



**environmental affairs**

Department:  
Environmental Affairs  
REPUBLIC OF SOUTH AFRICA



# Progress in collaboration to develop a shared knowledge agenda on soil and water

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# The Aim of this presentation

- ◆ Show contaminated land management can contribute to societal challenges and thus become profitable
- ◆ Raise awareness on the importance of the soil sediment water system in tackling global societal challenges
- ◆ Indicate the need for knowledge on effects of the use of the soil sediment water system
- ◆ Explore further collaboration?



# Film Terra



# The need for good soil quality

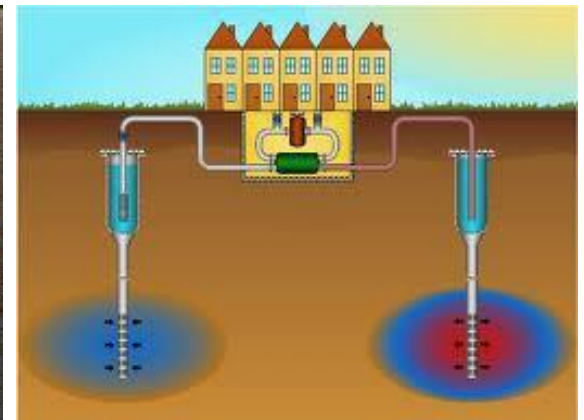
- ◆ Why are we working on soil remediation, clean up and reuse?



- ◆ Barcelona 2013: inventory of current and future (national) research priorities for soil and groundwater :
  1. Water and Food
  2. Urban land
  3. Green industry
  4. Energy and other resources
- ◆ Is the agenda changing from soil protection to soil management and sustainable use by current societal challenges?

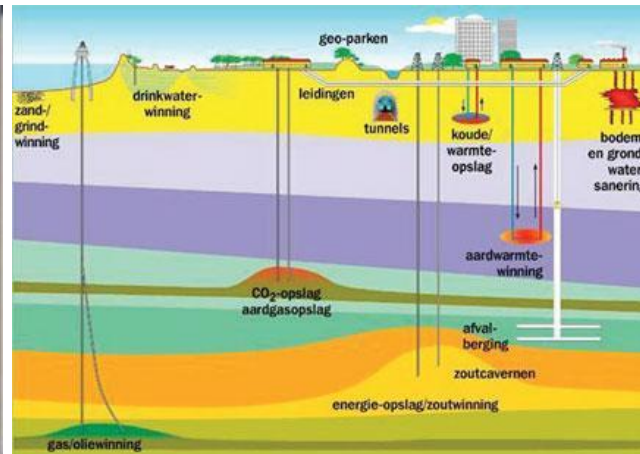
# Changing policy agenda in the Netherlands

- ◆ Societal challenges: climate change, urbanisation in a Delta environment, food safety and security, energy transition, safe and sufficient drinking water, pressure on natural resources, wish for greening the economy and circular economy
- ◆ Enormous social costs because of unconscious use of the SSW system
- ◆ Benefits left unused by ignorance of potential of services of the SSW system



# The society in charge

- ◆ Grown interest of social partners, businesses and industries
- ◆ A social initiative on conscious use and management has put the importance of the SSW system on the political agenda
- ◆ A covenant with social partners, a shared knowledge agenda
- ◆ The development of a spatial plan for sustainable use of soil and subsurface



# New partners and stakeholders

## The stakeholders

- ◆ Developers, farmers, energy companies, drink water suppliers, citizens etc.



## Sharing of revenues

- ◆ International interests, national interests, regional interests, private interests



## Business development

- ◆ Innovation potential and export



# Knowledge requirement

A knowledge agenda on sustainable use and management

- ◆ Societal drivers
- ◆ Societal challenges
- ◆ Knowledge gaps and requirements

**Climate change** urbanisation pressure on resources

Living in a Delta **Economic crisis**

Growing middle class food security

Climate robust cities energy crisis drinking water

**energy safety and security**



# What knowledge is required?

- ◆ Physical, chemical and biological knowledge: area oriented, multi use soil layers, monitoring
- ◆ Knowledge for integral decision making
- ◆ Governmental knowledge
  
- ◆ Fundamental: criteria, effects, risks
- ◆ Practical: multi discipline pilots and demo's with mixed consortia: science-policy-industries-users

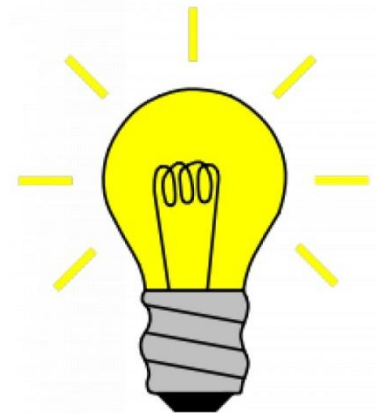
A chance to develop knowledge together?



# International societal challenges

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- ◆ Do you recognize the societal challenges as identified?
- ◆ Do you agree on the importance of soil quality and sustainable land use management as a means to contribute to societal challenges?
- ◆ Do you recognize the stakeholders and interests?
- ◆ Do you see the need for knowledge exchange and development?



# This is happening in EU

- ◆ Building and connecting international networks to frame the SSW system as opportunity in tackling societal challenges, create benefits and new business opportunities as well as jobs
- ◆ Influencing European research programs
- ◆ Attracting (international) businesses and industries to invest in research and sustainable use of the SSW
- ◆ Form coalitions on integrated soil-energy, soil-water or soil-climate projects

A background of red curtains with a black vertical strip in the center. The black strip is filled with white, multi-pointed starburst sparkles of varying sizes, creating a shimmering effect.

# Coming Soon!

# Coming soon

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- ◆ Global Soil Week Berlin
- ◆ Call H2020 on soil contamination and contaminated land management
- ◆ Call H2020 on a SRA soil, land use and management
- ◆ SNOWMAN
  
- ◆ Do other countries like to join?

# Further collaboration?

- ◆ ICCL ,Common Forum and NICOLE exchange knowledge
- ◆ The Common Forum has a shared knowledge agenda on remediation and contaminated land management
- ◆ How can we improve sharing knowledge?
- ◆ Is it possible to make a shared agenda on sustainable use of the SSW system for societal challenges ?
- ◆ Are there projects we can start together?

# Thank you for your attention

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## ◆ More information?

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## ◆ Paper on soil science policy interface

## ◆ Knowledge agenda for soil and subsurface

## ◆ Film Terra