

Territorial cohesion: a development challenge mainly?

"By examining all uses of land in an integrated manner, it makes it possible to minimize conflicts, to make the most efficient trade-offs and to link social and economic development with environmental protection and enhancement, thus helping to achieve the objectives of sustainable development."

UNCSD, Rio 1992- Agenda 21, Chapter 10



Environmental sustainability: 5 key policy questions relevant to territorial cohesion

1. Cost of environmental protection → the “burden” issue

- Cost for public budgets: financing of protection (incl. administration and research)
- Cost for companies: effects on economic competitiveness

2. Cost of insufficient environmental protection → the “externalities” issue

- Depletion of renewable resources (forest, fisheries, water...)
- Degradation of natural assets (forests, fisheries, soil, water, ecosystems...)
- Impacts on human health and well being
- Costs of remediation (instead of protection...)

3. Environmental performance of the economy → the “decoupling” issue

- Compliance to national emission standards, respect of international conventions
- Distances to targets, economic and technological options
- Use of scarce resource
- Sustainability of consumption patterns

4. Assessment of policies → the “effectiveness/efficiency” issue

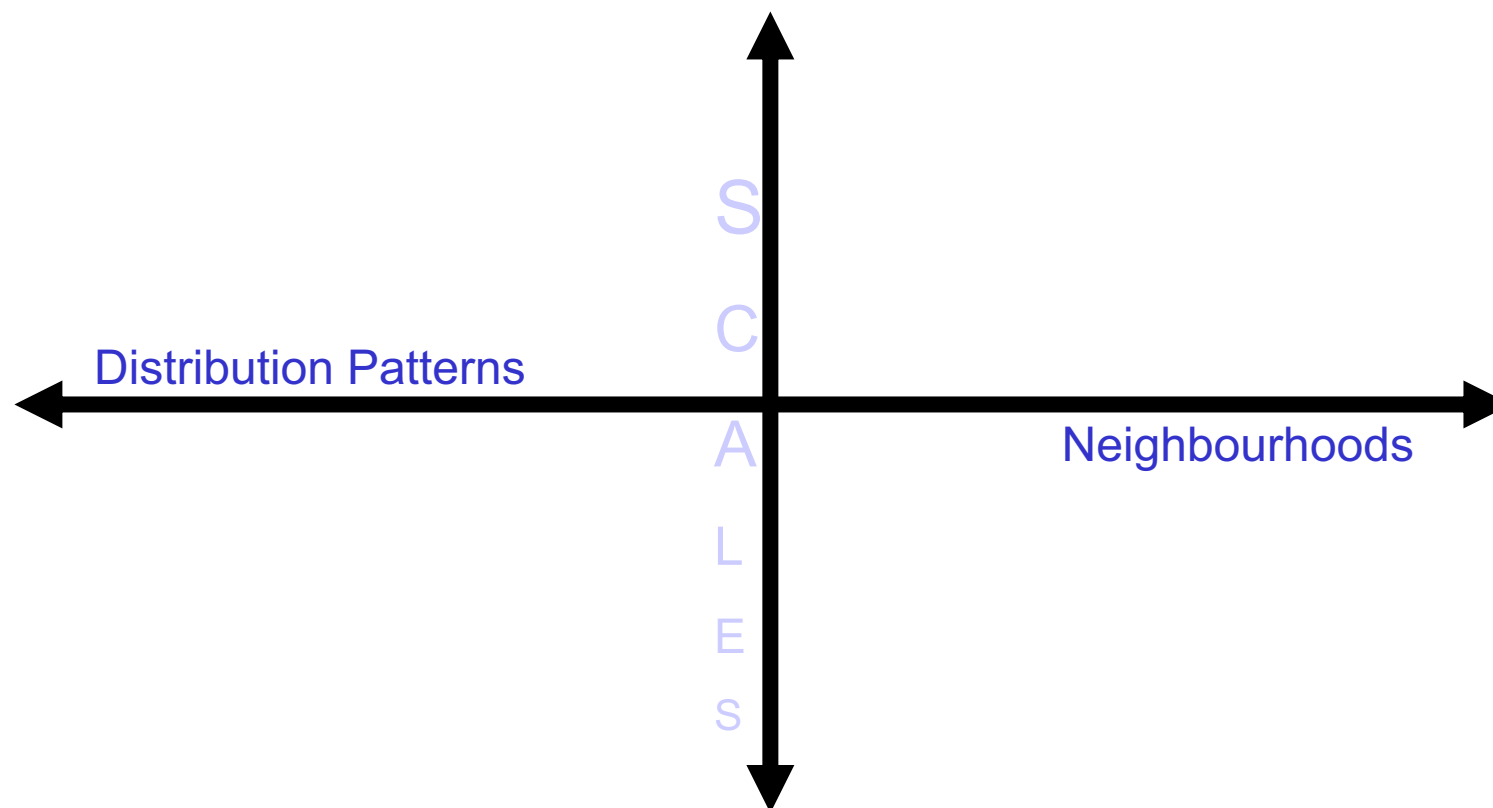
- Efficiency/effectiveness of environmental policies and instruments
- Efficiency/effectiveness of environmental sector policies (agriculture, transport...)
- Environmental impact assessment of social and economic policies
- Incorporation of environmental concerns in the multiple levels of public and private decision-making (participation, awareness, corporate accounting) Reserves (ownership, access, operation)

5. Conservation of comparative advantages → the “natural capital” issue

- Reserves (ownership, access, operation)
- Economic rents on natural resources (depletion...)
- Viability of living/cycling natural capital, continuity of ecosystem services
- Adaptability to change (global market, climate change, technology)



Forming the understanding and information base

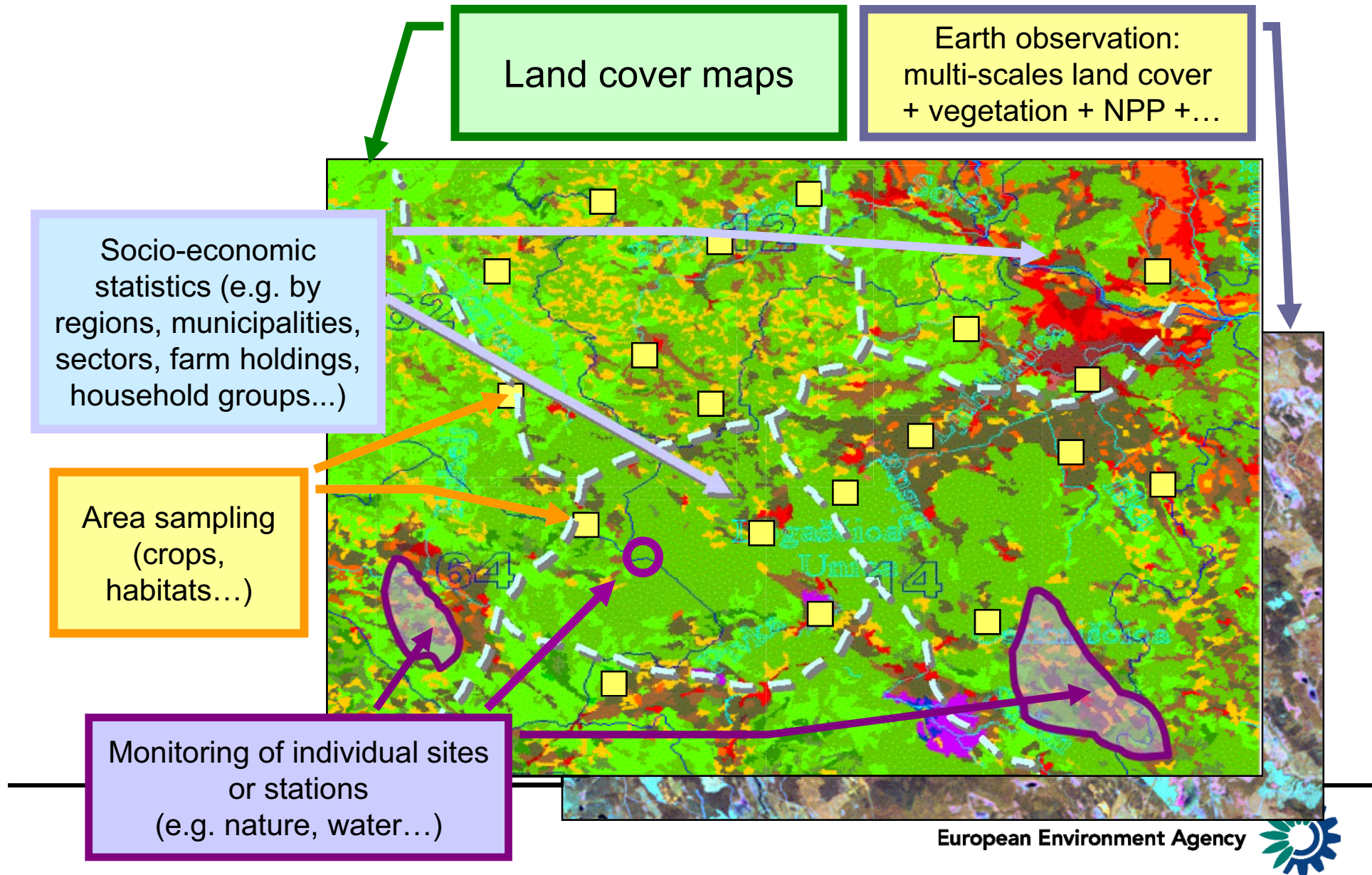


Contribution to knowledge

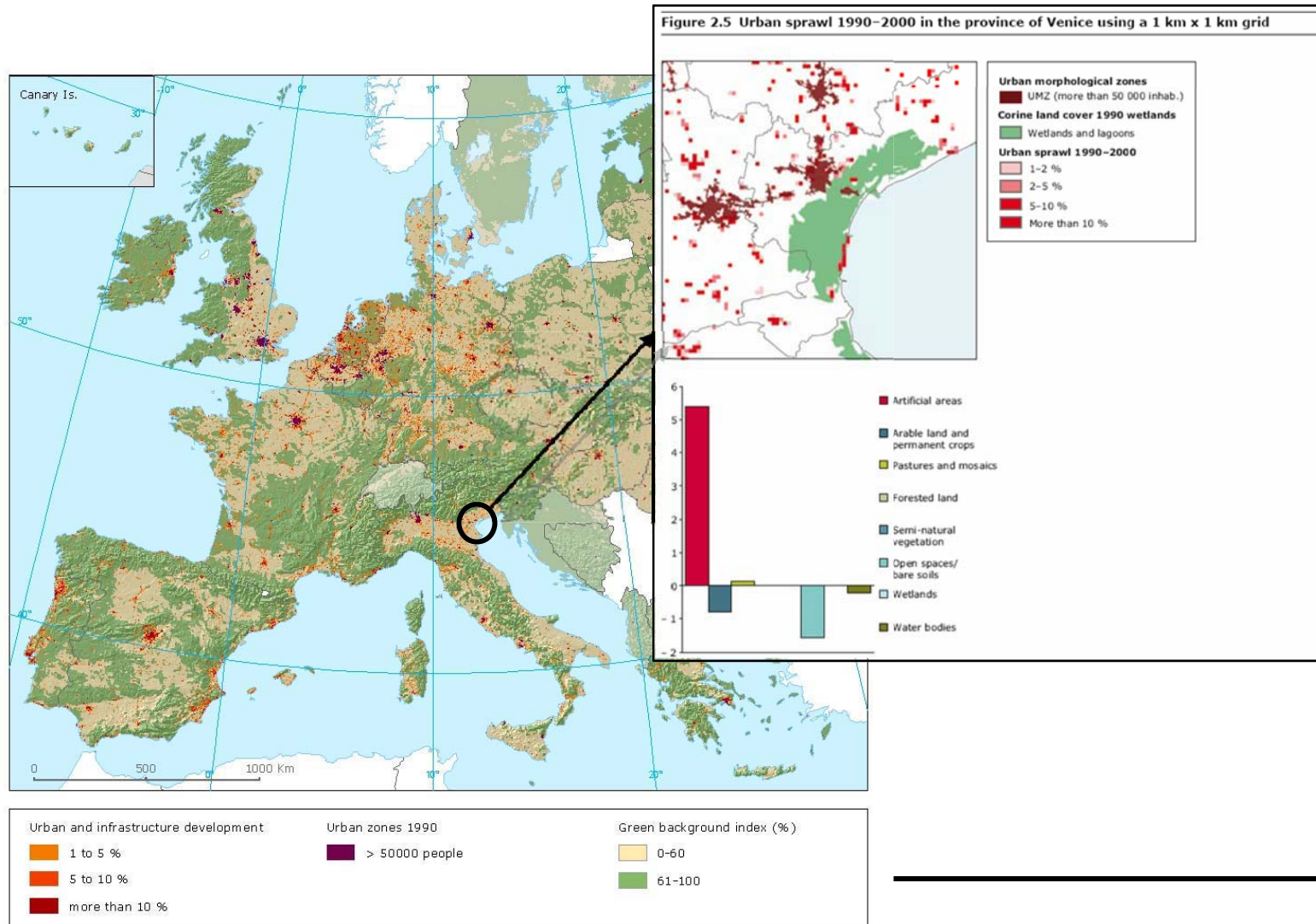
- Territorial integration: Spatial analysis
- Socio-Economic / Environmental integration: Accounting
- Accounting for changes over time and space:
 - Understanding patterns of change and informing on systems interactions
 - Accounting for ecosystem goods and services (Ecosystem Assessment...)
 - Valuation of natural assets and environmental expenditures
 - Tool for Sustainability Impact Assessment (Targeted Accounts)
- Platform for building scenarios and models



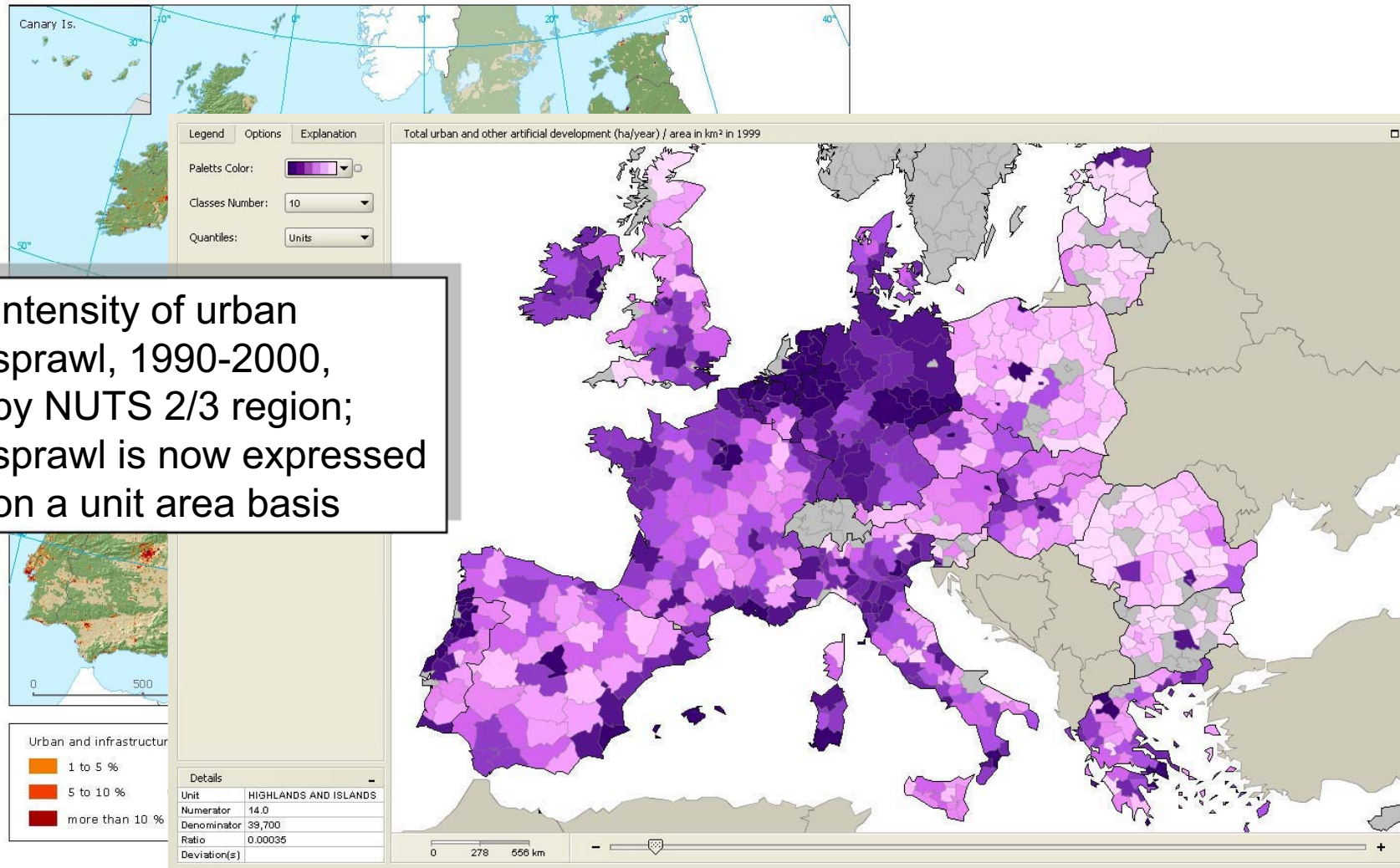
Integration of Environmental & Socio-Economic Data



Mapping flows – Urban sprawl



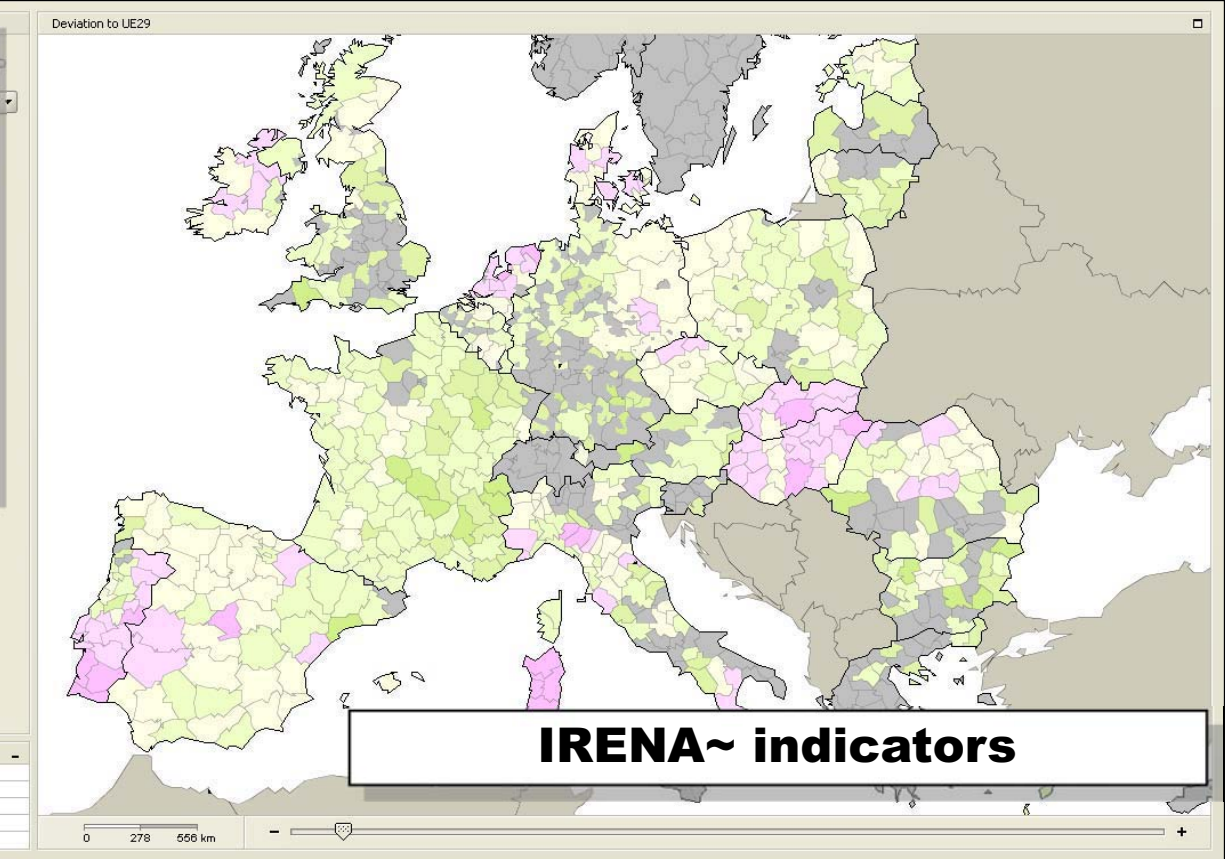
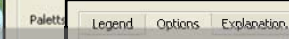
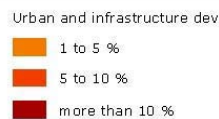
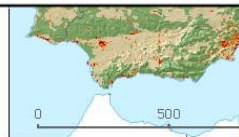
Urban sprawl (2)-Using HyperAtlas



Mapping flows - Agriculture



Withdrawal of farming, 1990-2000, by NUTS 2/3 region, expressed on a unit area basis as the difference to the European average value



IRENA~ indicators

Details	
Unit	CHARENTE-MARITIME
Numerator	22.0
Denominator	6,860
Ratio	
Deviation[s]	19%

e.g. Agriculture landscape differentiation,
NW Europe & New member countries

**Intensification:
conversions
pasture to arable**

**Important
conversions
arable to pasture &
withdrawal of farming**

**Fast
agriculture
restructuring**

Delayed process ?

Le
Co
F5

Net

46M41N4.SUMOFAREA.H

Net increase of set aside/fallow land >30%

Net increase of set aside/fallow land 5% to 30%

Net conversion of pasture to arable 5% to 30%

Net conversion of pasture to arable >30%

Withdrawal of farming (total)

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2 to 5%

5 to 10%

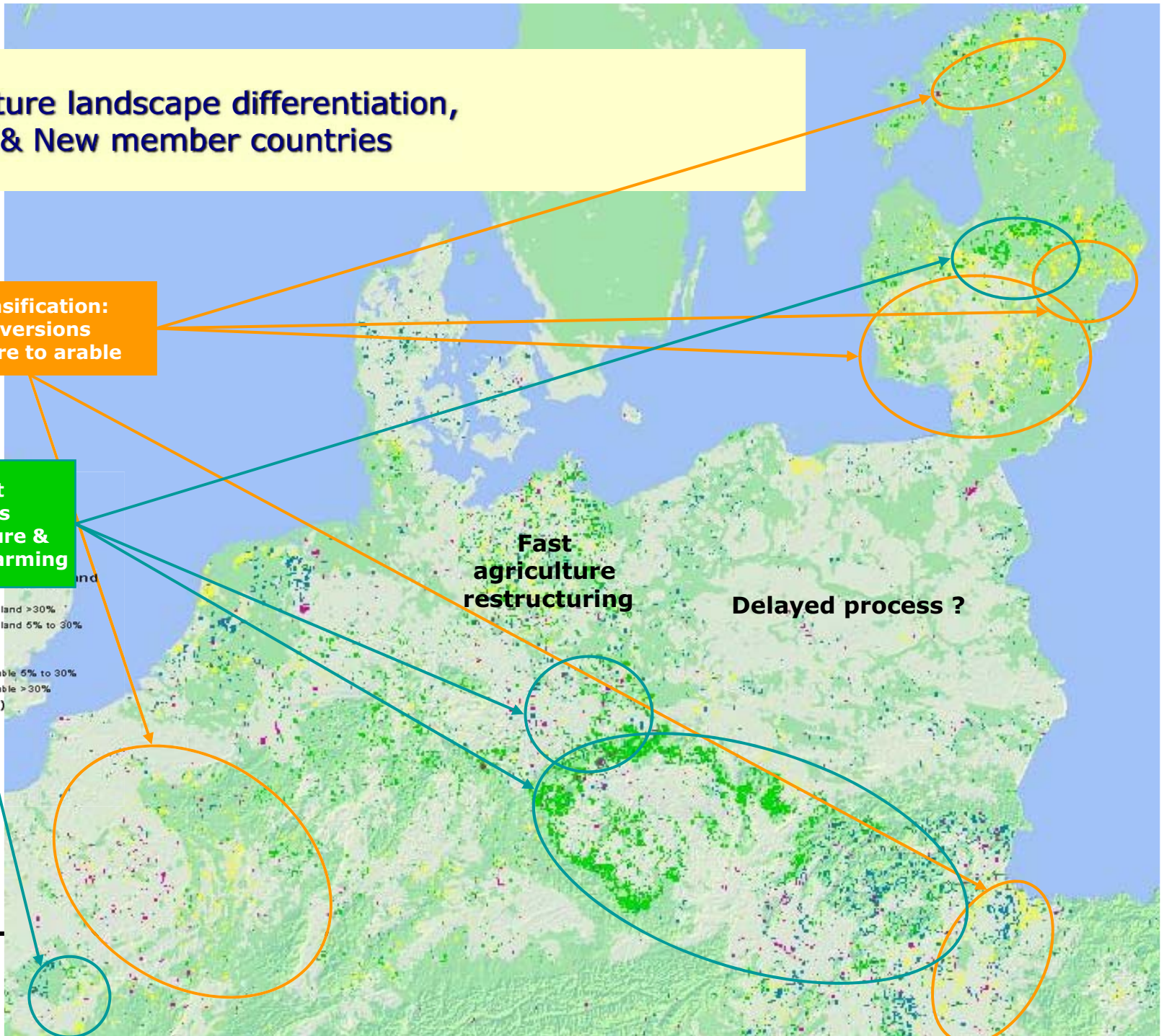
10 to 30%

more than 30%

**Landscape Natural
Potential**

High natural potential: 100

Low natural potential: 0



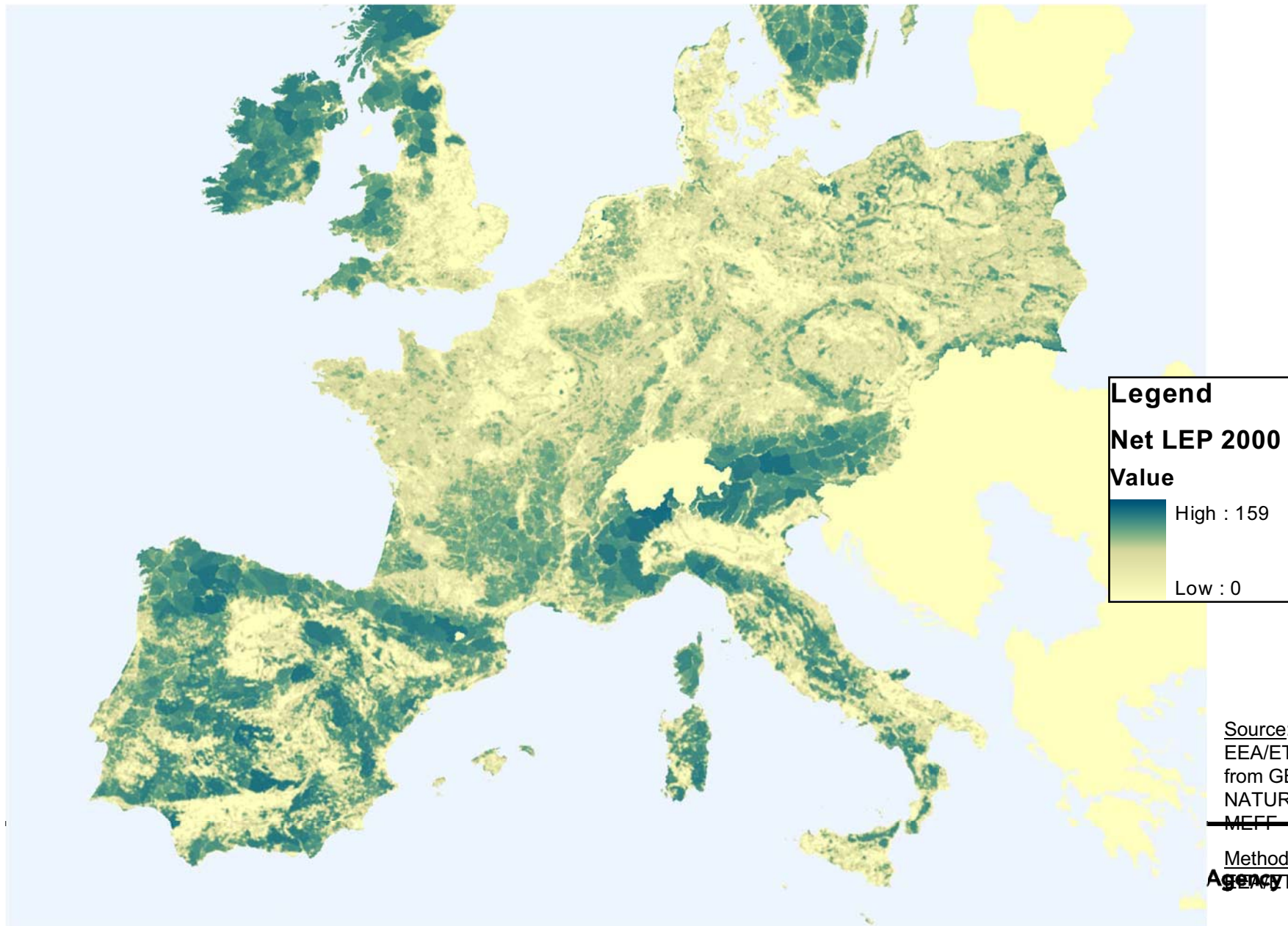
Towards “Net Landscape Ecological Potential”

A landscape based indicator which tells the **value and integrity of ecosystems** considering 3 dimensions:

- **Land use intensity/naturalness captured by the types of land cover**; at the macro level, a distinction is made between intensive land covers (artificial and intensive agriculture) and less intensive and natural land cover types
- **Value given by society (science, environmental policies...) to natural features** captured via the designation of areas for nature conservation – either European (Natura 2000) or national (CDDA);
- **Fragmentation by roads, railways and other artificial features**: the indicator is the Effective Mesh Size



Net Landscape Ecological Potential 2000, 1 km² grid

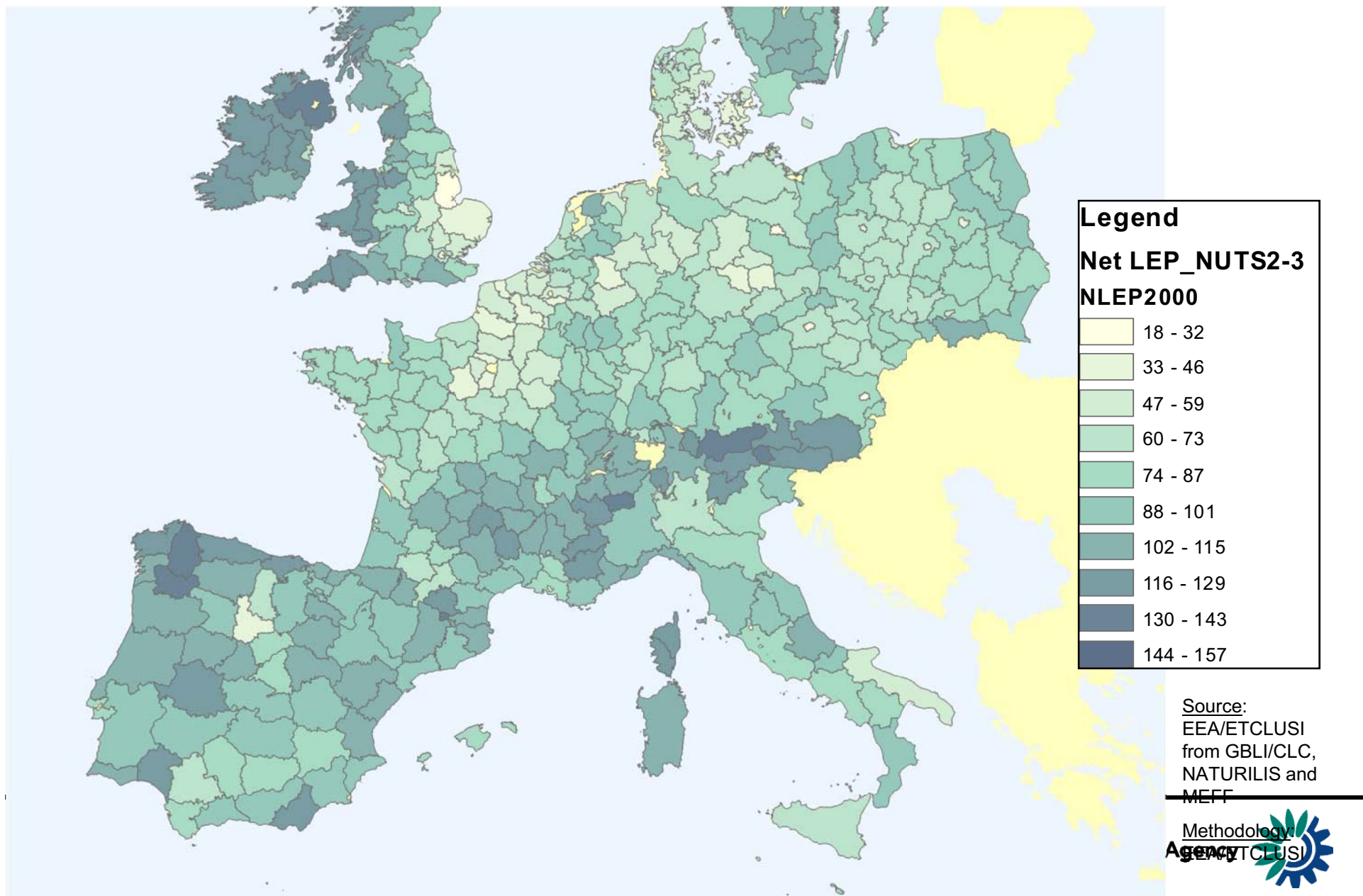


Source:
EEA/ETCLUSI
from GBLI/CLC,
NATURILIS and
MEFF

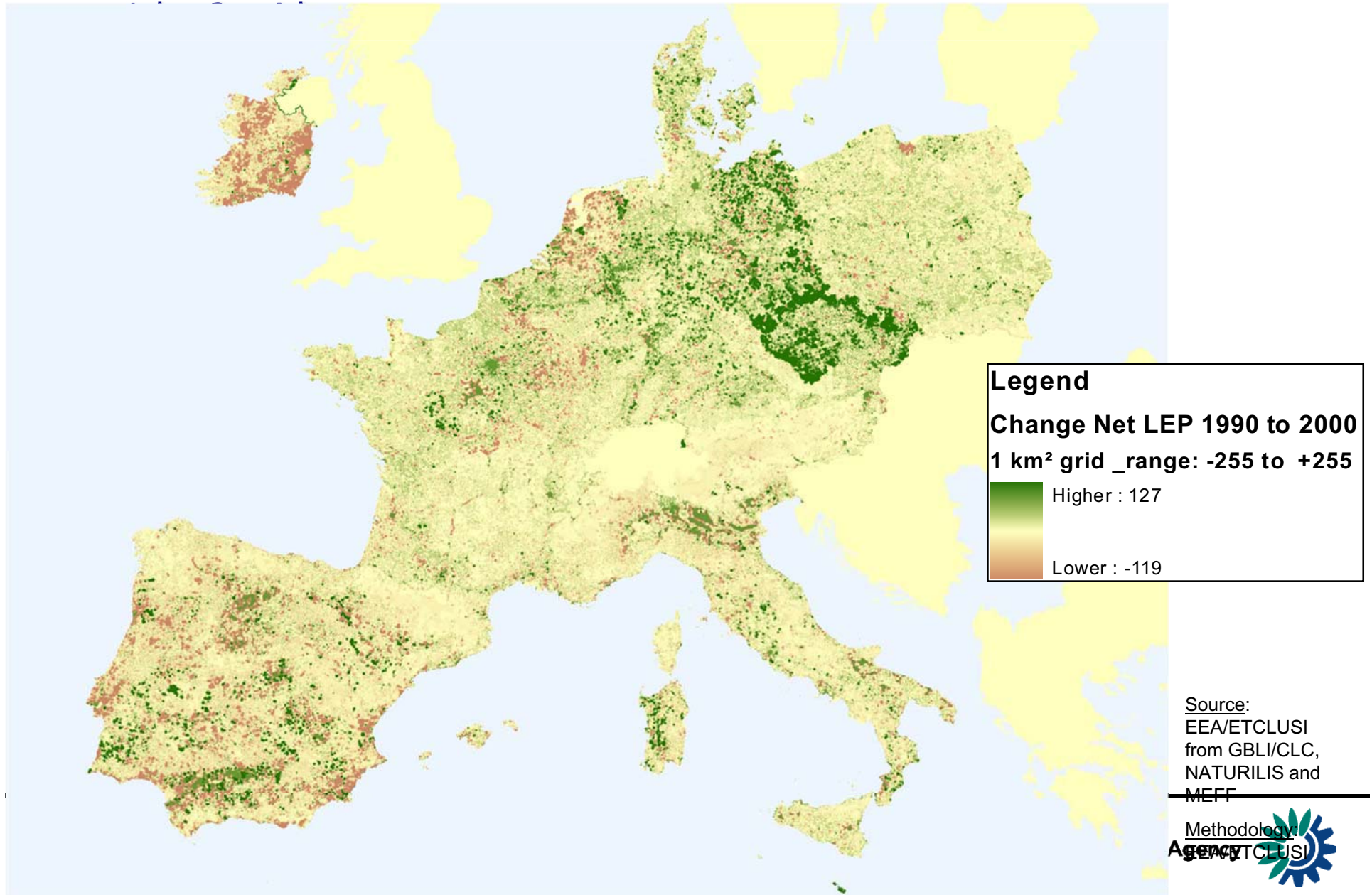
Methodology
Agency
ETCLUSI



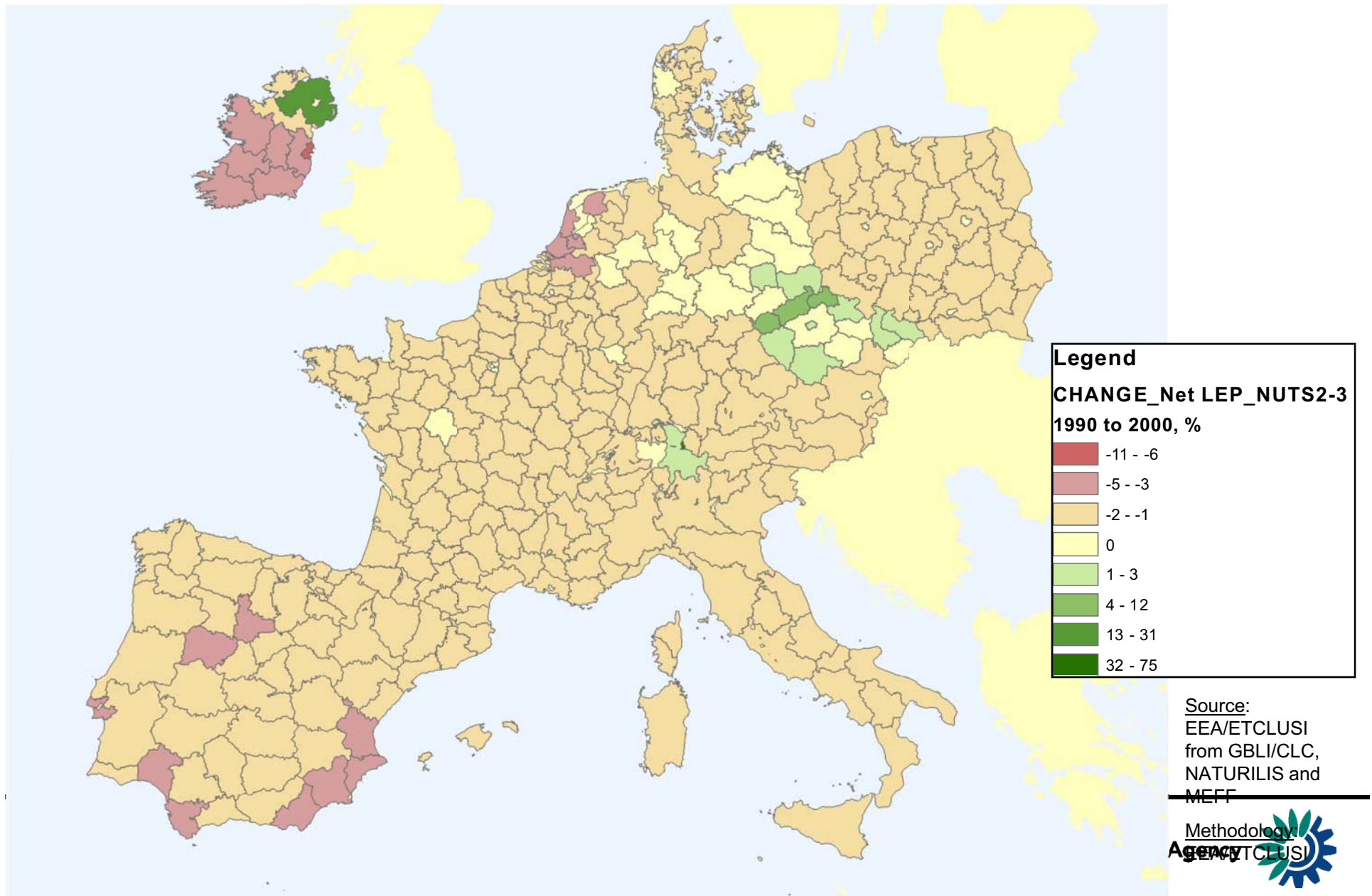
Net Landscape Ecological Potential 2000, NUTS2/3



Change 1990-2000 in Net Landscape Ecological Potential (NLEP),



Mean change 1990-2000 in Net Landscape Ecological Potential, NUTS 2/3



Points for consideration during our afternoon discussion

- So many indicators around...how to capitalise and make them fit for territorial analysis
- Select few: target most relevant/pertinent and link them to a clear policy review process
- Don't link their quality to statistical availability only – proxies work fine too
- Allow for analytical units different from reporting ones (eg NUTS/LAU) – operationalise multiscale analysis
- ESPON2006 (& other observatories) acquis: mutualisation around pre-defined requirements

