

#### Knowledge for Climate (2008-2014)

Knowledge for Climate is the Netherland's research program on adaptation to climate change

Close co-operation between national and local authorities, business community, civil community and institutes for (applied) scientific research

Funding of 50 million Euros from the Dutch Economic Structure Enhancing Fund (FES)

Through co-financing of participants and stakeholders the total budget of the research program is appr. 100 million Euros





### Initiators of the program

- Wageningen University and Research Centre
- Utrecht University
- VU University Amsterdam
- •KNMI
- •TNO
- Deltares



### Effects of climate change

- Sea level rise
- High water levels in rivers (winter)
- Low water levels in rivers (summer)
- Extreme rainfall
- Draughts
- Higher temperatures (heat stress within cities)
- Changing wind directions
- Wind force
- Consequences for urban and regional planning



#### Mission

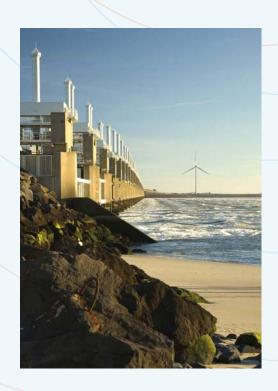
development and dissemination of scientific and applied knowledge on climate change and related themes – like spatial planning, infrastructure, nature management and sustainability – to assist the government, business community and civil society in 'climate proofing' the Netherlands



#### Aim

To enhance the opportunity for successful and feasible adaptation strategies

- Close cooperation between all relevant parties
- Stakeholders participation and cocreation as a basis for innovation
- •Integration of scientific knowledge from different disciplines (climate change, water management, ecology, spatial planning and social-economic sciences)





### Approach

- •Focus primarily on a limited number of vulnerable areas, called **hotspots** or **regional programs** and to develop adaptation strategies for these areas by an integrated, participative and multi-stakeholder driven approach
- •To create a **Climate Knowledge Facility** providing generic scientific information and modelling facilities with a focus on long term issues
- Actively invest in knowledge and information transfer to ensure the knowledge will become available both nationally and internationally



#### Climate proofing the Netherlands, hotspots







- Lakes, meadows and peat
- Great rivers
- 🍼 Waddenzee
- Southern delta

  Dry rural areas
- Deep polders / Haaglanden
- Mainport Schiphol and Haarlemmermeer
- Rotterdam port and region



## Example: Hotspot 'Schiphol airport'

- Changing weather conditions in 2050-2075
- Consequences for water management at the airport
- Consequences for airport operations (runway system; take off and landing procedures)
- Consequences for noise nuisance, safety and local air pollution
- Consequences for planning of urban areas around the airport
- Adaptation strategy ???



# Climate Knowledge Facility

- Model Platform
- Research Platform

To develop generic scientific knowledge on adaptation strategies and to provide the hotspot teams and all other relevant parties with specific scientific data and information



### Knowledge Transfer

- •To develop an effective national knowledge network
- •To develop knowledge on transfer of knowledge (for climate)
- •Cöordinator: Mrs. Florrie de Pater





# A programme in three phases

- Phase 1
  - Hotspot related research
  - Closed tender
  - Short and medium term projects focussing on most urgent knowledge needs
- Phase 2
  - General and hotspot related research
  - Open call for consortia
  - Long-term studies that generate in-depth knowledge
- Phase 3
  - Hotspot related research
  - Integration of knowledge in order to develop regional adaptation strategies





#### Eight research themes:

- Water safety at national and regional level
- Fresh water supply at national and regional level
- Climate-proofing rural areas
- Climate-proofing urban areas
- Infrastructure and networks
- Improving climate projections and the set of instruments used for modelling
- Governance of adaptation
- Decision support tools

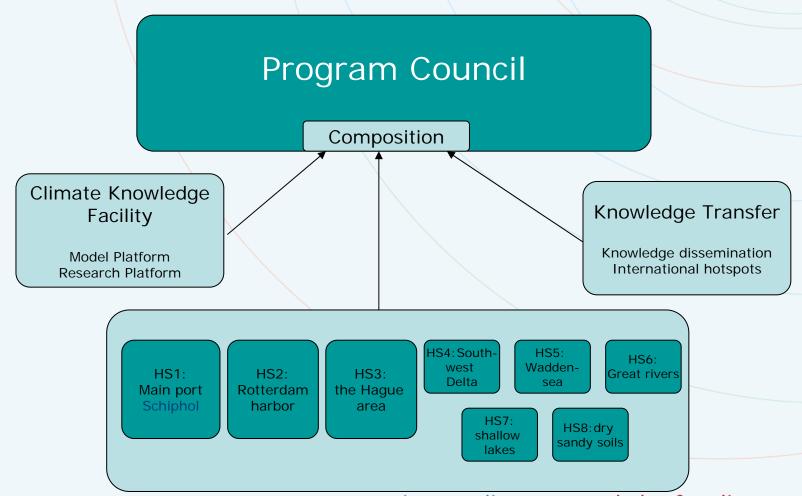


### Science-policy interactions

- Scientific quality strengthen the national knowledge infrastrure on climate adaptation
- Scientific relevance matching outstanding know-how and demands of (regional) policy makers
- Societal applicability focussing on national and regional (hotspots) adaptation strategies
- Programming consensus between hotspot representatives and representatives of knowledge institutes
- Reviewing from a scientific and a societal viewpoint
- Transfer and valorisation of knowledge

# Program Council





Kennis voor Klimaat Knowledge for Climate

### **Board Advisory Council**



#### **Board Advisory Council**

Chair: Mr. C.B.F. Kuijpers (VROM)

Composition

Knowledge Institutes

KNMI, WUR, UU, VU, TNO/Deltares

Departments

VROM, LNV, VenW, EZ en OCW

Board of Management and representatives of BSiK-programs

KvR, LmW en Habiforum

# Budget



Onderdeel	Indicatie totale projectbudget	Beschikbaar voor 1e tranche	Min. % contra- financiering
Kennistransfer/-platform	3,6	0,7	25
Internationale hotspots	3,7	0,75	50
KKF - modelplatform	6,7	1,4	25
KKF - ontwikkelingsruimte hotspots	8,6	0	25
KKF - Bouwstenen NAS	3,3	0,7	25
Hotspots			
Rotterdam	10,5	2,1	50
Schiphol	10,5	2,1	50
Haaglanden	10,5	2,1	50
Zuid-westelijke Delta	2,2	0,45	50
Waddenzee	2,2	0,45	50
Drge rurale gebieden	2,2	0,45	50
Veenweidegebieden	2,2	0,45	50
Rivierengebied	2,2	0,45	50