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International survey on eco-innovation parks

*Learning from experiences on the spatial
dimension of eco-innovation*

Green Management and Territorial Marketing
Bologna, 13 December 2012

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Definitions: scale and concepts

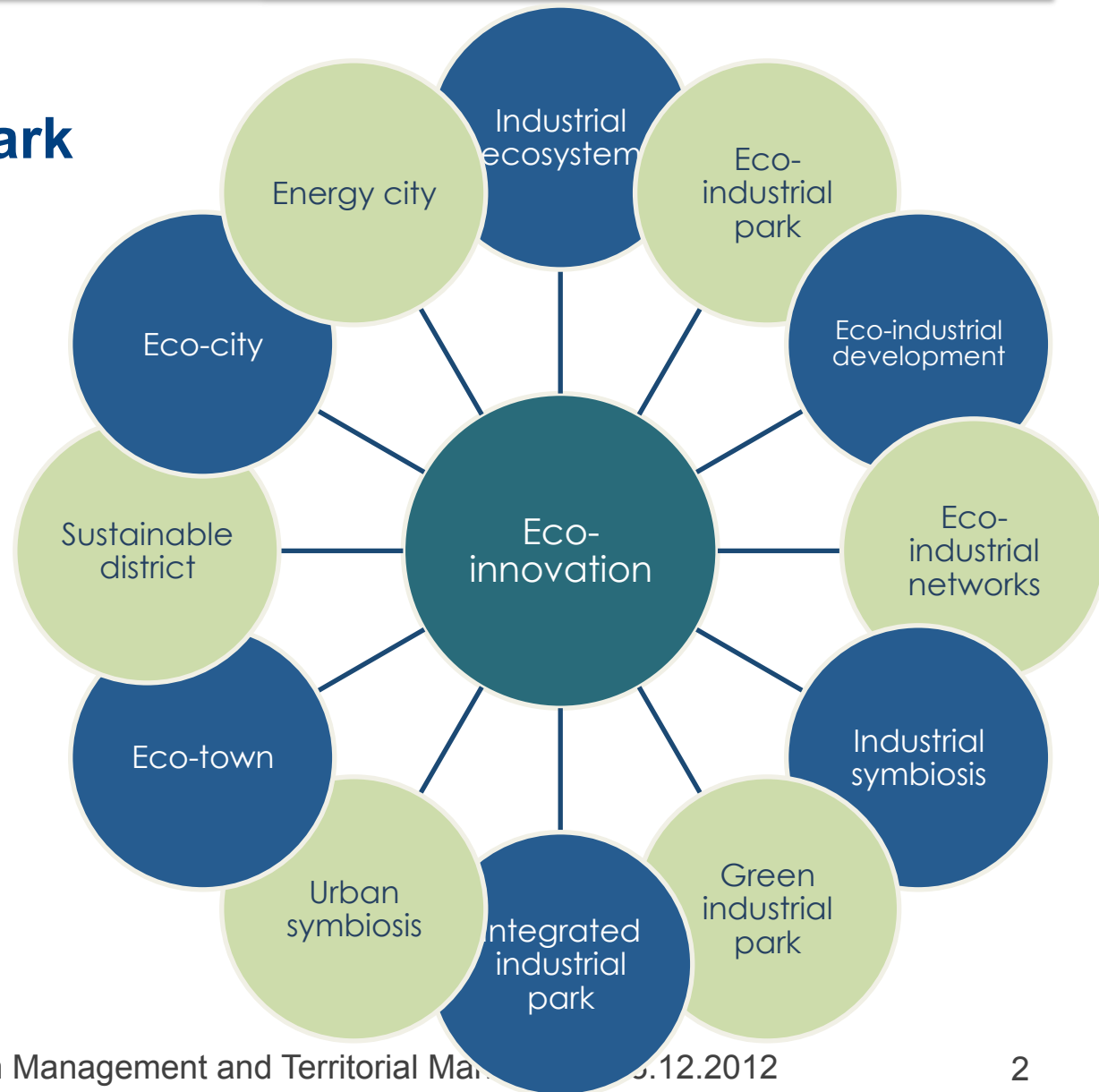
Industrial area & park



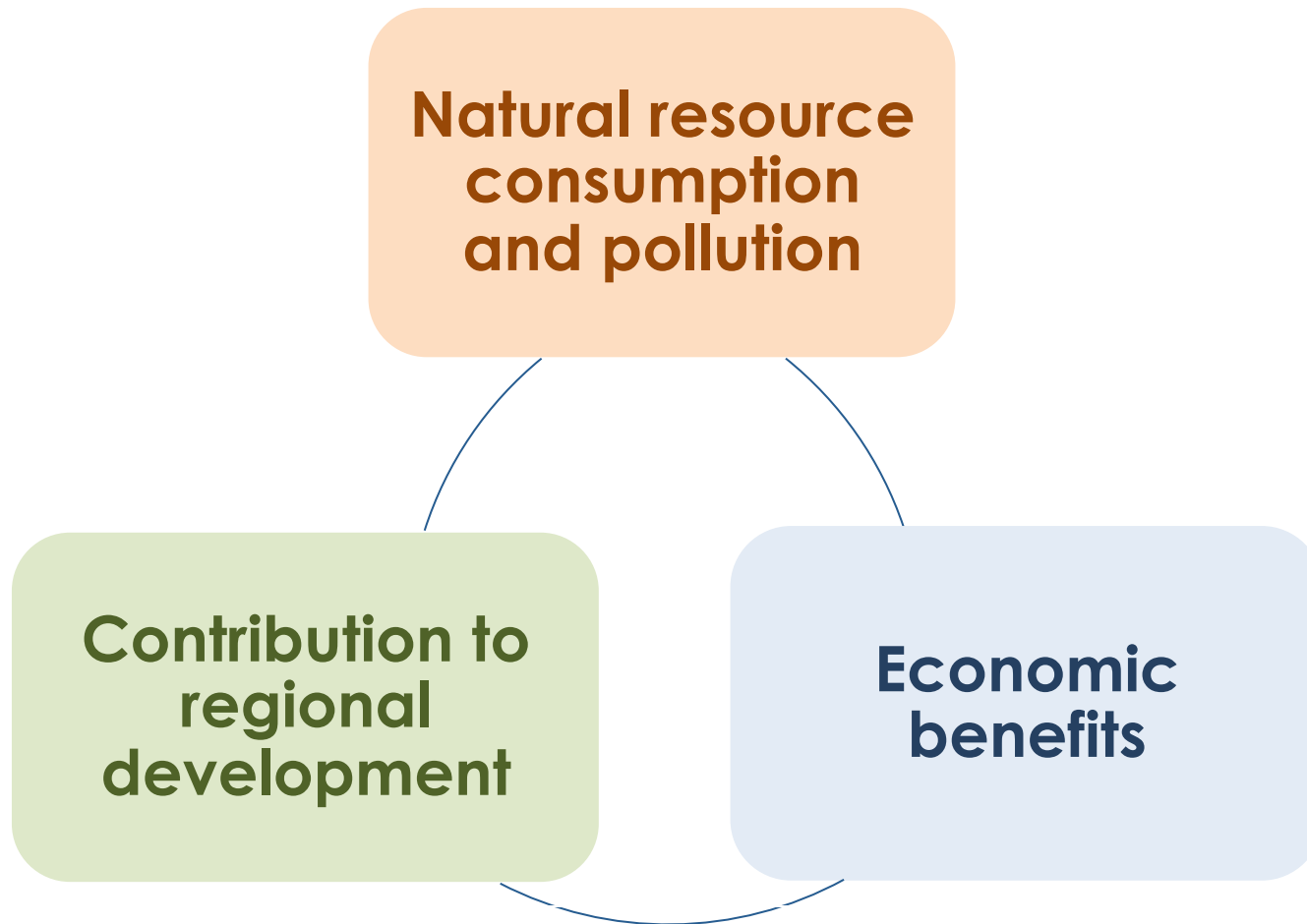
Combined area



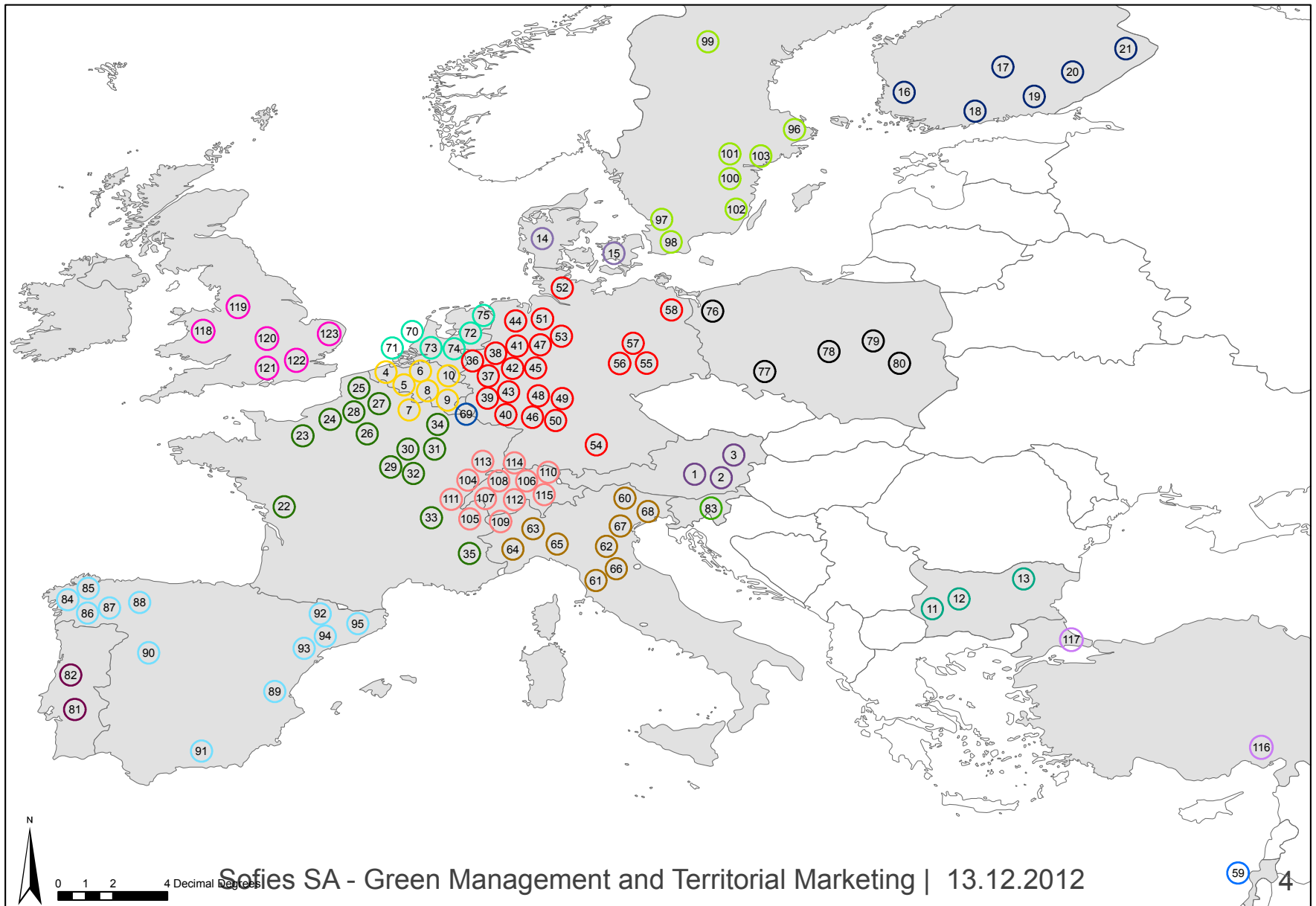
Urban district



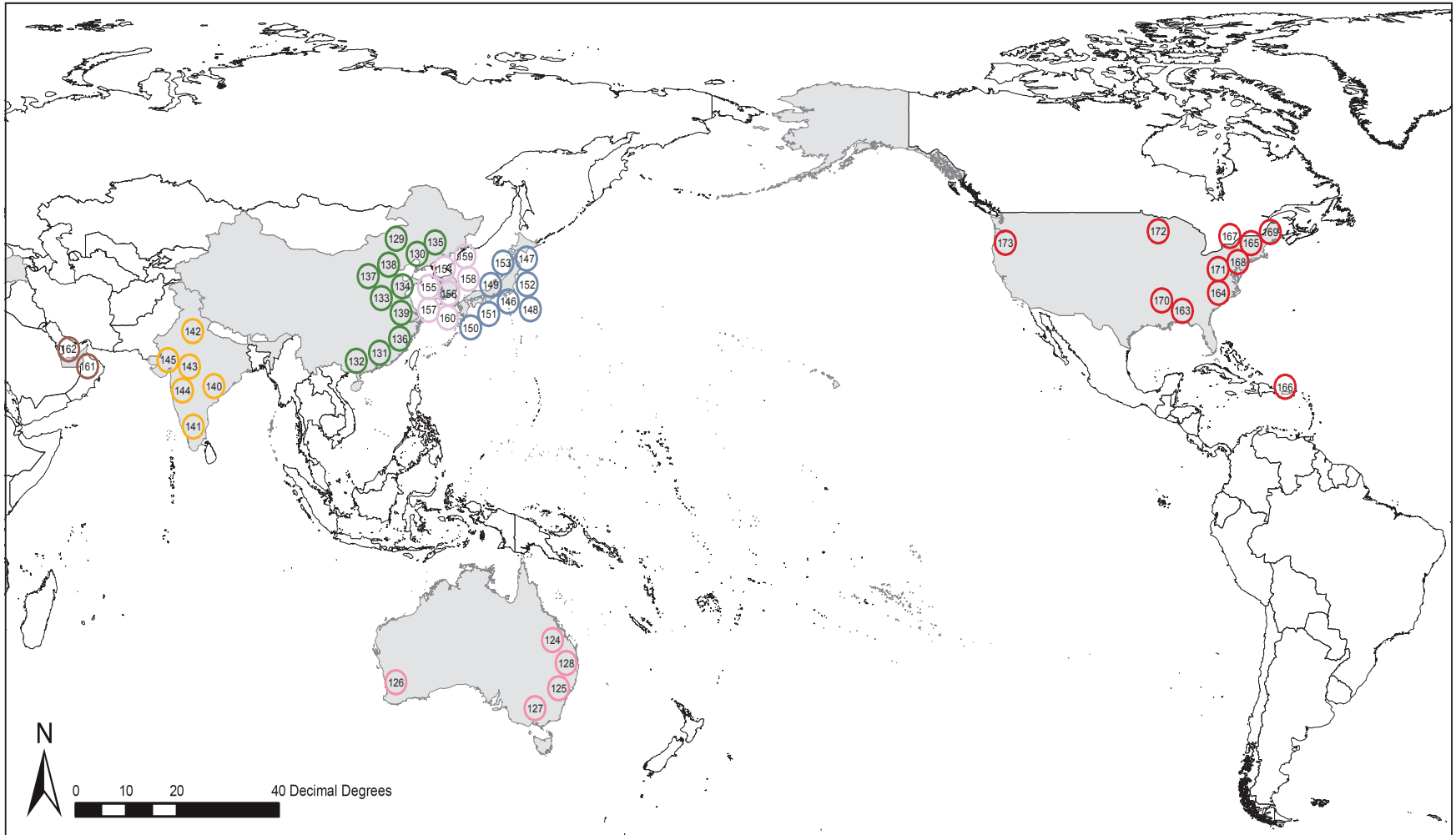
Benefits of eco-innovation parks



Learning from experience



Learning from experience



Toward eco-industrial development

Eco-criteria: the environmental dimensions of eco-innovation parks

Energy efficiency

Cultural, social, health, safety

Renewable energy sources

Mobility, transportation

Waste management

Land use

Water management

Air pollution prevention

Material / chemical flow

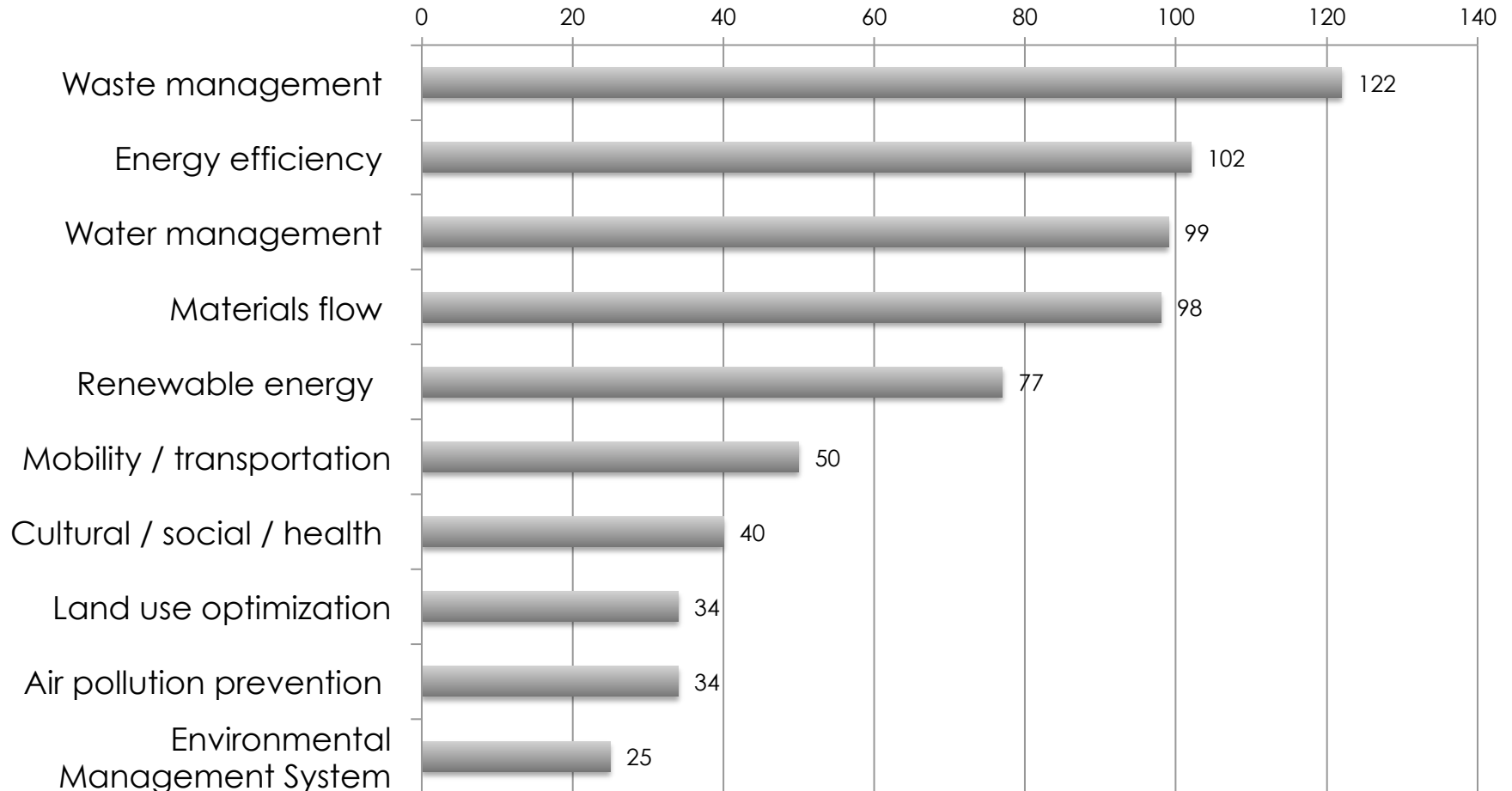
Noise prevention

Biodiversity

Environmental management

Toward eco-industrial development

Occurrence of eco-criteria



Toward eco-industrial development

Success factors: studying diversity in implementing eco-innovation parks

Economic value added
(Added value)

Cooperation with Science and
Technology institutions (Coop S&T.)

Policy & regulation frameworks
(Policy)

Geographical factors and regional
infrastructure (Location)

Financial incentives
(Incentives)

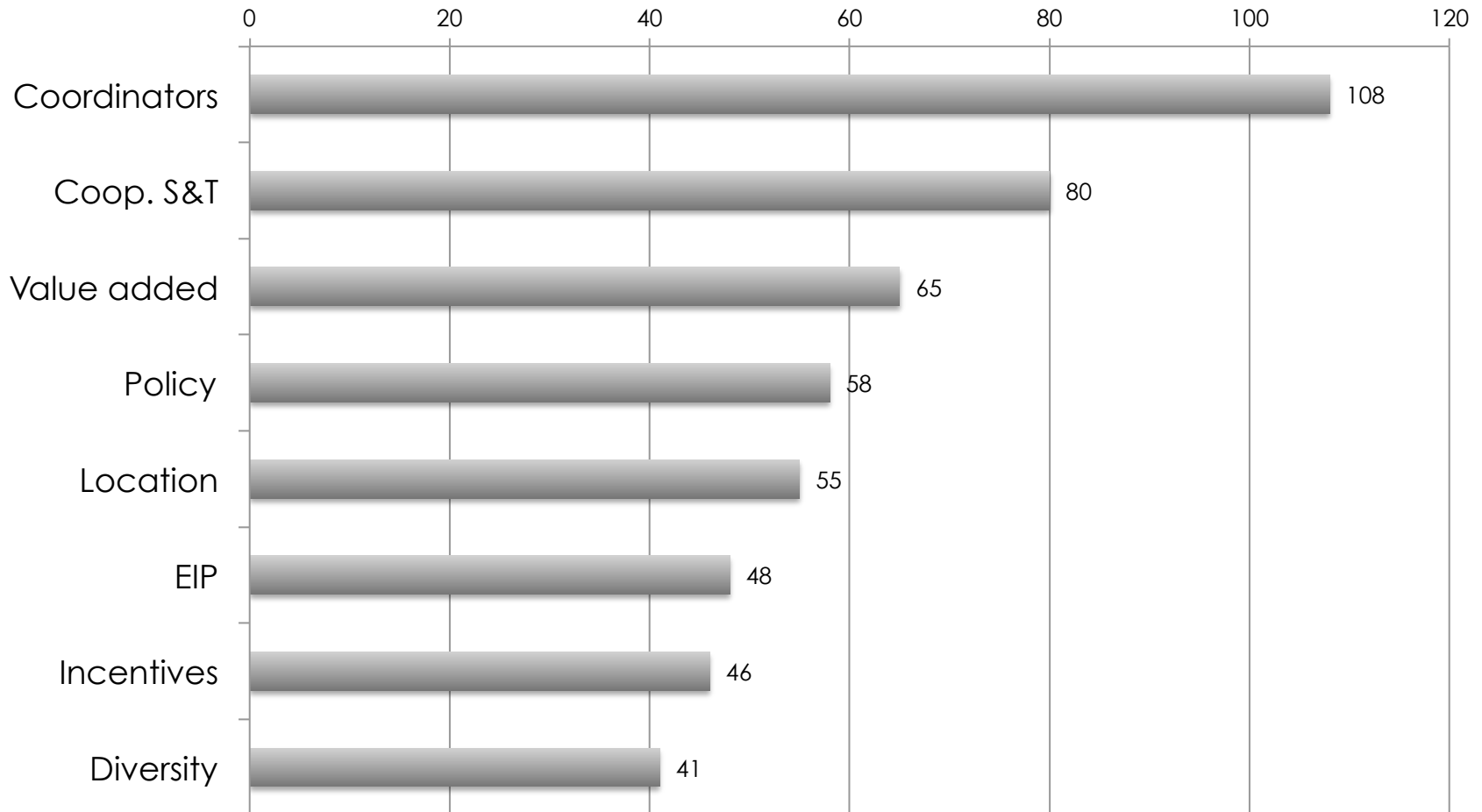
Diversity of businesses
(Diversity)

Organizational and institutional
setups (Coordinators)

Clear designation as
eco-innovation park (EIP)

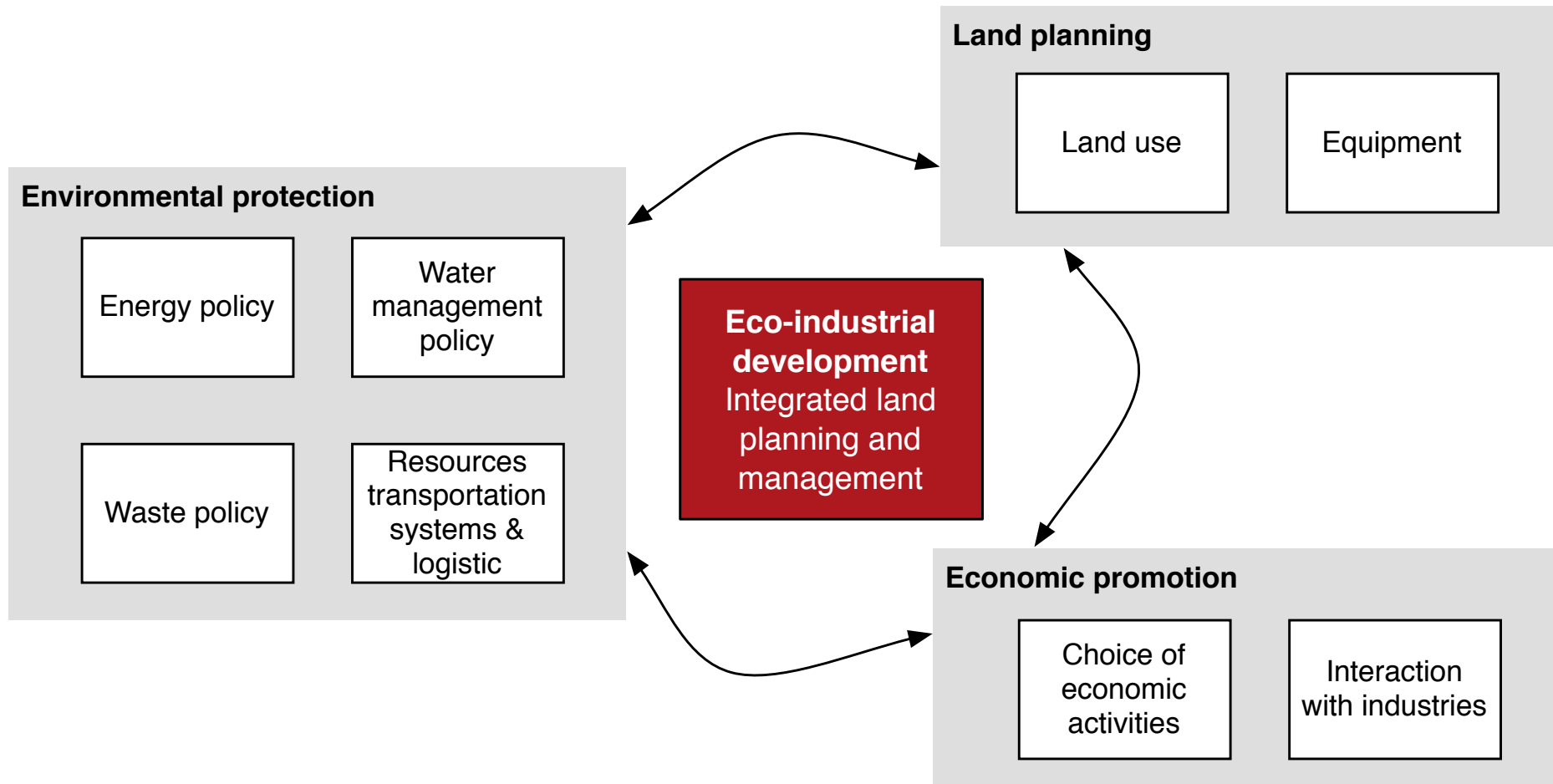
Toward eco-industrial development

Occurrence of success factors

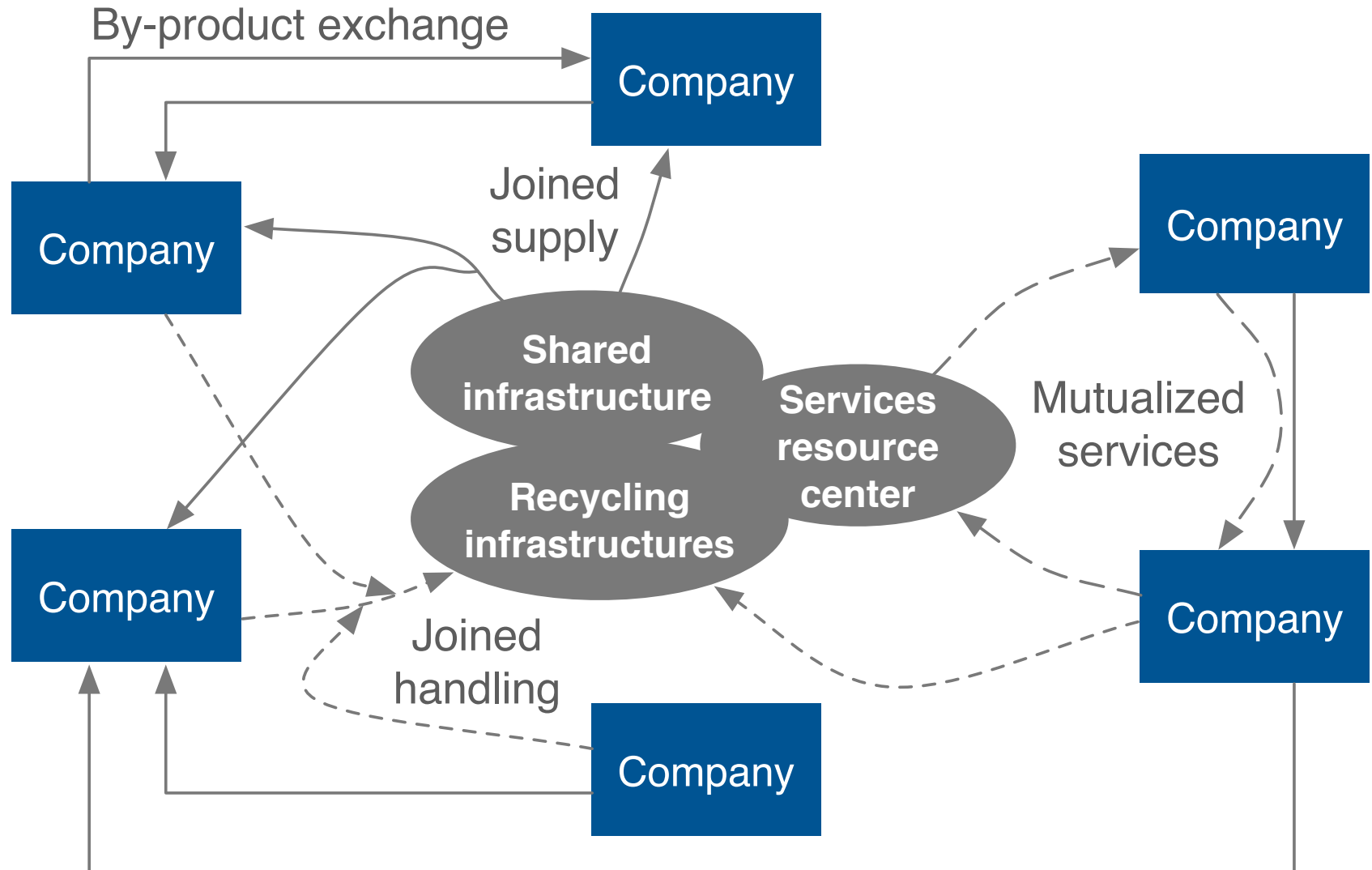


The setting up: a systemic approach

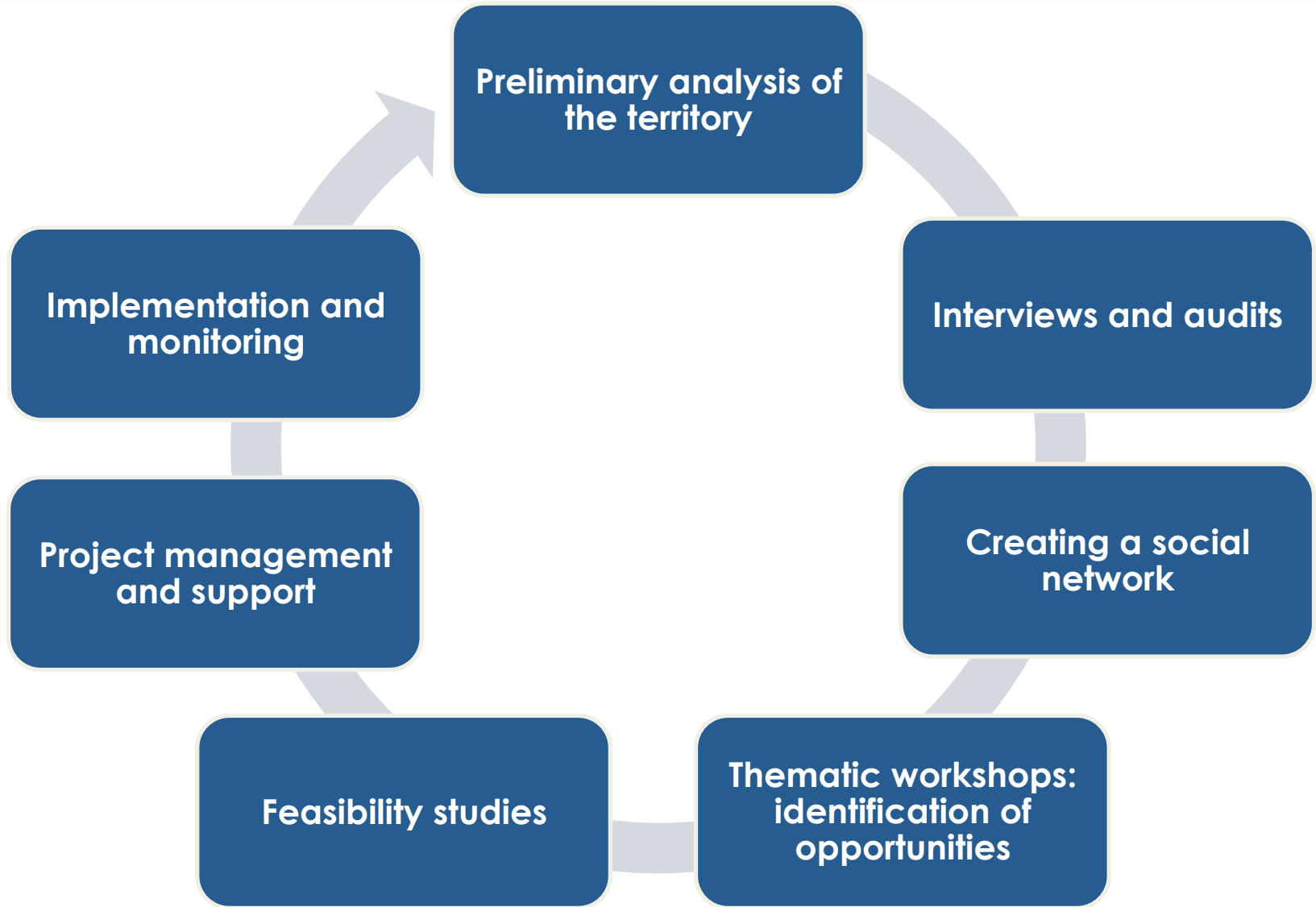
Increased collaboration and communication between economic promotion, land planning and environmental protection



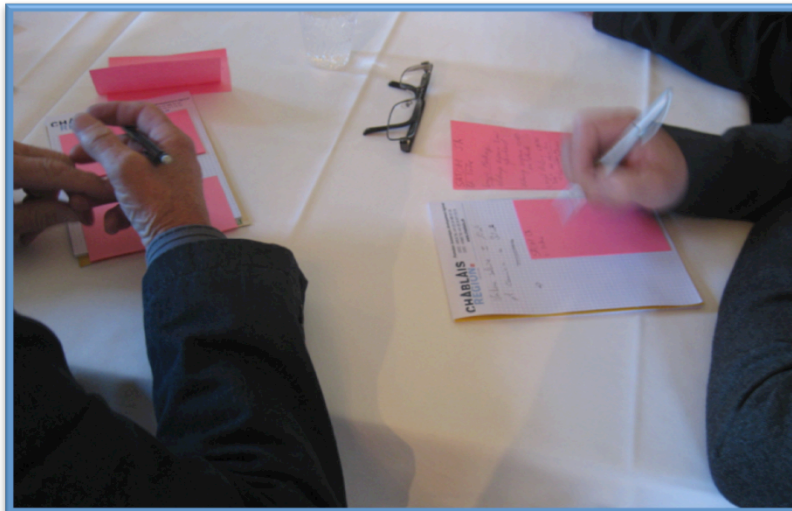
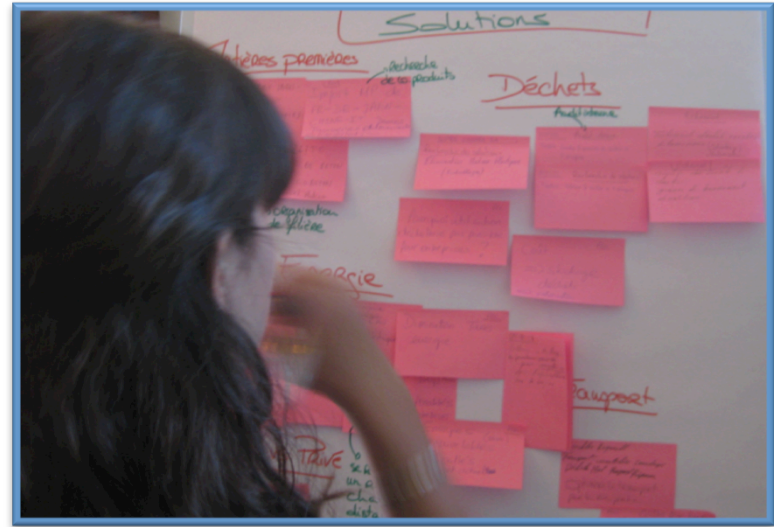
Support to companies: eco-industrial park



Services for eco-industrial development



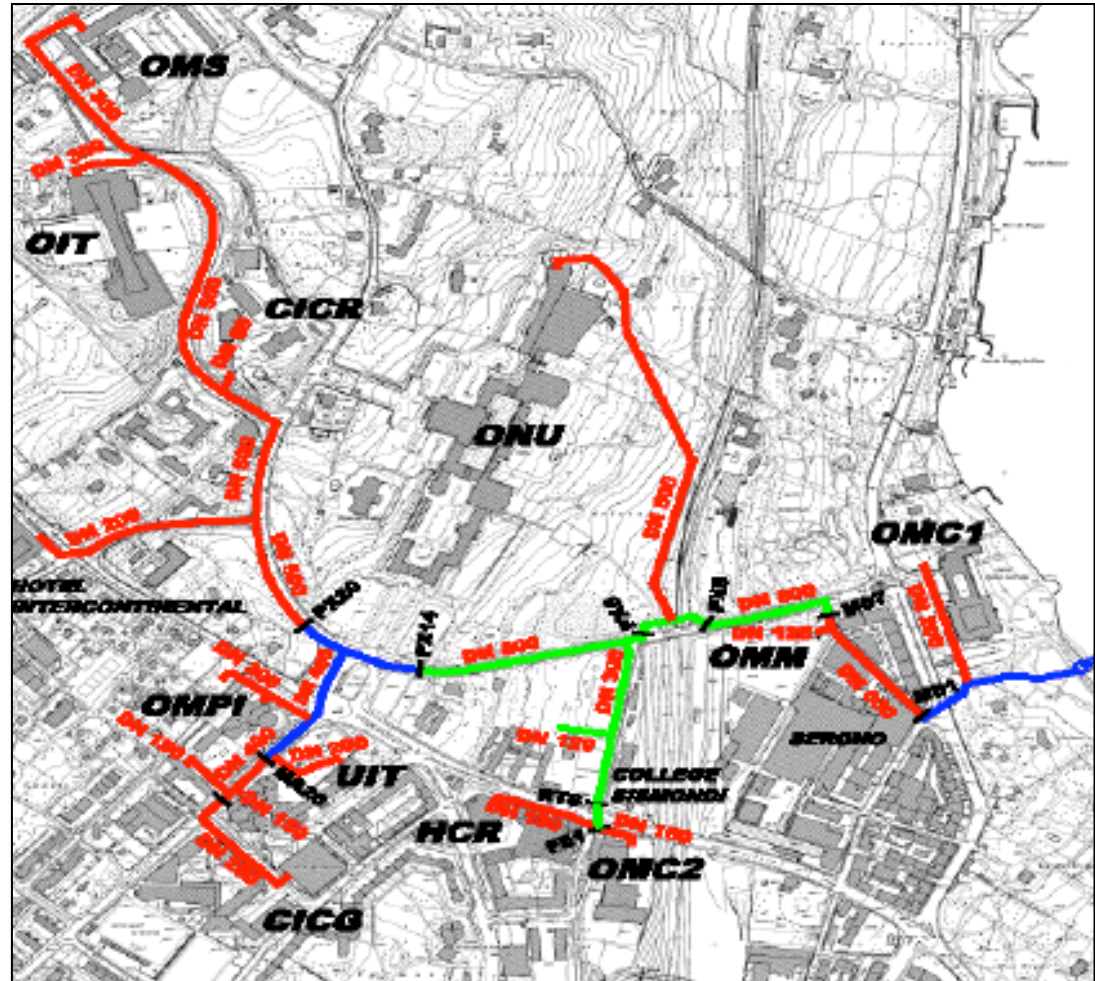
Services for eco-industrial development



Support to companies: example 1

Shared energy production:
Hydrothermal heating and cooling technology (and watering of green space), involving:

- Merck - Serono
- UN headquarters
- Red Cross
- WHO
- ILO
- WMO
- WTO
- WIPO
- UNHCR
- ...



Support to companies: example 2

CIMO, third operator

Services:

- ✓ Energy vectors
- ✓ Waste management
- ✓ Technical support, training, etc.

Example of benefit

Energy recovery from on-site incineration plants produces 25% of the park demand for steam

SOFIES, consulting firm

Services:

- ✓ Analysis and implementation of industrial symbioses
- ✓ Creation of collaborative networks



Lessons learnt

1. Eco-innovation at the park scale is an ongoing process in most of the countries analyzed: **strategies are very diverse.**
2. Few experiences show **eco-innovation in the planning phase**
 - Planning of common services and infrastructure
 - Looking for proximity providing benefits
3. Lack of standardized methods to **quantify and qualify success**
4. Clear designation of industrial parks as eco-innovation or eco-industrial park is mostly used as a **marketing tool**

Perspectives

How to bridge the gap between economic development and environment ?

- ✓ Creating innovative and tailor-made business models
- ✓ Establishing networks of competence
- ✓ Fostering eco-innovation for an efficient and sustainable resource management



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Thank you for your attention!

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