Universität Hamburg
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Criteria and Indicators – their role for assessment of forest damages

UNECE
Food and Agriculture Organization of the United Nations
Federal Ministry Republic of Austria Agriculture, Forestry, Regions and Water Management

Criteria and Indicators – their role for assessment of forest damages

Data

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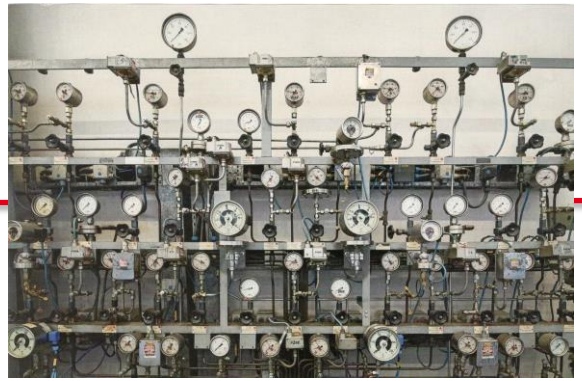


Data → Information

Forest damage - time is running

24.8.2018

16.12.2018

Quelle: Forstpraxis.de

Criteria and Indicators assessment

Different perspectives

Market liberals

Institutionalists

Bioenvironmentalists

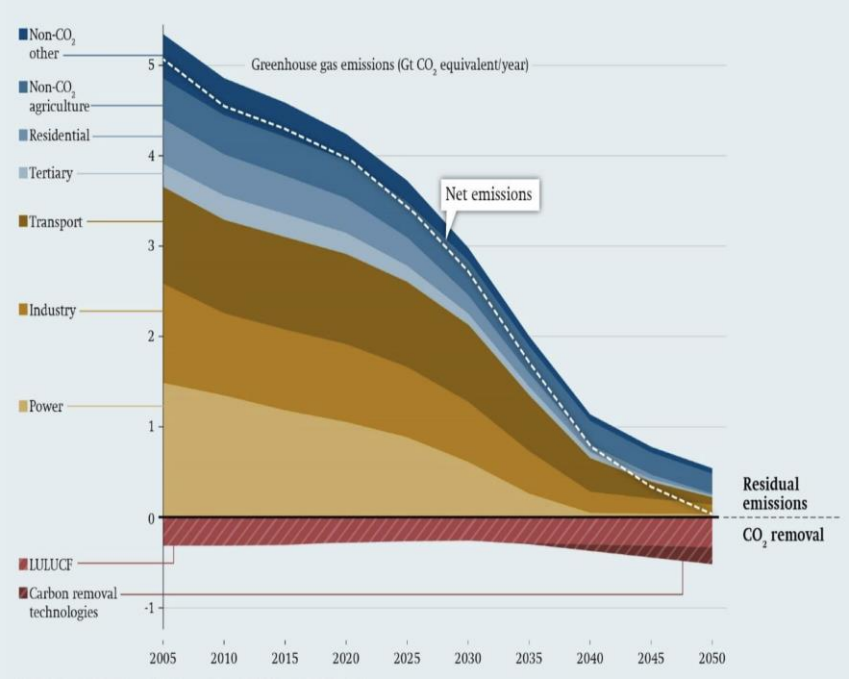
Social greens

Changing general conditions/ changing times

- Climate change
- Extreme weather events
- Biodiversity conservation
- Non-utilization
- Carbon storage
- Climate neutrality
- Forest decline
- Increased amount of salvage timber
- Volatile (global) timber markets
- Timber supply shortages

Not completed

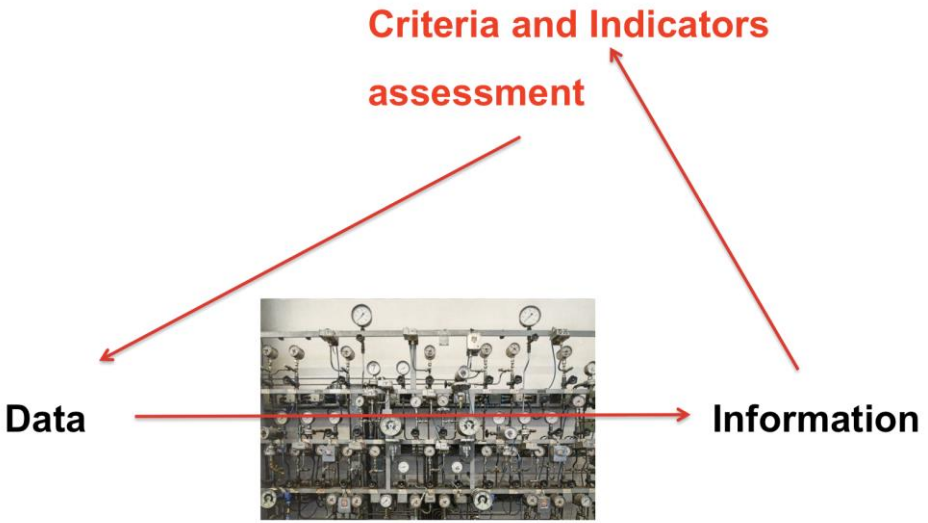
Climate neutrality



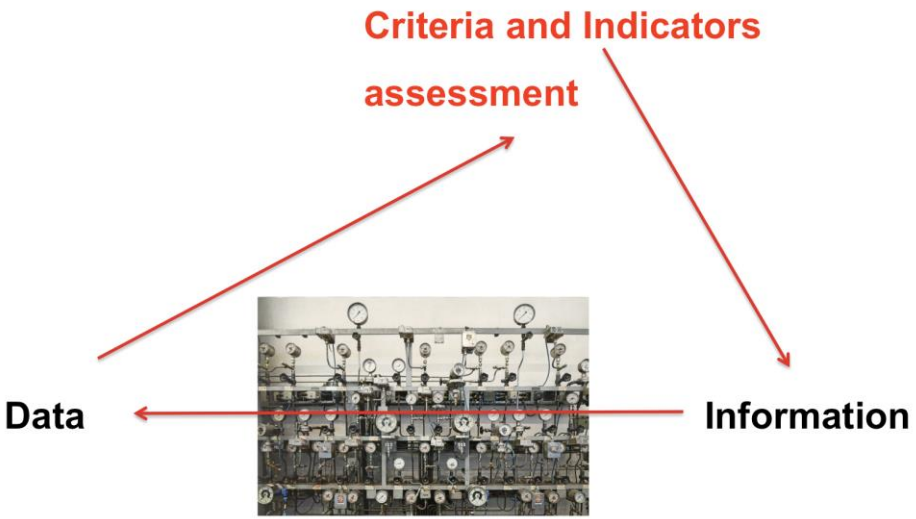
Reducing emissions

Removals

What we get



What we need



Harmonisation of damage assessments

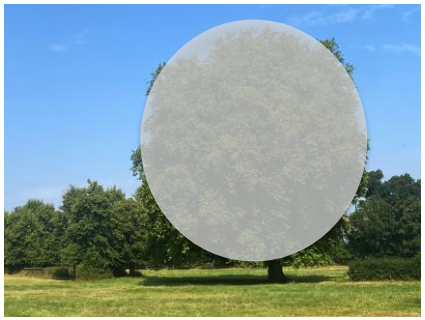
Thematic consistency

Time series consistency

Spatial consistency

Differences in national assessments

- Ranking of damages
- Damaging agents considered
- When does an event become a damage?
- .....



Harmonisation of damage assessments

How can reliability be improved?

How much uncertainty can be tolerated?

Harmonisation of damage assessments

How can reliability be improved?

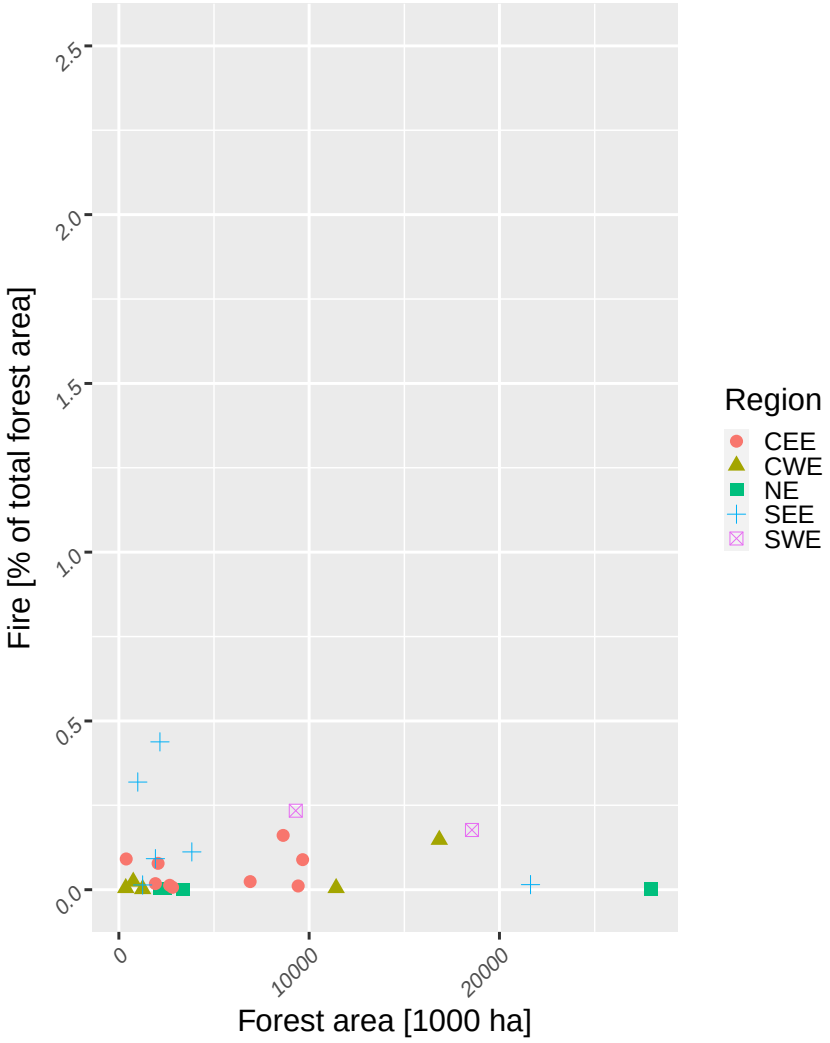
How much uncertainty can be tolerated?

Assessing Information

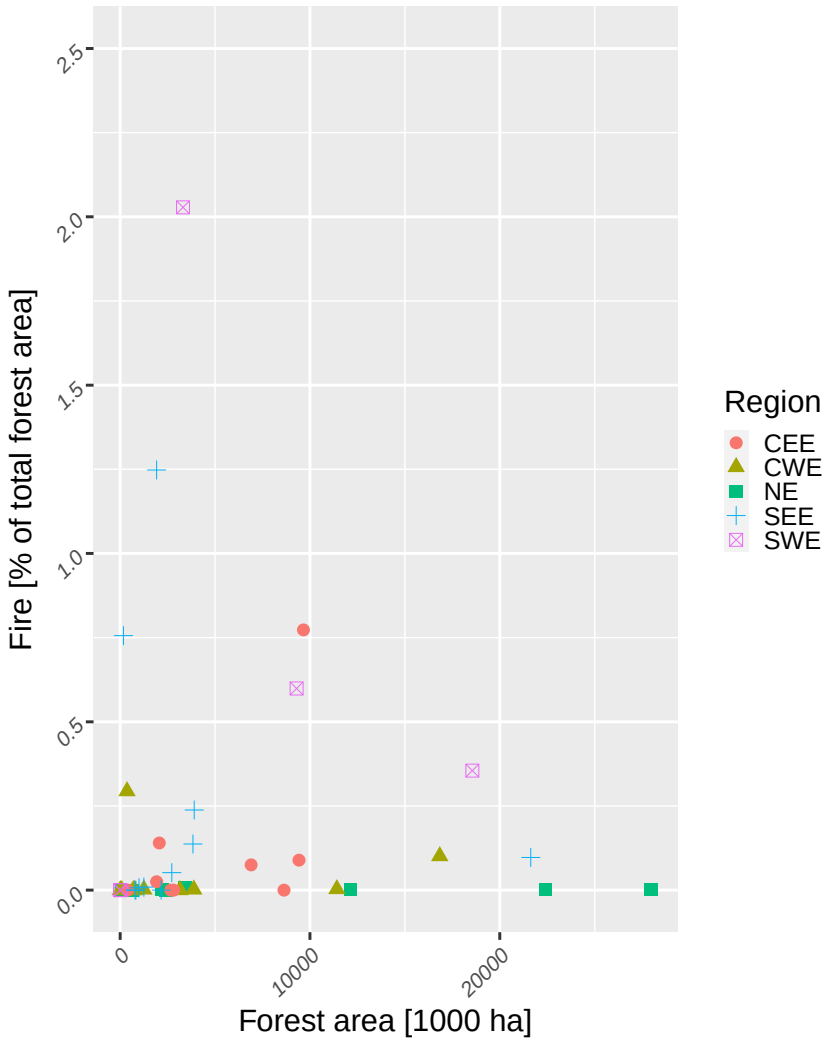
Is the information

- up-to-date?
- complete?
- compatible with data from other sources?
- relevant? (Does it answer the right questions?)

Fire according to SOEF 2020



Fire according to EFFIS 2020



Share of salvage loggings by causes over the reported period

Member State	Reported period	Causes of salvage loggings over reported period		
		Wind (%)	Insects (%)	Other (%)
Austria	2004-2019	43	37	20
Cyprus	2010-2019	0	0	100
Czechia	2004-2019	47	41	12
Finland	2004-2019	74	8	18
Germany	2006-2019	49	38	13
Lithuania	2004-2019	60	28	12
Poland	2009-2019	59	0	41
Slovakia	2004-2019	44	49	7
Slovenia	2004-2019	21	40	39
Sweden	2004-2018	94	3	3

Source: Camia et al., 2020

Does the information provided answer the right questions?

Indicators: show progress towards SFM

Market liberals

Institutionalists

Bioenvironmentalists

Social greens

Does the information provided answer the right questions?

Indicators: show progress towards SFM

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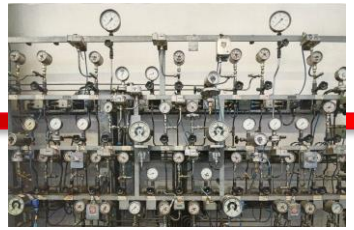
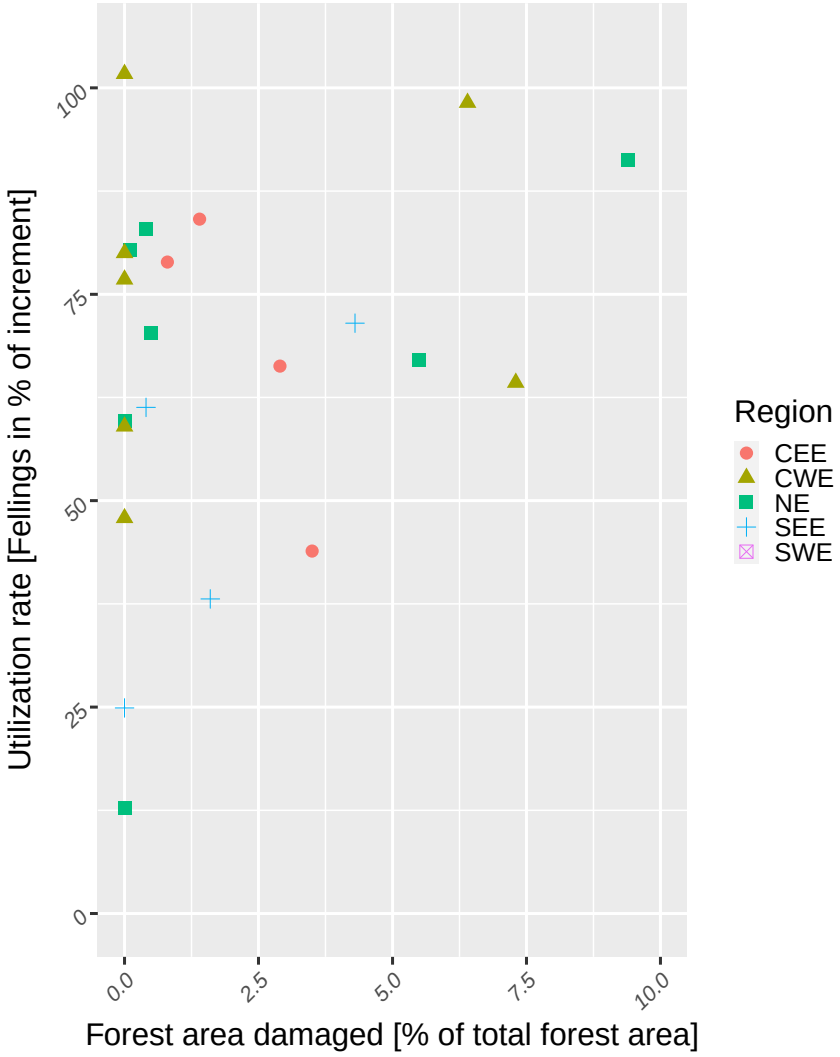


Bioenvironmentalists

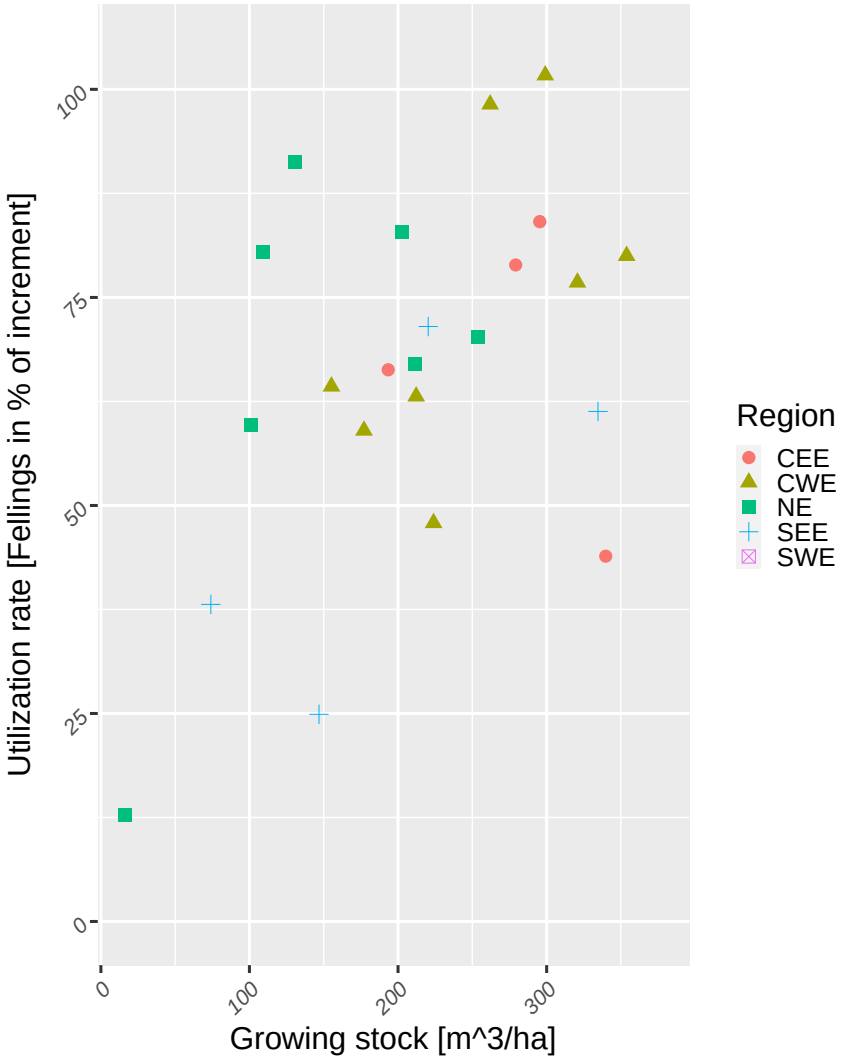
Social greens

- **Big data**
- **Destination Earth**
- **Digital Twin Ecosystems**
- **EFFIS**
- **.....**

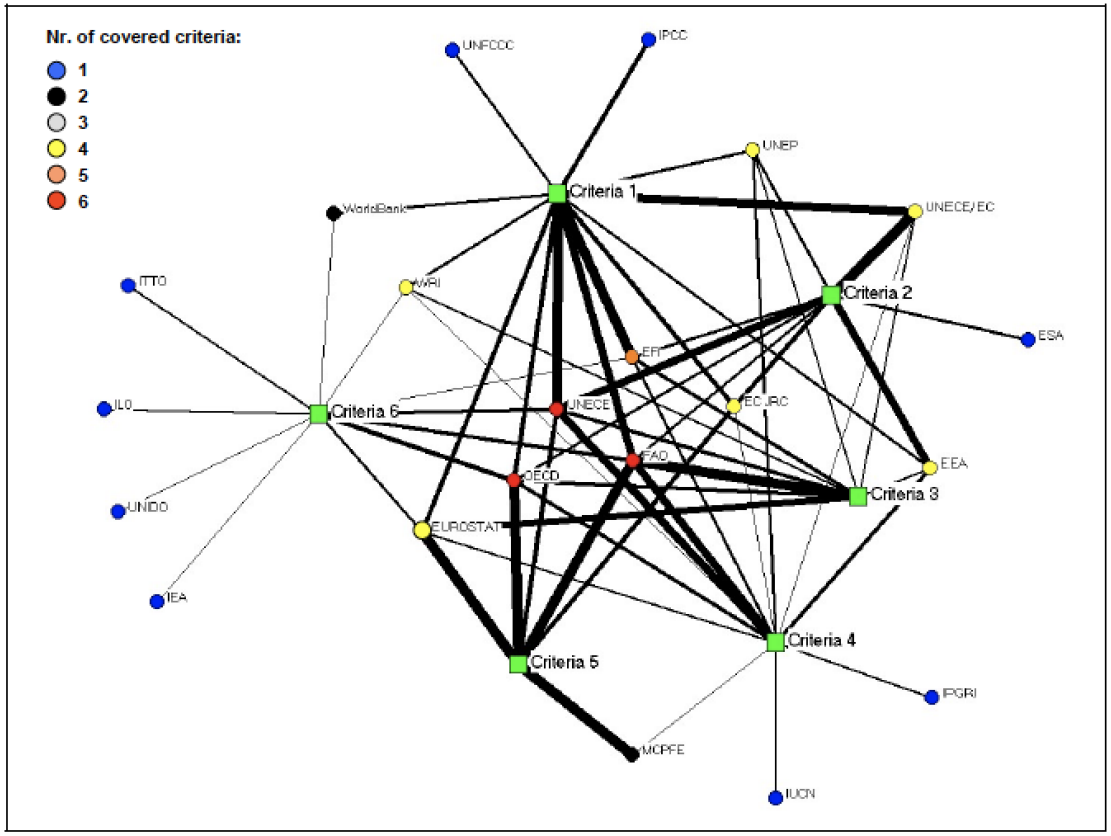
SOEF 2020



SOEF 2020



Indicators: show progress towards SFM



Source: Requardt, 2007