Let’s Construct Europe’s Future
With Innovative Buildings and Infrastructures
Construction and Societal Challenges

Radisson Blu Centrum Hotel - WARSAW
04 / 05 October 2011

“EnergieSprong”
Energy Leap

Dutch multi-annual program for Innovation Implementation
Vision energy transition built environment

2010-2015 create the environment in which successful innovations can be realised
Transition management required?

• 1916: Flooding of Northern parts of The Netherlands
• 1918: “Zuiderzee” Law
• 1953: Flooding of southern parts of The Netherlands
• 1958: “Delta” law
• 1995: River flooding landinwards
• 1998: “Delta” law large rivers

Not for climate adaptation issues!
But for mitigation

- When changes in attitude and behaviour are required

Loorbach, 2002, Loorbach and Rotmans, 2004
Goals

Tangible in period 2015 – 2020

New buildings
Market ready concepts able to:
• 100% reduction of fossil energy use for heating/cooling
• 50% reduction of fossil energy use for electricity at building level
• 50% renewable electricity generated locally (district level)

Renovation
Market ready concepts able to:
• 50 à 75% reduction of fossil energy use for heating/cooling
• 25 à 50% reduction of fossil energy use for electricity
So…

Energy **Leap** as starting point
“Energy Leap” contributes to the creation of market conditions for a energy neutral built environment in NL
And, and, not or!

Transform barriers into chances and stimuli

Demand side in action: Organise demand/professional customers

Supply side in action: Facilitate supply chains

Knowledge disclosure and integral cooperation determine success
Supply side: stimulus to create practicable examples
Rules of the game?
Potential impact as guiding principle
Demand side: Value creation ...

![Graph showing productivity loss against indoor air temperature in °C.](Image)
... and all lights on green for private “ambassadors”
Target groups/partners?

Housing organisation is as wild as its director

Local Government, Local Authorities, Councils and related bodies please click here
Innovative coalitions!
... requires skills (besides knowledge)

=\> SEV intervention: Process coaching
Knowledge disclosure
In the 21st century
Available “instruments”

Total program funding 60 M€
- Subsidy for realisation projects
- Services
  - Process coaching and support (a.o. for housing corporations, local authorities and innovative coalitions)
  - Knowledge disclosure (COP, Masterclass, Workshops, etc.)
- (creation of) Example material
  - Website, Flickr, Youtube, etc.
  - Conceptual design and Publications: Energy neutral houses, Energy neutral districts
- Documentation and monitoring of realised building concepts
Example material for building approaches

• Passive house+
  – Emphasis on demand reduction
• Exergy house
  – Emphasis on quality of (excess) energy flows
• Solar
  – Emphasis on renewable energy
• All electric
  – Without gas
**But also..**

- Back to nature
  - Local biomass
- Modern comfort
  - Powerhouse, Zero-dwelling
- Smart executed
  - Icon dwelling
  - PIAF

![Image of buildings and renewable energy systems]
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- Tools
  - Optimising energy balance at district level, including implementation (space) implications
  - Impact assessment building concepts for building stock
  - etc..
- You! (network)