



# A 'Legislation Check': assessing the national legal system concerning more environmental sustainability towards Earth-centeredness

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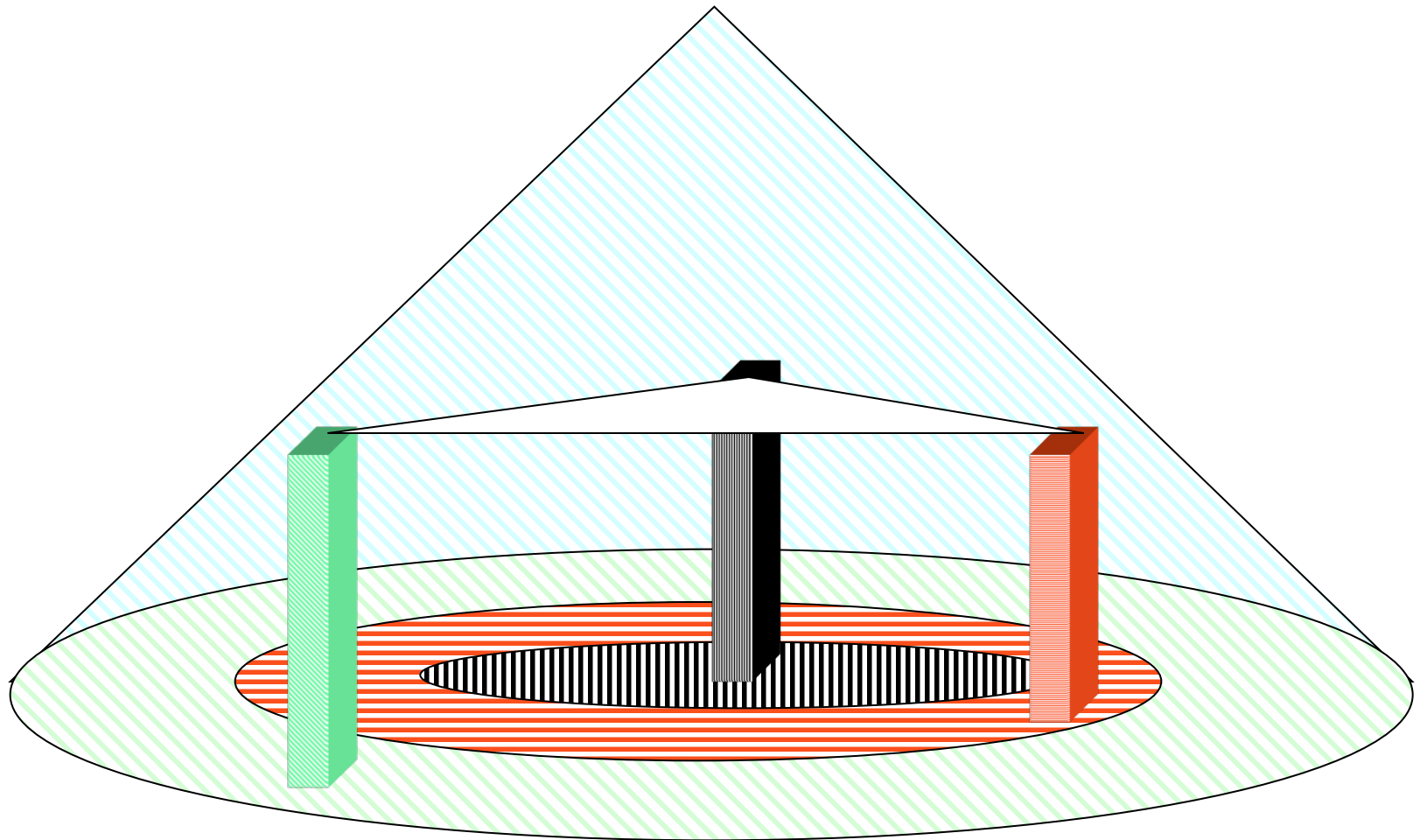
# Outline

1. Introduction
2. 3-D Sustainability as the theoretical basis of the 'Legislation check'
3. Qualitative method part and results (water example, protected area example)
4. Quantitative method part and results
5. Conclusions

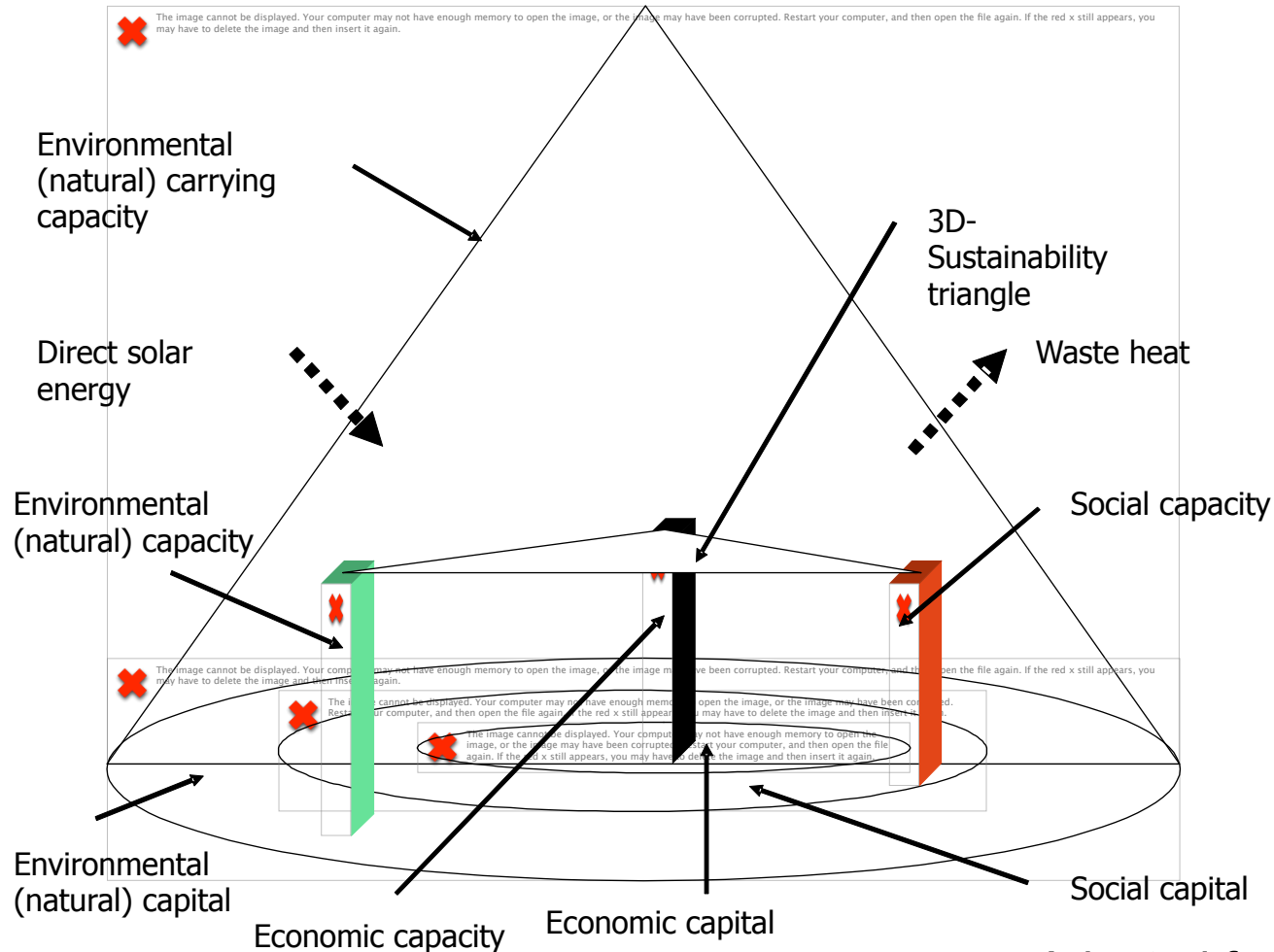
# 1. Introduction

1. Sustainable Development as a widely recognised concept since 1987
2. main ingredients: social, environmental and economic sustainability
3. National states are key stakeholders in SD
4. Research question: In how far contributes the national legislation to environmental sustainability towards Earth-centeredness?

# 2a. 3D-Sustainability in detail



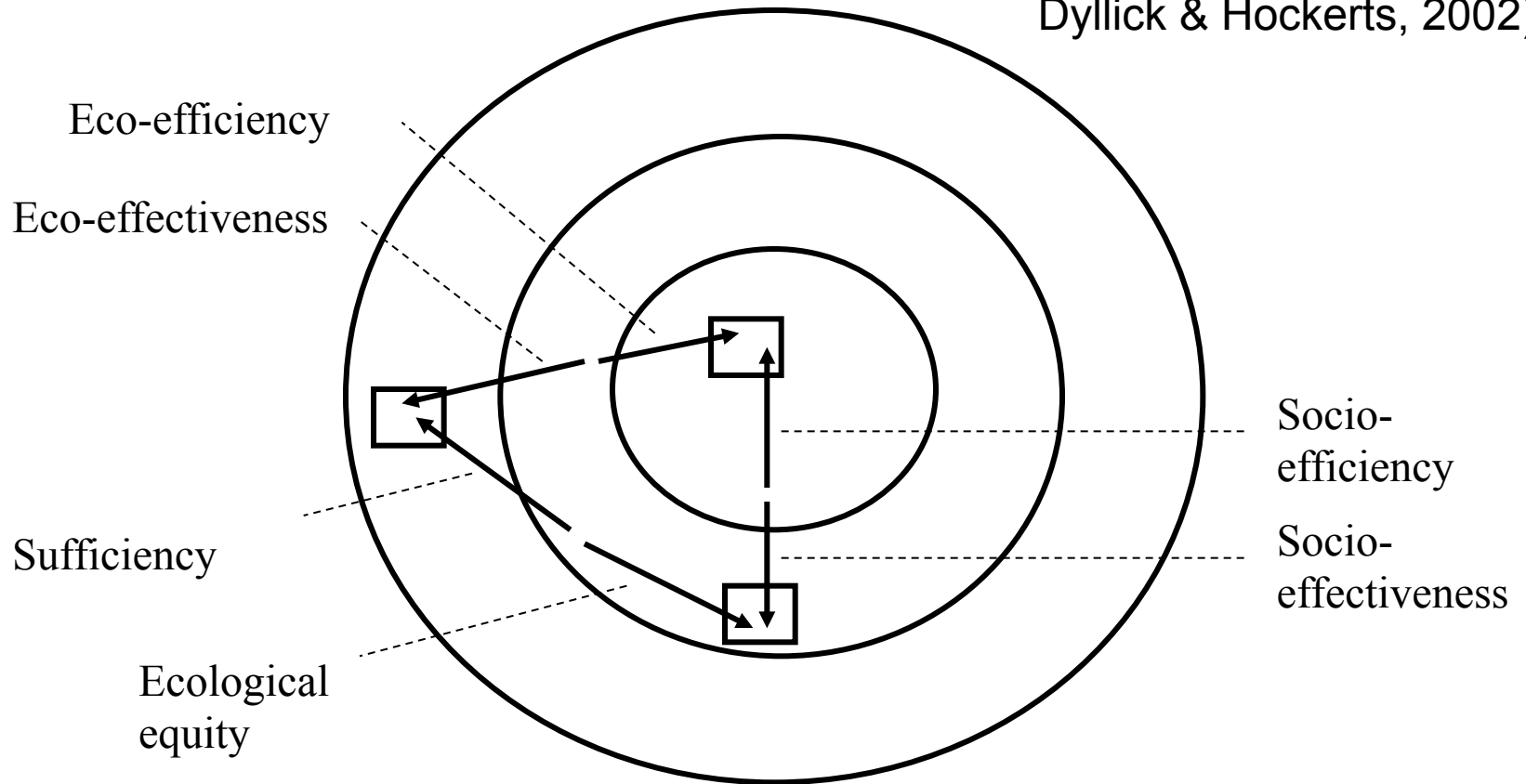
# 2b. 3D-Sustainability in detail



Adapted from:  
Mauerhofer 2008

# 2c. 3D-Sustainability from above

Adapted from: Mauerhofer 2008 (triangle based on Dyllick & Hockerts, 2002)



## 2d. General, not fixed hierarchy of priorities for sustainable development measures

Sufficiency

Eco-effectiveness

Ecological equity

Socio-effectiveness

Eco-efficiency

Socio-efficiency

- Change through a shift of the burden of proof
- Reflects the precautionary principle

(Mauerhofer 2008)



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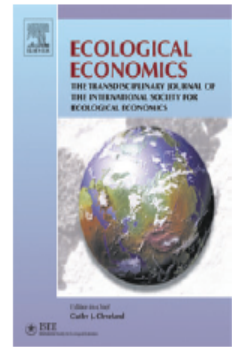


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METHODOLOGICAL AND IDEOLOGICAL OPTIONS

3-D Sustainability: An approach for priority setting in situation of conflicting interests towards a Sustainable Development<sup>☆</sup>

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ABSTRACT

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This paper aims to provide a new approach to objectively assess hierarchies and priority setting in the relationship between environmental, social and economic sustainability within



# 3a. Qualitative methodology I

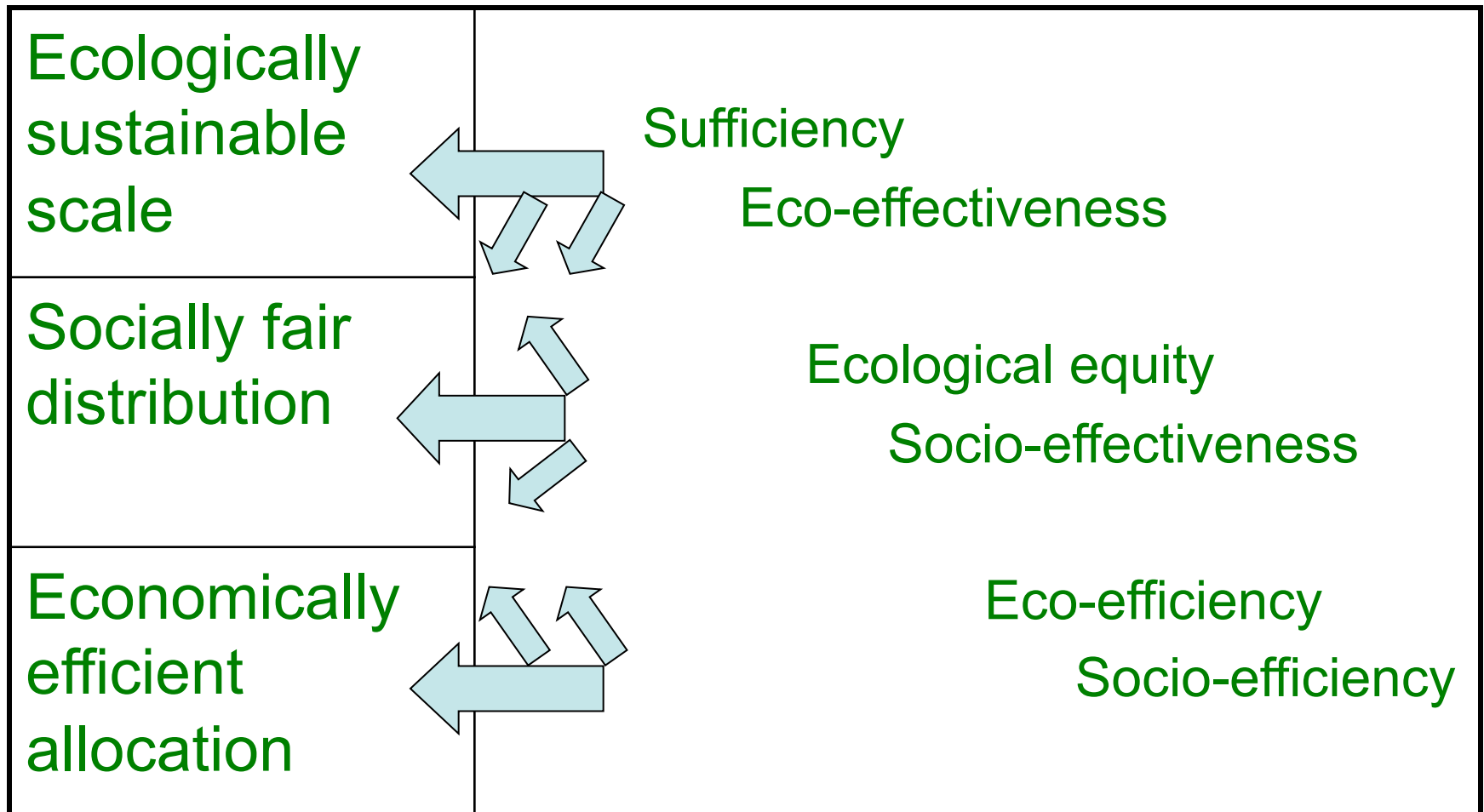
## ***Relationship of scale, distribution & allocation***

- *With regard to a sustainable development the ecologically sustainable scale should be first discussed, while secondly a fair and just distribution of resources using systems of property rights and transfers among alternative people have to be established and thirdly, once the scale and distribution problems are solved, market based mechanisms can be used to efficiently allocate resources among alternative products (Costanza et al., 1993: 80 and 87)*

(underlining not in the original)

# 3a. Qualitative methodology II

## Relationship to scale, distribution & allocation



# 3a. Qualitative methodology III

Overall objective	Interrelations	Specific questions for national legislative level	Legislation-check criteria
Ecologically sustainable scale of critical natural capital achieved	Dependant from geographical level	<p>Scale known?</p> <ul style="list-style-type: none"> <li>• Can the known scale be nationally addressed at all?               <ul style="list-style-type: none"> <li>○ Known scale nationally addressed by competent authorities?                   <ul style="list-style-type: none"> <li>▪ Known scale nationally addressed in correct way?</li> </ul> </li> </ul> </li> </ul> <p>Scale not known/uncertain?</p> <ul style="list-style-type: none"> <li>• Addressed in a precautionary way?</li> </ul>	<p><b>Sufficiency</b></p> <p><b>Eco-effectiveness</b></p> <p><b>Ecological equity</b> (Socio-effectiveness)</p> <p><b>Eco-efficiency</b> (Socio-efficiency)</p>
	Dependant from ecological carrying capacity		
	Dependant from time		

## 3b. Qualitative results: Example 'Austrian Water law'

### Ecologically sustainable scale:

- **Geographical level:** cannot be nationally addressed
  - Sustainable solution through EU influence: River basin approach based on EU-Water Framework Directive (WFD) → other example Natura 2000
- **Ecological carrying capacity:** Qualitative criteria within national water legislation based on WFD, **but:**
  - term 'sustainable' used more or less randomly
  - (unsustainable) exemptions (based on WFD)
  - own exemption criterion 'sustainable development'!



Fit Page

**National and International River Basin Districts**  
 Submissions in accordance with Article 3 of the Water Framework Directive  
 Version 22/03/2007

- National River Basin Districts<sup>(1)</sup> (within EU27)
- National River Basin Districts<sup>(1)</sup> (outside EU27)
- International River Basin Districts<sup>(2)</sup> (within EU27)
- International River Basin Districts<sup>(2)</sup> (outside EU27)
- Coastal Waters<sup>(3)</sup>

RBD boundary  
 Country border  
 EU27 boundary

Map produced by V&A, UK on behalf of European Commission<sup>(4)</sup>, DG Environment, March 2007.



Azores (PT)  
 Madeira (PT)  
 Canaries (ES)  
 Guadeloupe (FR)  
 Martinique (FR)  
 French Guiana (FR)  
 Réunion (FR)  
 Melé

Footnotes:

# 3b. Qualitative results: Example Natura 2000 – EU Protected Area System

## Ecologically sustainable scale:

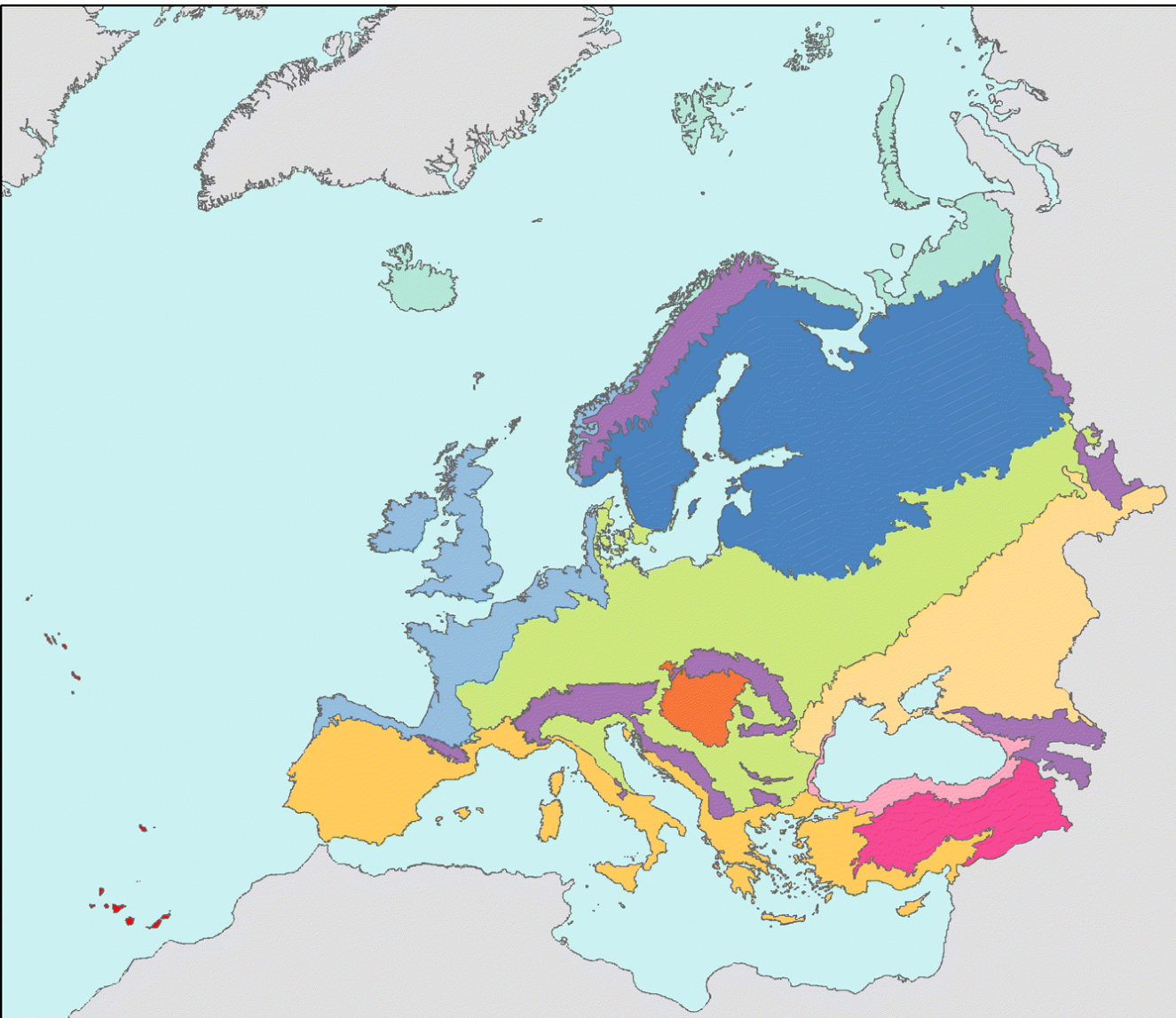
- **Geographical level:** cannot be nationally addressed
  - Sustainable solution through EU influence: biogeographical region approach
- **Ecological carrying capacity:**
  - Definition of “Favourable Conservation Status” in Directive (stable/improving level required)
  - Applicable for EU & regularly controlled in EU
  - Last results: by 2007 only 17 % of species and habitat types in favourable conservation status in EU
  - Weak implementation on national level





# Selection of sites has to be done on the basis of biogeographical regions & only scientific criteria

Map from: <http://dataservice.eea.europa.eu/atlas/viewdata/viewpub.asp?id=155>





# 4a. Quantitative methodology

- **Search-Database:** RIS = official legal database of Austrian Government
- **Search-object:** Legislation of Austria which addresses the ecologically sustainable scale
- **Search-Terms:** sustainable\*, sustainable development, sustainability (terms in German language)
- **Search years:** 2004, 2008 and 2010

# 4. Quantitative results

Term searched for	Federal level			Provincial level		
	Year 2003	Year 2008	Year 2010	Year 2003	Year 2008	Year 2010
sustainable*	311	494	517	415	532	546
sustainable development	Not assessed	147	153	Not assessed	24	24
sustainability	Not assessed	76	82	Not assessed	44	54

Table 2: Quantitative results of documents found in the official Austrian legal database

At least:

- legislative acts (144 results)
- administrative ordinances (124 results)
- bi-/multilateral treaties (193 results)

# 4. Quantitative results: Discussion

**Assessment limited → numbers only minima, because:**

- legislation could also adhere to 3D-Sustainability without using the terms searched for
- use of three terms does not ensure compliance with 3D-Sustainability

# 5. Conclusions I

## **Combination between quantitative & qualitative assessment method preferable because**

- quantitative assessment solely shows a certain tendency towards increased use of sustainable development related terms
- many applications of terms are clearly disconnected from the concept of sustainable development in the sense of 3-D Sustainability
- qualitative assessment per environmental sector clarifies more the effectiveness

# 5. Conclusions II

## ‘Legislation Check’

- is not restricted to environmental law sectors but thematically overall applicable
- is also not geographically limited but could be implemented within every country and also beyond national borders
- can be easily replicated and provides scientifically sound results for environmental sustainability towards Earth-centeredness



# Thank you for your attention!



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