislation to restrict or communication on qualities to include in development

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