Rijkswaterstaat
Ministerie van Infrastructuur en Milieu

Governance covenant soil and subsoil

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Ministry of Infrastructure and Environment – Soil+

Aquaconsoil Lyon 20-3-2019

The menu

1. General introduction

2. Mixed groundwater plumes

3. Covenant soil and subsoil 2010-2020
   - Remediation of urgent sites
   - Funding, organisation and decentralised approach
   - Soil and subsoil: partner in SDG’s

4. Reuse of soil/circular economy: critical success factors

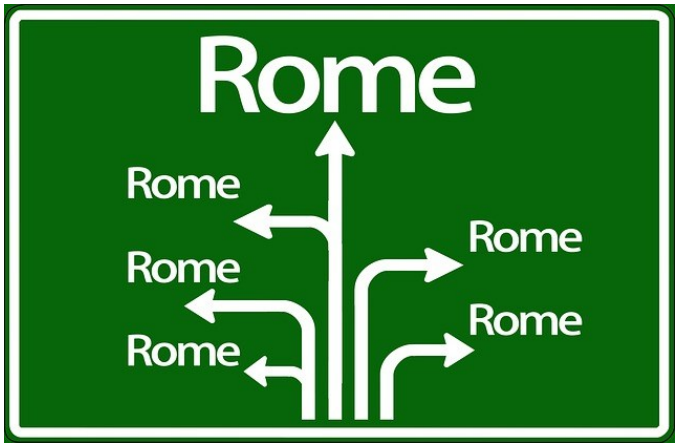
5. Nature development at a brownfield – a success story

Ballpark figures

• Soil treatment	2-3 M ton/year
• Soil disposal	0,5 M ton/year
• Reuse mildly contaminated soil	20 M ton/year
• Reuse of mildly contaminated sediment	50 M ton/year
• Use of primairy Sand	50 M ton/year

There are more ways to Rome

- Branch Programmes
  - Gasworks
  - Railroads
  - Filling stations
  - Dry cleaners
  - National property (military sites…)
- Covenants
  - Industrial areas
  - Competent authorities
- Area approach
  - Contaminated groundwater
  - Heat –cold storage
  - Transfer of liability
- Green Deals
  - Temporary nature
  - Farmers for water
  - Upcycling Bottom-Ash



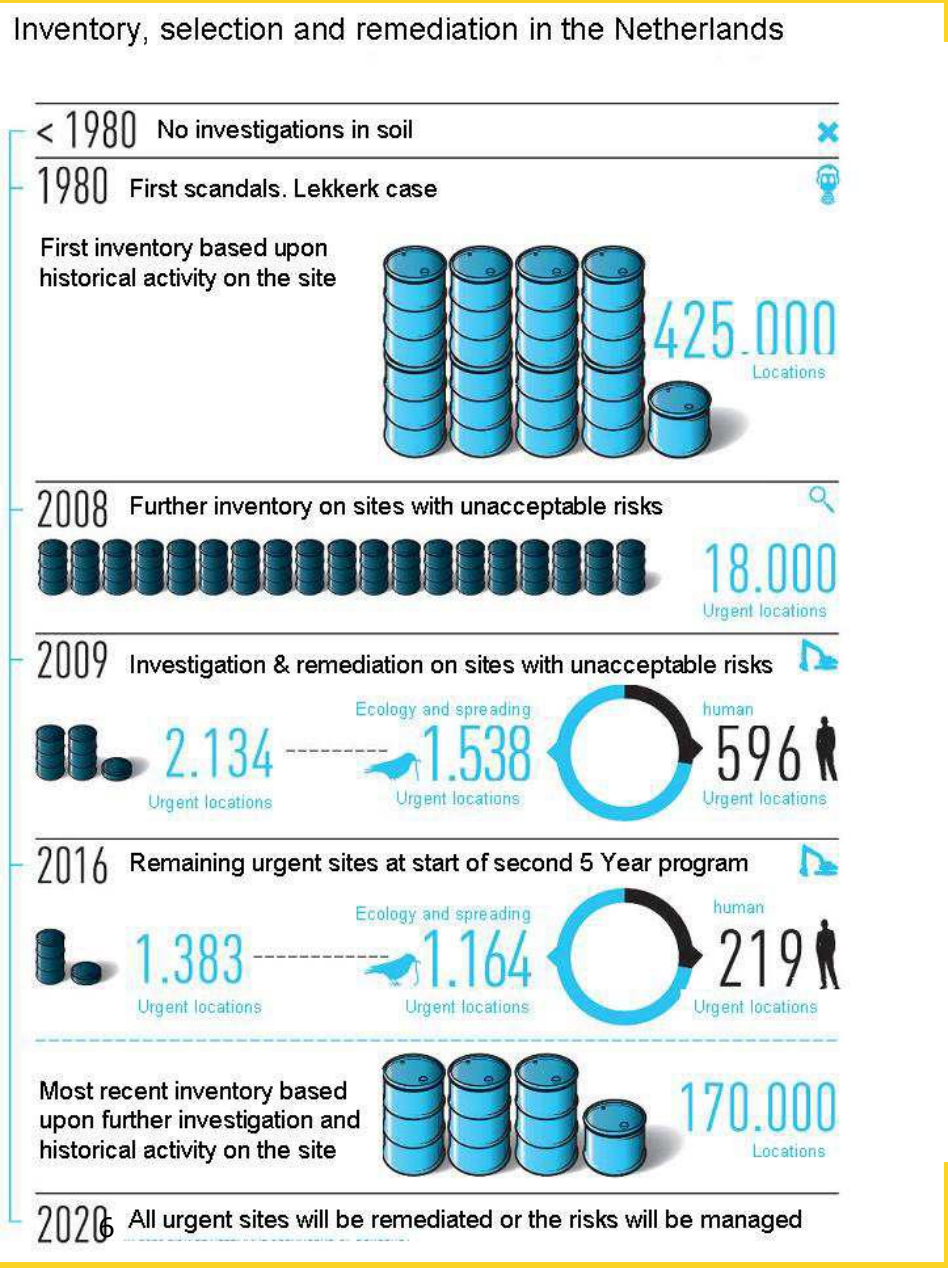
Goals:

- Action
- Shared responsibility
- Joint financing
- Prevention
- Innovation
- Land stewardship (soil services for communities)

Policy/legislative outline

- Polluter pays principle
- Prevention & Full and immediate remediation for contamination caused > 1987
- Functional remediation/Risk management for contamination caused < 1987 at a natural moment
- Remediation of sites with urgent risks within 4 years

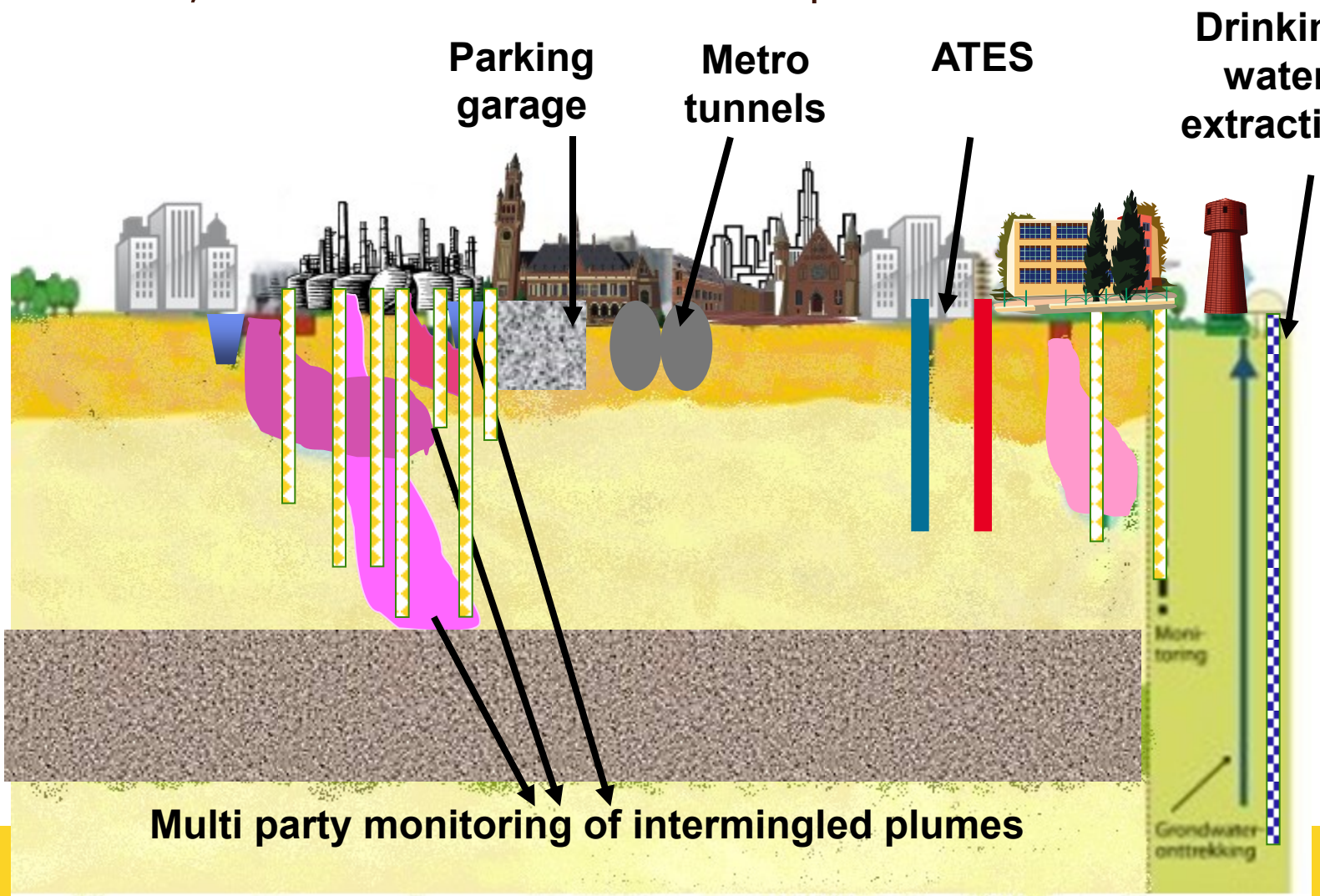
POLICY DEVELOPMENT



Soil Management

- Disposal is prohibited unless treatment is not feasible
- Treatment is mandatory when direct reuse is not possible
- Reuse is possible in constructive works based upon **leachability** and **fit for use**
- Reuse is possible as soil based upon **stand-still** and **fit for use**
- **Local tailor made policy to match supply and demand**

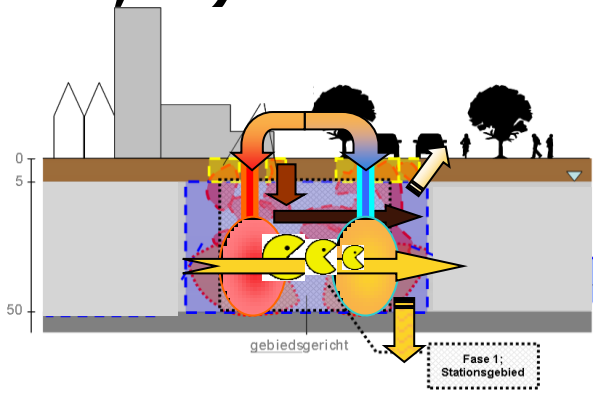
Urban inner city reality: mixed plumes => source liability is clear, but who takes care of the plumes?



Area approach of contaminated groundwater role of public organization

- **Government is responsible for groundwater and has the instruments to organize an area oriented approach**
- **For the mixed plumes up scaling to an area is needed**
- **Competent authority has to make a (management) plan => including the permissible value of the contamination on the borders (target values, intervention values, …)**
- **Public consultation is obliged**
- **Financial agreements:**

  Urban (re)development is mostly the driver so other stakeholders have an interest



Combining functions

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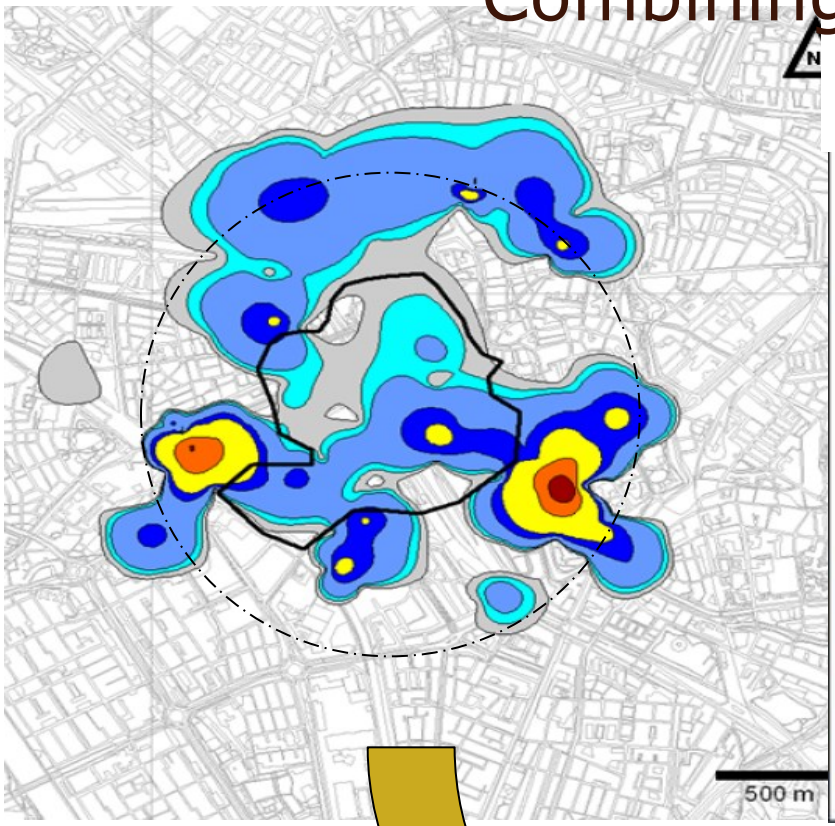
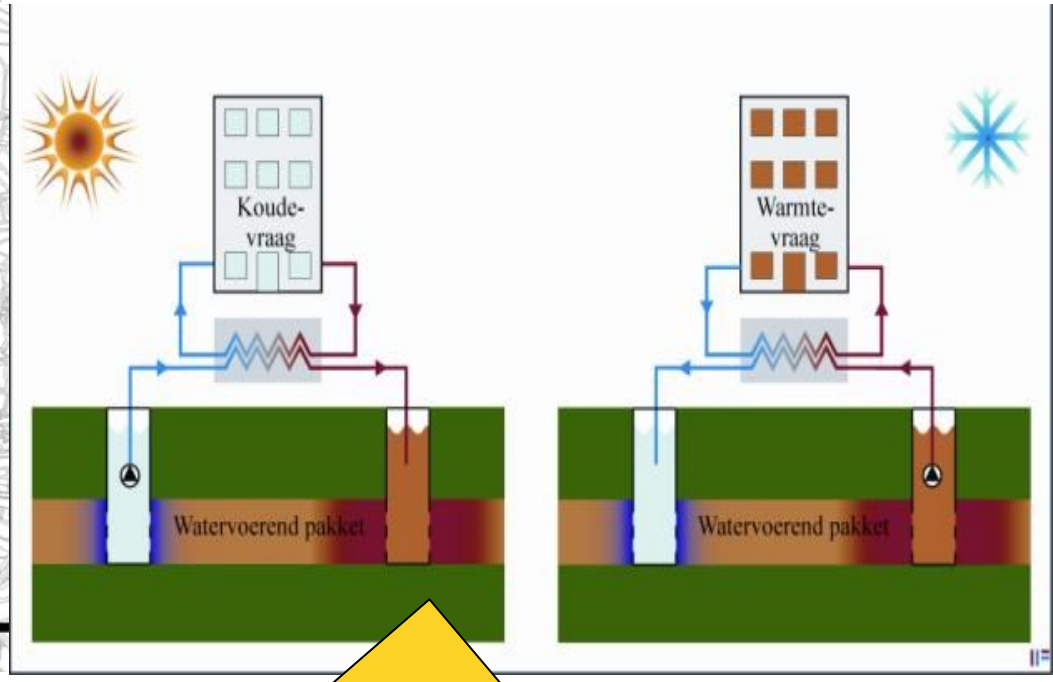
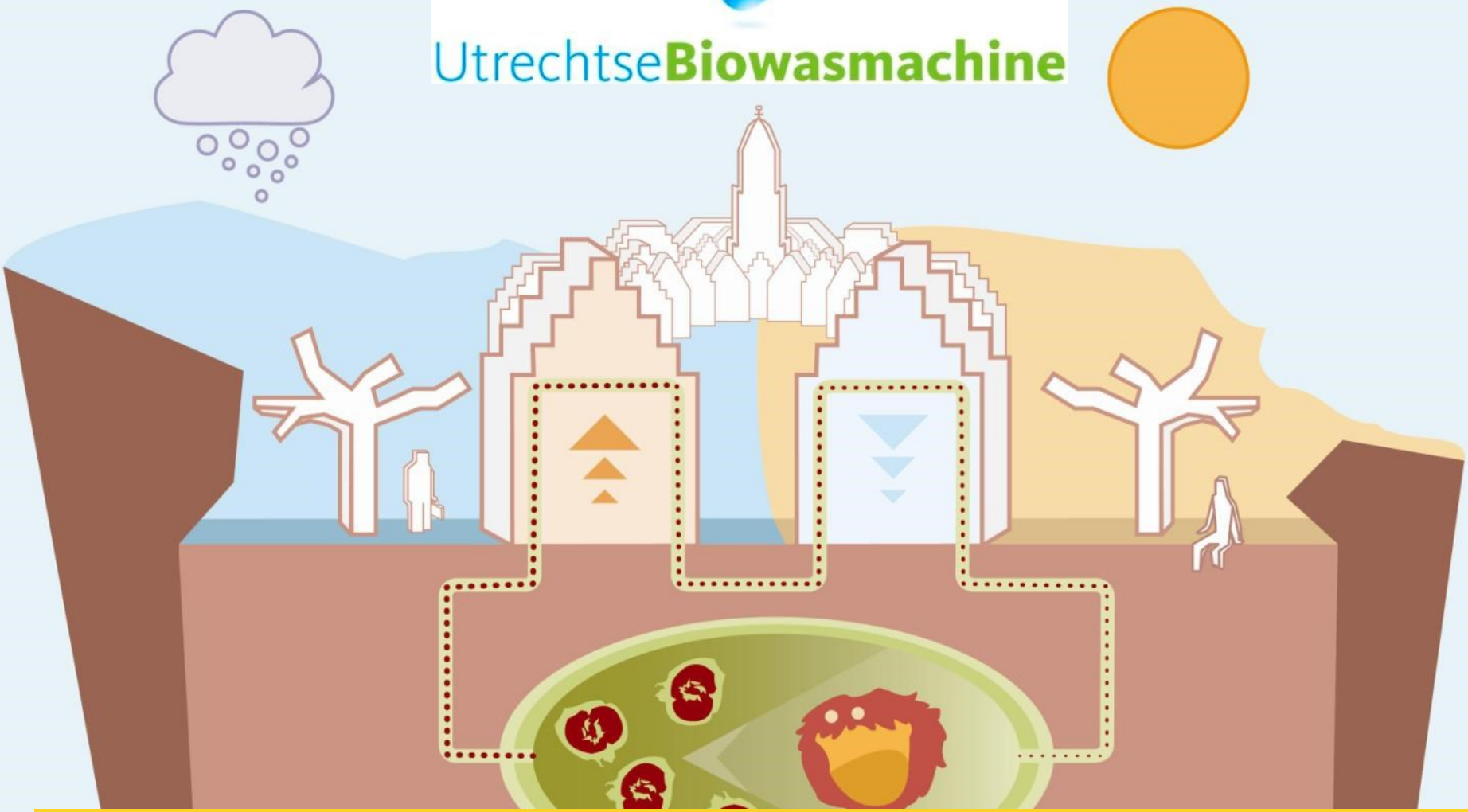




Spatial planning & Remediation & CO_2 reduction

UtrechtseBiowasmachine



An area oriented approach which makes it possible to remediate, monitor and control multiple groundwater sources and plumes within a fixed area & make use of soil energy!

Covenant Soil and subsoil

Involved:

- Ministry of Infrastructure and Environment
- Provinces (12)
- Municipalities (380)
- Water Boards (21)

Election on 20-3-2019

Covenant goals

- Remediate or Risk management on all sites with urgent risks for humans, ecology or spreading towards groundwater before 2020

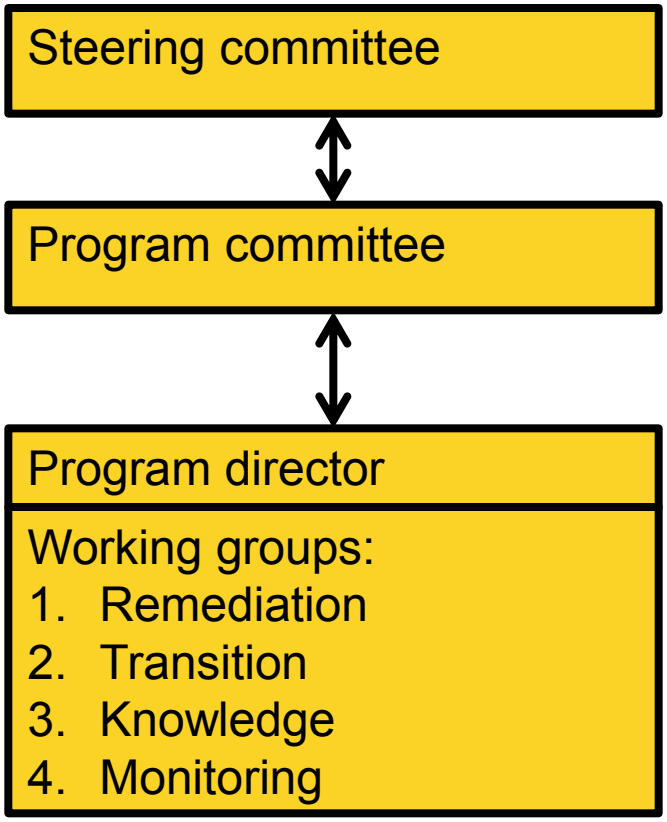
- To maximise the contribution of the soil water system to societal goals on renewable energy, climate adaptation and climate change, circular economy, enough and clean drinking water, healthy urban living and biodiversity

Governance

Close collaboration

- Combined effort to reach our goals
- 41 (12 provinces and 29 municipalities) are responsible for remediation
- Ministry provides labelled funding (M€110 /year), local accountability
- Yearly monitoring of progress and focus on specific sites.
- Knowledge agenda, development and exchange of knowledge

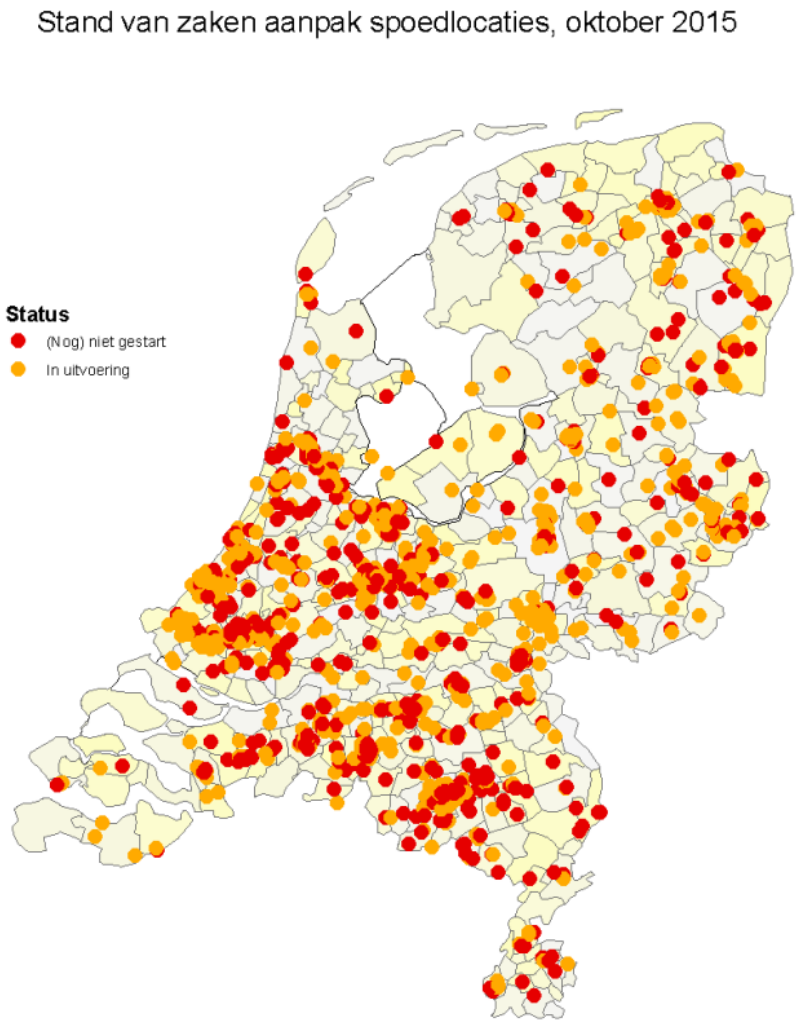
Organization structure

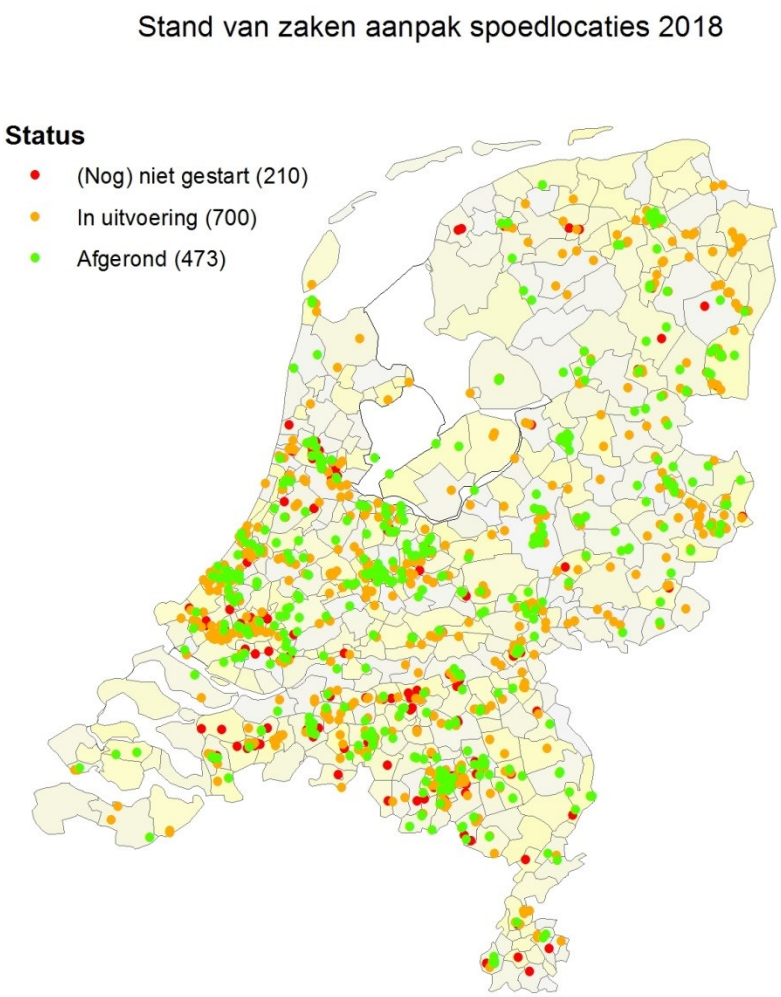


Each committee or working group consists of 1-3 members representing the parties involved:

- Ministry of Infrastructure and environment
- Provinces
- Municipalities
- Water boards

Progress in remediation





Circular economy: Reuse of soil

Success Factors:

- Knowledge based legislation → Reuse standards are based upon advice RIVM (Dutch EPA)
- Guided implementation/Knowledge transfer
- Tailor made local legislation within boundaries
- Quality assurance
- Professional public contracting
- Effective environmental guarding

Thinking in possibilities

Further information

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https://rwsenvironment.eu/subjects/soil/