



Management of contaminated sites in Austria

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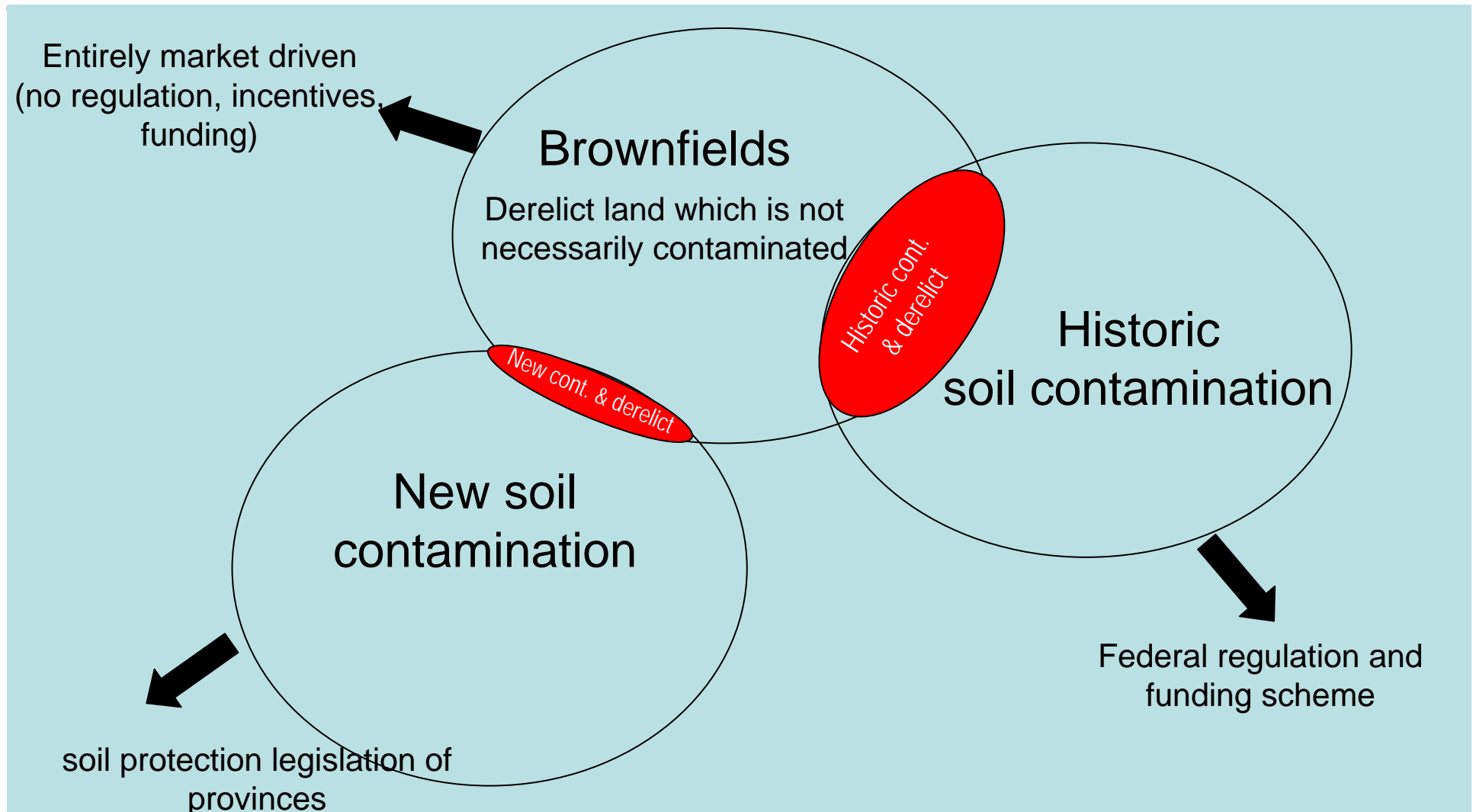
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Common Forum
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Land management schemes in Austria



Nov 2007 / Folie 2





Overview

Historic Contamination

Key Players

Recent developments

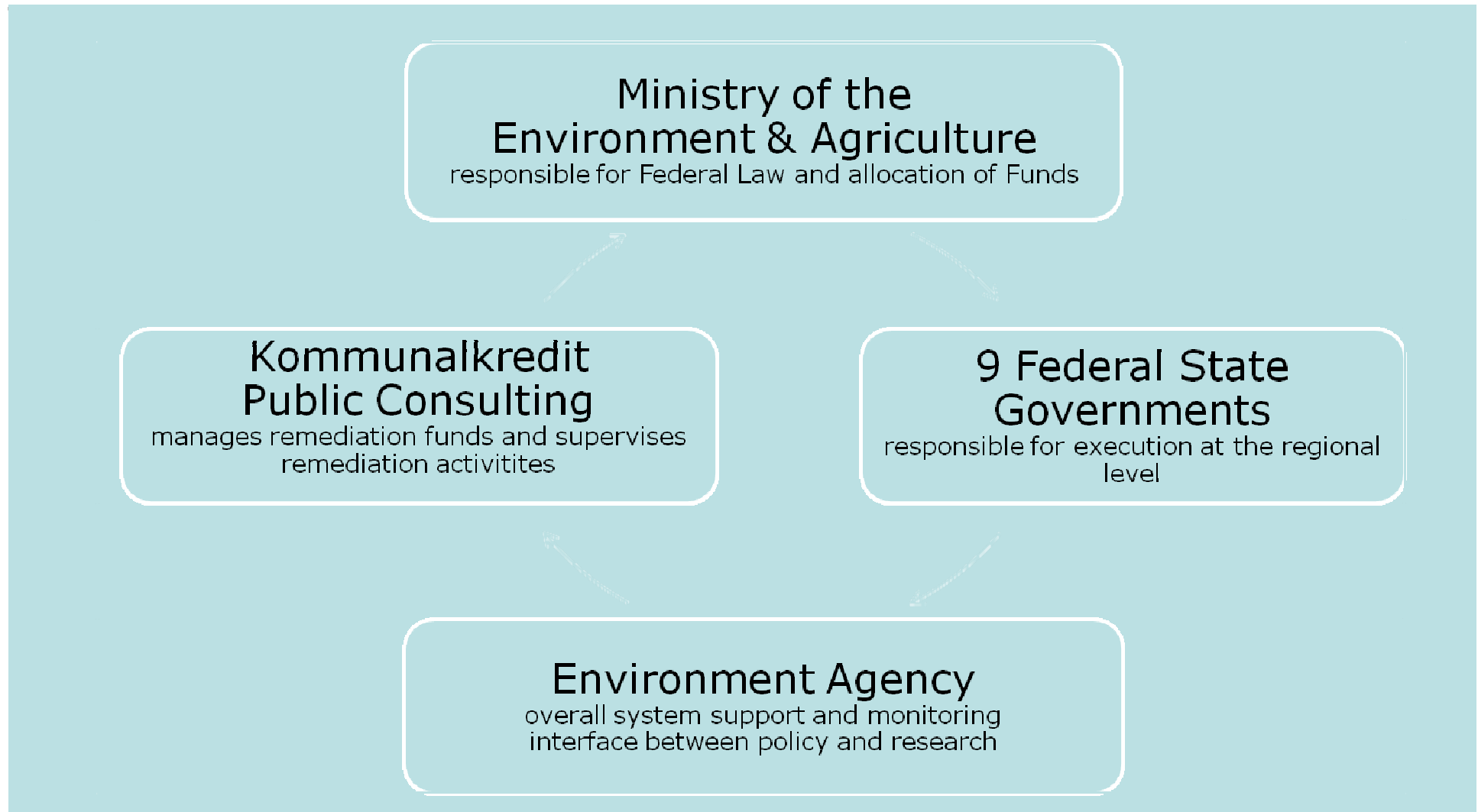
Brownfields

Recent developments





Historic Contamination Key Players





Historic Contamination Recent developments

1. Review on the **Performance** of Austria's Contaminated Sites Management (→ historic contamination)
2. Research: **Risk Based Remediation Targets**
3. Project on **New Orientation** of Austria's Contaminated Sites Management: Contaminated Land Management 2010





1. Review of the Management of Historic Contamination

- Review was prompted by the Ministry of the Environment
- Central element: Austrias Contaminated Sites Act → exists since 1989
 - System includes identification, clean-up and funding of historic contamination
- Topics of the review
 - Methodological developments after 17 years, remediation & investigation costs, funding rates, duration of procedures, economic and environmental impacts of remediation activities, estimation of future efforts
- Key aim: **Define ecologic and economic effects and impacts of nat. remediation activities between ('89 – 06)**
Benchmark the system, forecasts for the future





1. Outcomes of Review

Some facts

Remediation funds: 60 – 70 mio
€/yr.

→ average funding rate 80%

→ 1.1 billion € over 17 years

145 sites remediated

380 detailed risk assessments

The funds covers the

“top of the iceberg” of contamination

→ gas works, tanning factories, steel
works, large waste dumps



Key conclusions

Very robust system

Definition of benchmarks

Increase in efficiency necessary
(costs & time) if national
remediation goal wants to be
reached





2. Research: Concept to derive risk-based remediation targets

- Background : Amendment of the Austrian Contaminated Sites Act
- Objectives: site-specific consideration, taking type of landuse into account, develop alternative to precautionary strategy
- Outcome: scientific basis for a risk-based policy on contaminated land management
- Follow-up: study "Contaminated Land Management 2010"
- Conducted by: Environment Agency and Research Organisations





3. Contaminated Land Management 2010

Objectives: Reorientation of contaminated sites assessment

Conducted by: Environment Agency and Research Organisations

Stakeholder Workshops: Ministry of the Environment, Provinces, Research Organisations, Environment Agency

Integration of new aspects:

- Exposure assessment (human health)
- Impacts on eco-systems (basic principles)
- Use specific orientation values
- Models for pollution migration in groundwater
- Economic assessment of environment impacts
- Support of innovative technologies





Brownfields

Recent developments

Some Facts

National policy target to reduce land consumption
150 ha/day to 15 ha/day until 2020.

No monitoring of brownfields

No economic incentives to reuse brownfields

Abundant quantities of "greenland" available

2004: Quantification of brownfields in Austria

2008: Motivation Guide "Land in Sight"

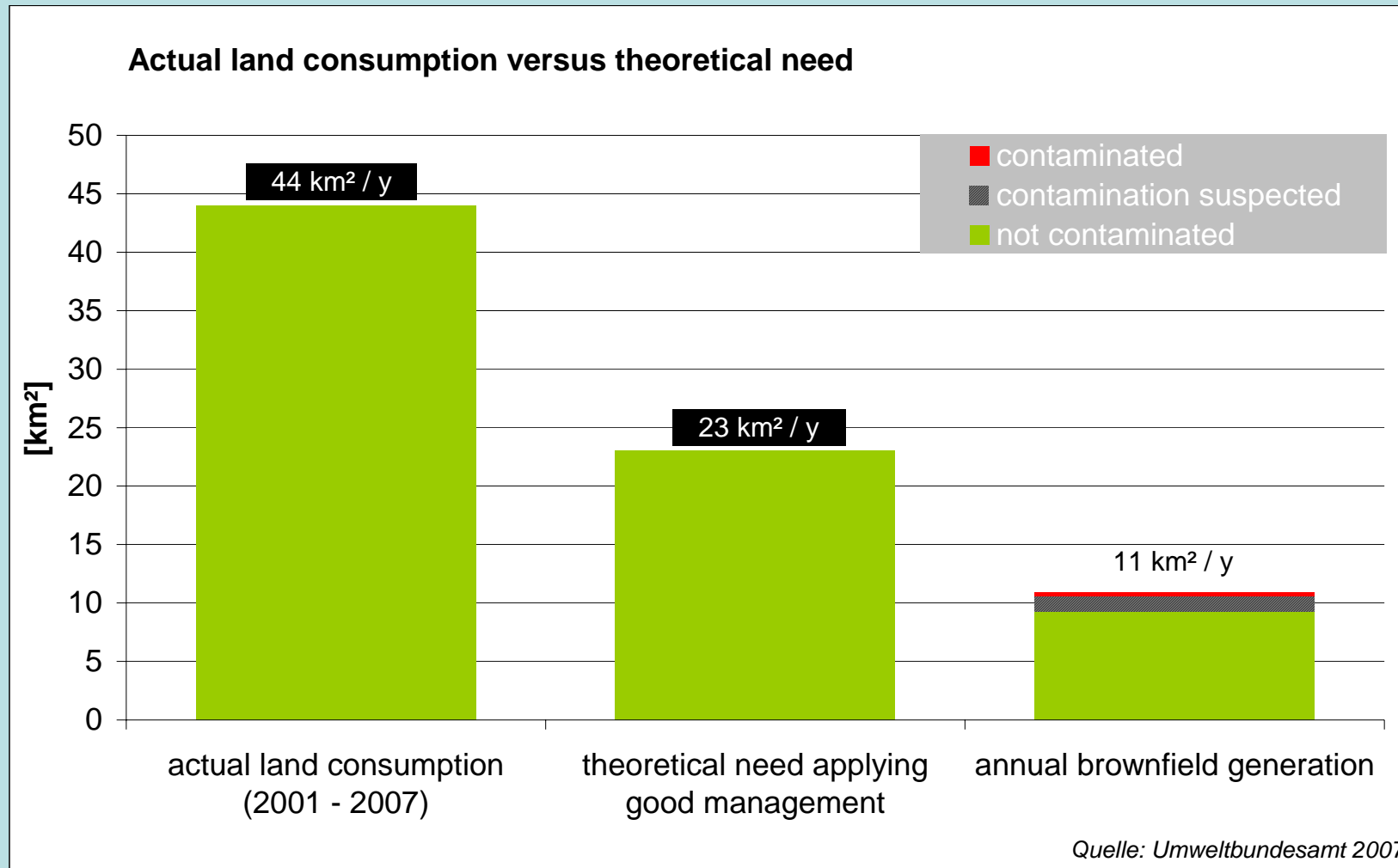
2009: Scoping Study, what is needed to push brownfield-
recycling





Brownfields

Quantification of brownfields in Austria





Brownfields “Land in Sight”

The Motivation Guide “Land in Sight”

- Gives an overview on the development of land consumption and the availability of brownfields
- Gives guidance to land developers
- Provides an overview of success stories





Brownfields

“How to push the reuse of brownfields”

2009: In a scoping study in cooperation with the Ministry, the Environment Agency, the 9 provincial governments, land developers and representatives from the municipalities answers to the following questions shall be derived:

- The need for monitoring: land consumption, brownfield reuse
- Educational needs
- Increase barriers to build on green land
- Increase security for developers

