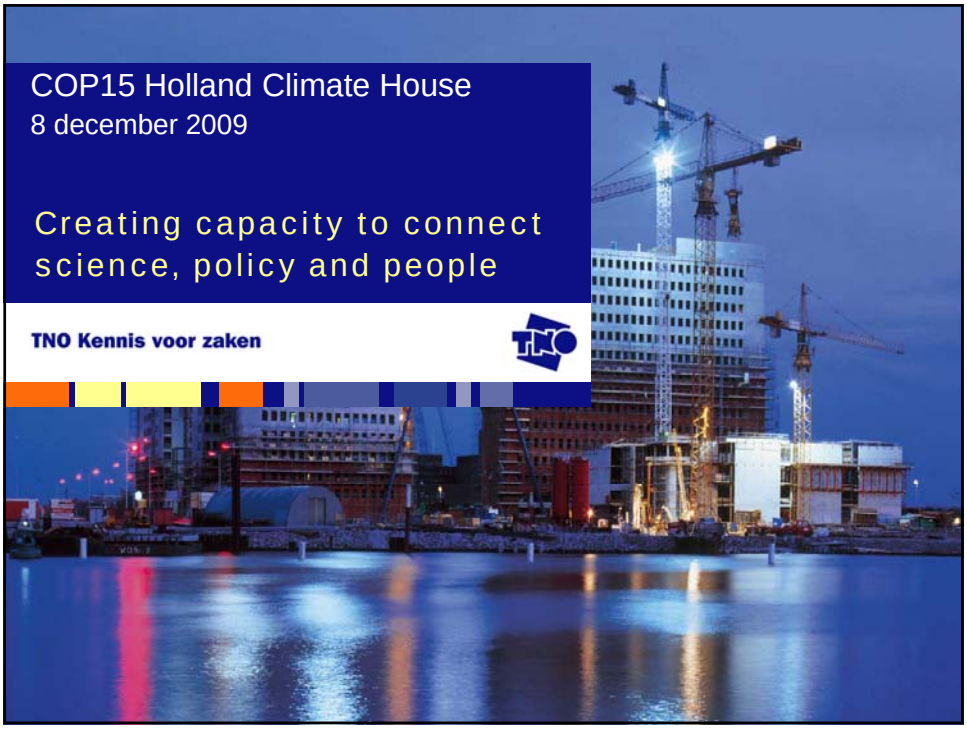
COP15 Holland Climate House
8 december 2009

Creating capacity to connect science, policy and people

TNO Kennis voor zaken



Workshop Programme

I. Systems approach

II. Stakeholders and different perspectives

III. Connection between science and policy

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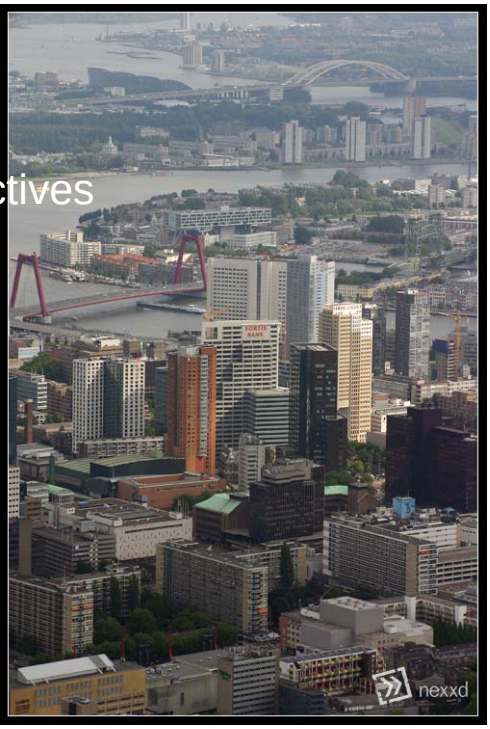
Part I

The systems perspectives on cities and climate change



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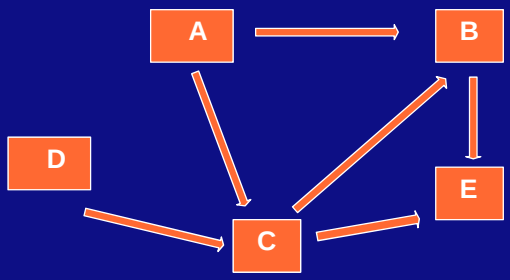
Systems Thinking

- Typical approach

- Systems approach



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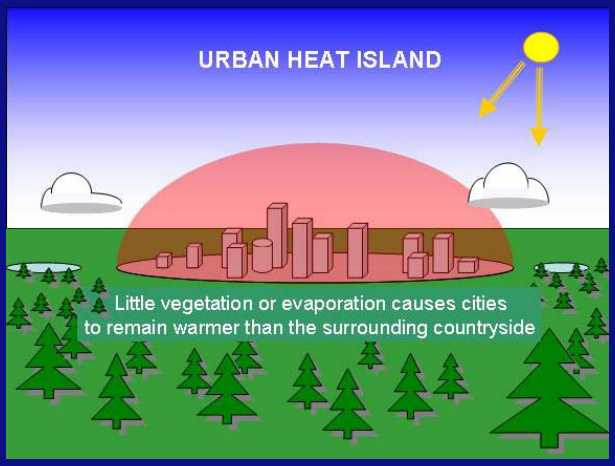
Climate change: Heat

CO2 → Climate change → Heat in cities → Demand for cooling



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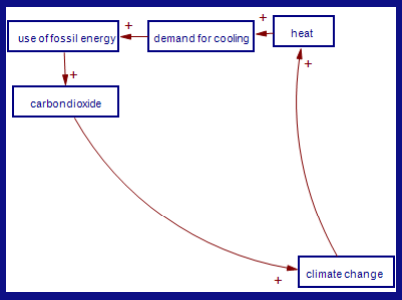
How to solve the problem?



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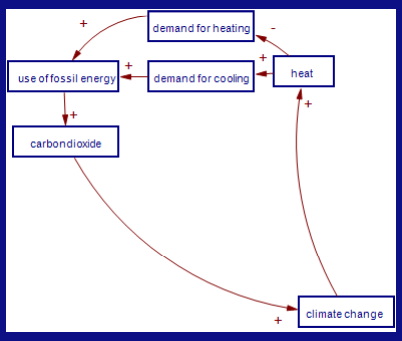
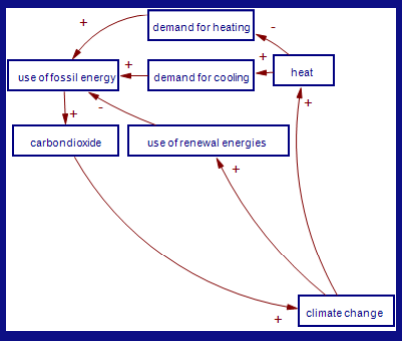
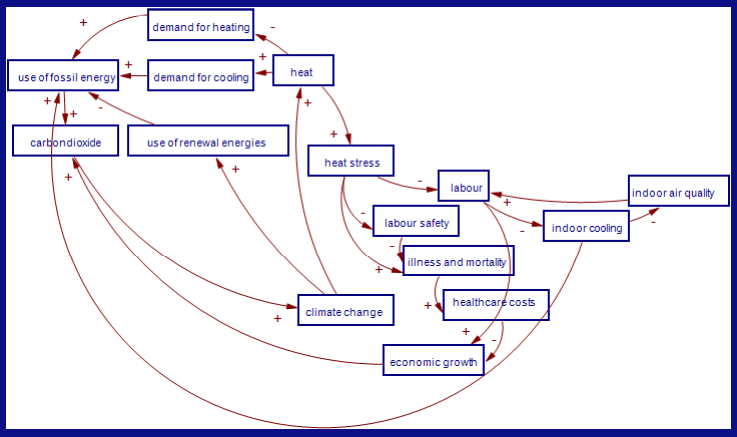


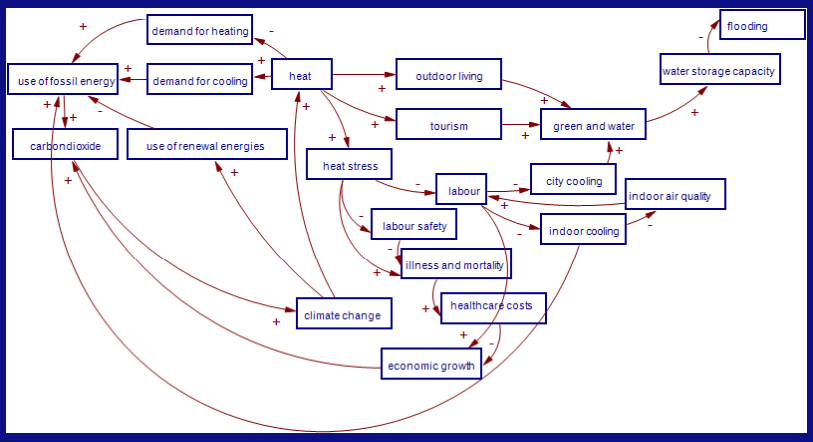
7 **seasonal compensation?**



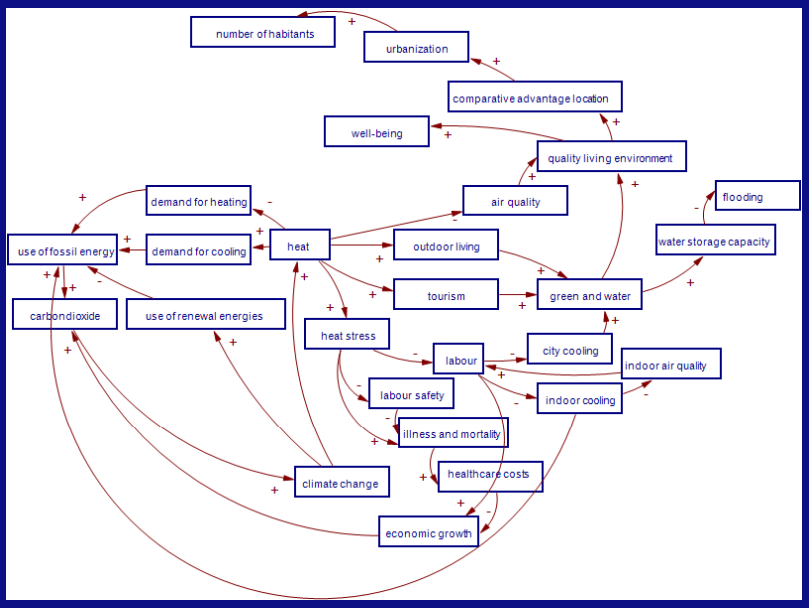
8 **climate awareness and climate policy**



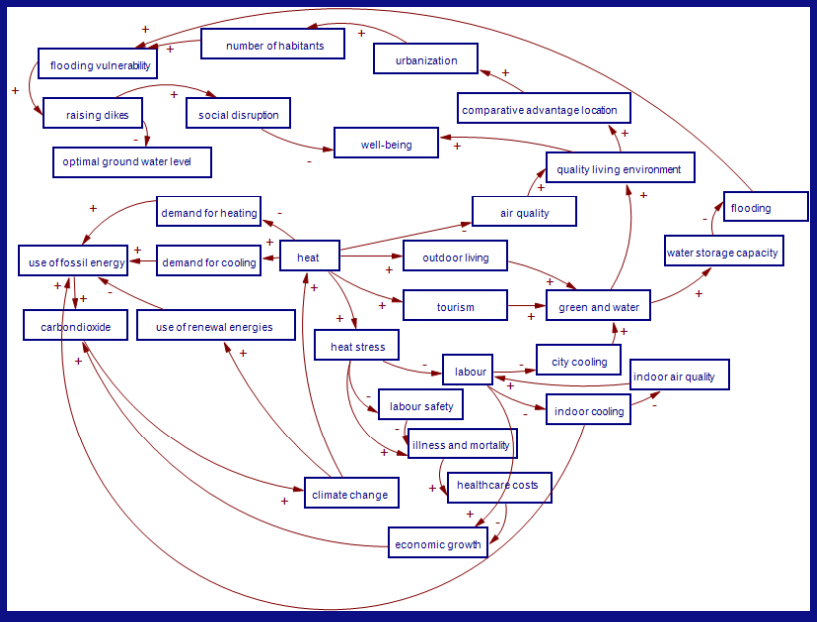
9 **productivity and economic growth**



10 **tourism and outdoorliving**

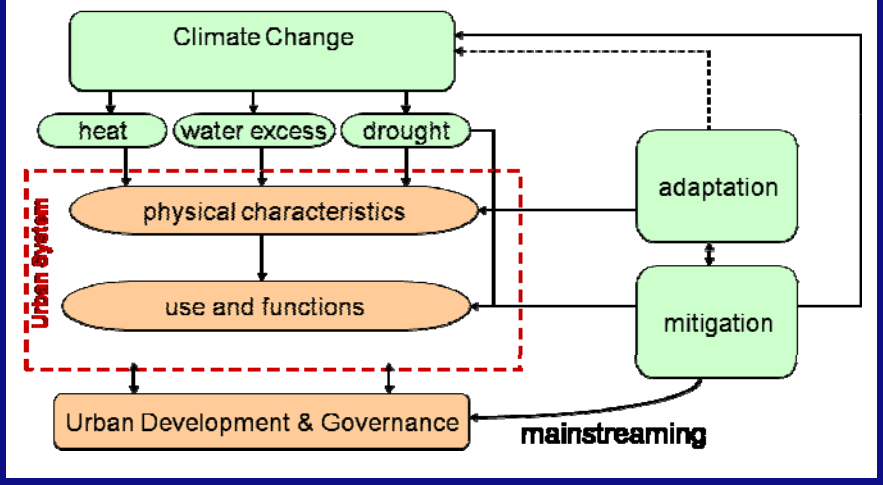


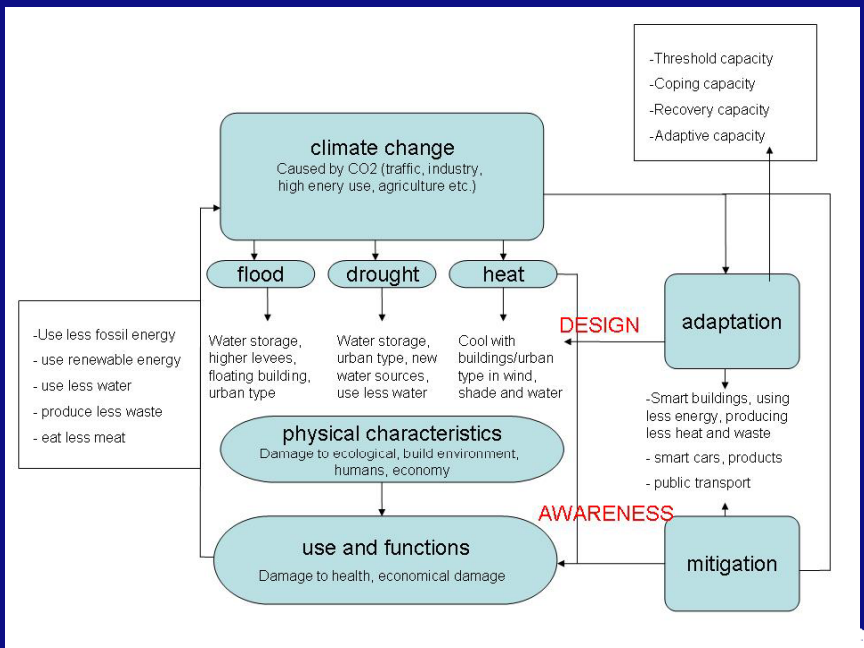
11 **city attractiveness**



12 **flooding vulnerability**

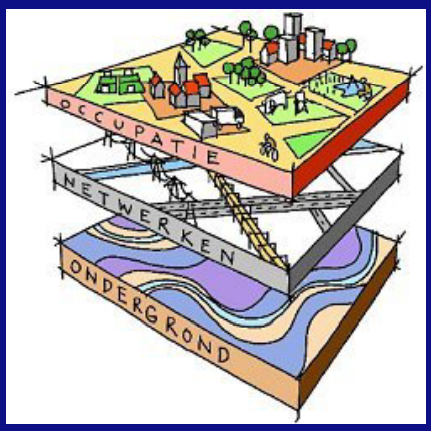
Conceptual model





14

Layer approach to determine the interrelations



15

Heat demands for more cooling

CO2-emissions increases

Which forces contribute to this pattern?

16

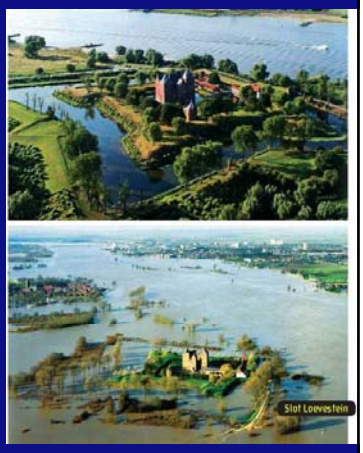
Statement 1

A system approach is necessary for effective urban climate measures

17

Part II

In complex situations with many stakeholders:
Different perspectives on problems and solutions



18

Example of stakeholders' perspectives

Three groups:

- Users: economic reasoning, challenges, technology as solution, short term oriented
- Controllers: societal risk between boundaries, belief in regulations and authority, medium term oriented
- Guardians: preserve ecosystems, "natural sediments", long term oriented

Language and blind spots

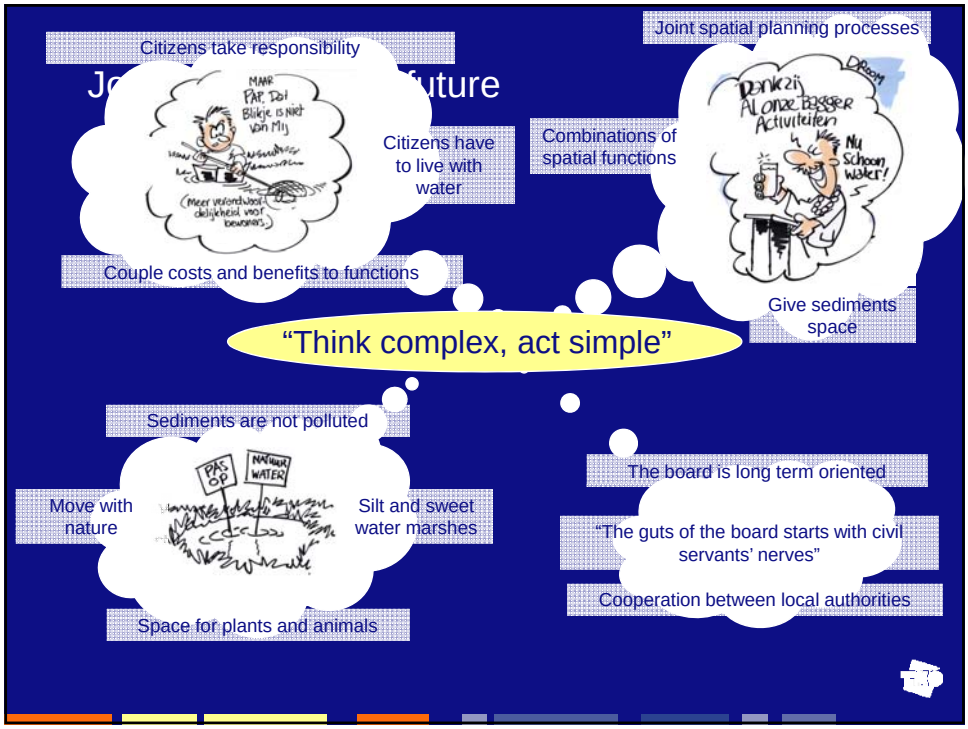
	Language	Blind spots
Controller	**Government: Control & Regulation** **Danger/Safety** of sediments **Research** (predict outcomes)	**Unusual, "risky", solutions** **Ownership of solutions** **Costs are no "hurdle"**
Guardian	**Damage to Nature/Ecosystem** **Waste** **Risk** **Regulation**	**Economically viable** **Efficient solutions** **Short term impact** **Costs**
User	**Challenge and Profit** **Technology** **Pragmatic** **Costs**	**Long term impact** **Ecosystem** **Risk** **Control & regulation**

How to deal with these perspectives?

- Know the perspectives
- Involve them in the process

Why involve stakeholders?

- Innovative solutions
- Robust solutions
- Use stakeholders knowledge
- Awareness
- Counteract obstructive power



Statement 2

Stakeholder involvement leads to added value in climate decision making

Part III

Connecting Science and Policy for complex policy problems

25

Connecting science and policy increasingly complicated

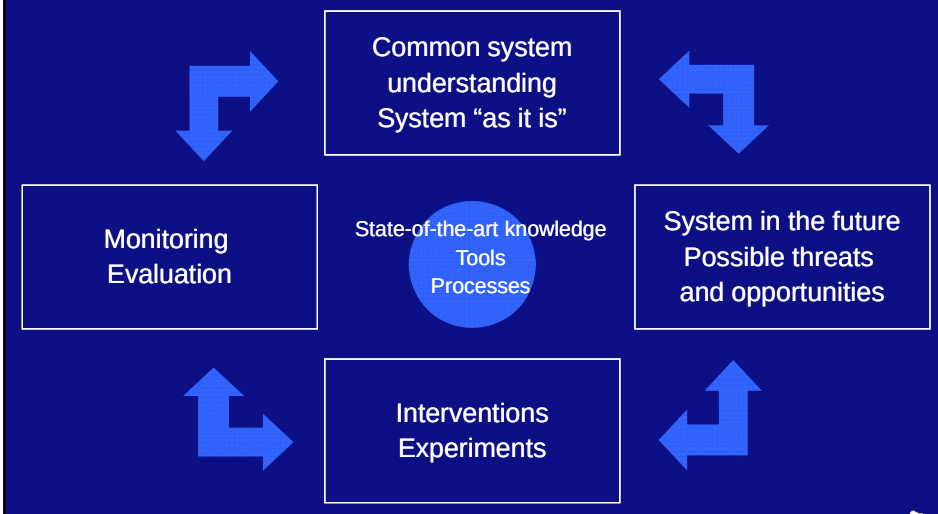
Two trends:

- Increasing specialisation in both policy and science
- Complex policy processes: governance

Challenges:

- Integration of science in a meaningful way for the city
- Sharing knowledge with local authorities and stakeholders, etc.
- Knowledge about the urban system
- Dealing with uncertainty

Joint stakeholder processes for systems



Competences for connectivity

Researchers

- A joint ownership of knowledge production processes
- Joint production of documents, models, etc
- Appreciate local knowledge
- Integrate fields of knowledge from user’s perspective
- Transparent research processes

28

Competences for connectivity

Policy makers

- Design a process that is transparent and fair
- Be clear about how decisions will be made and the influence stakeholders have on the decision
- Know your stakeholders and their perspectives
- Respect and appreciate different points of view
- A frequent and open communication and a variety of knowledge input

29

Statement 3

Climate change asks for connectivity and related new competences

30