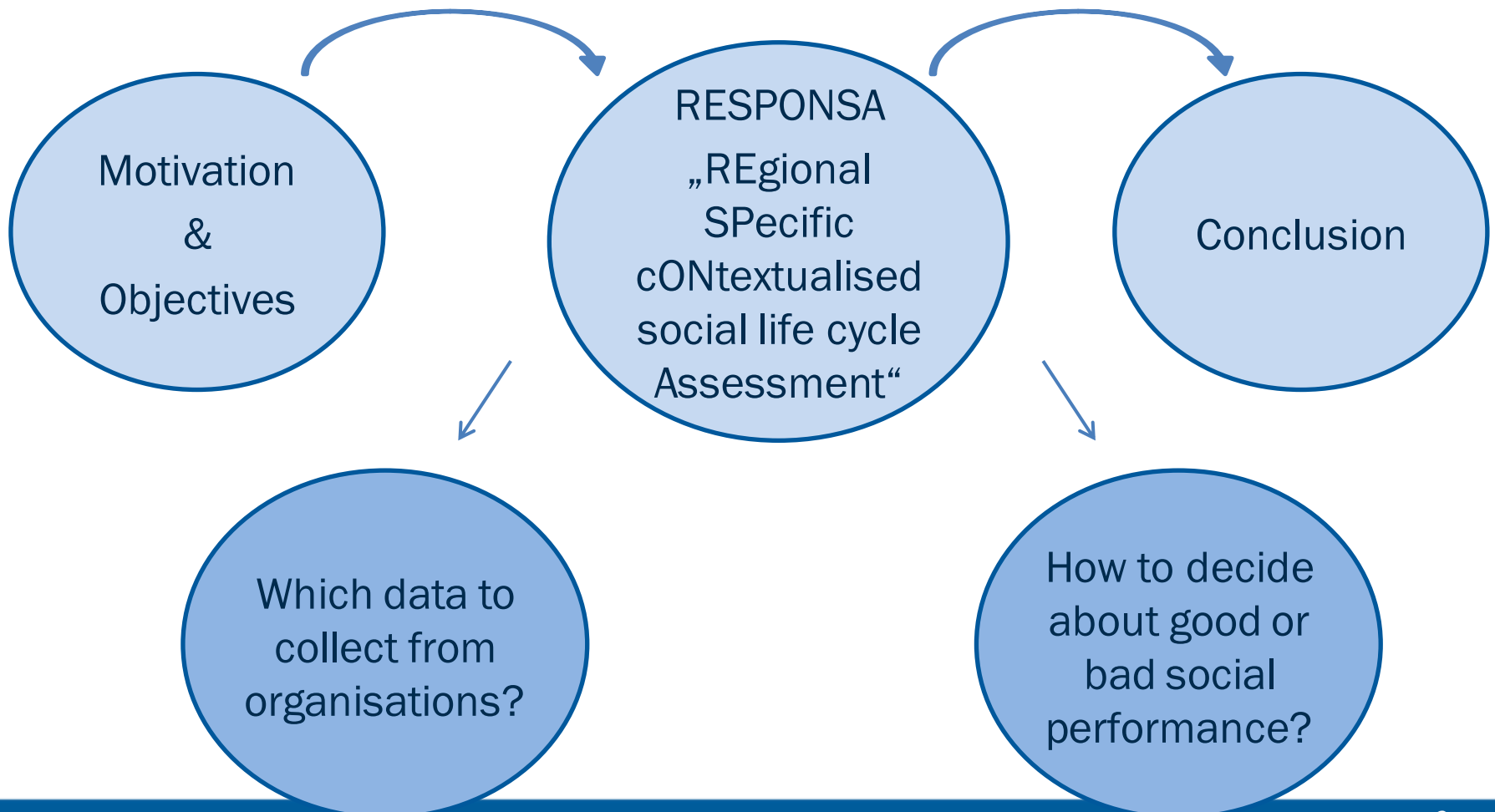
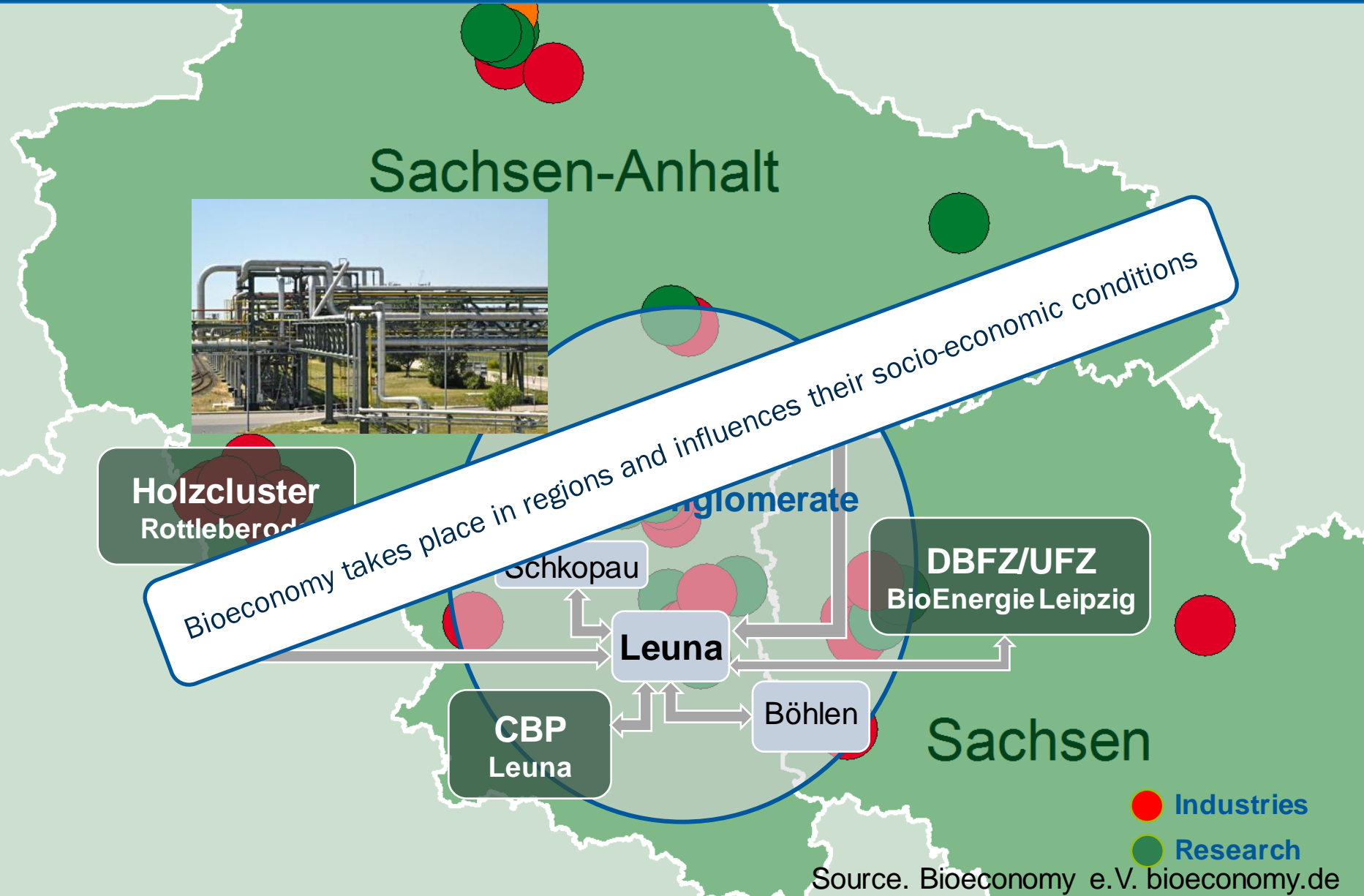


## Developing a social life cycle impact assessment approach for assessing wood-based products from a regional perspective



Anke Siebert, Alberto Bezama, Walther Zeug, Daniela Thrän  
AvniR 2016



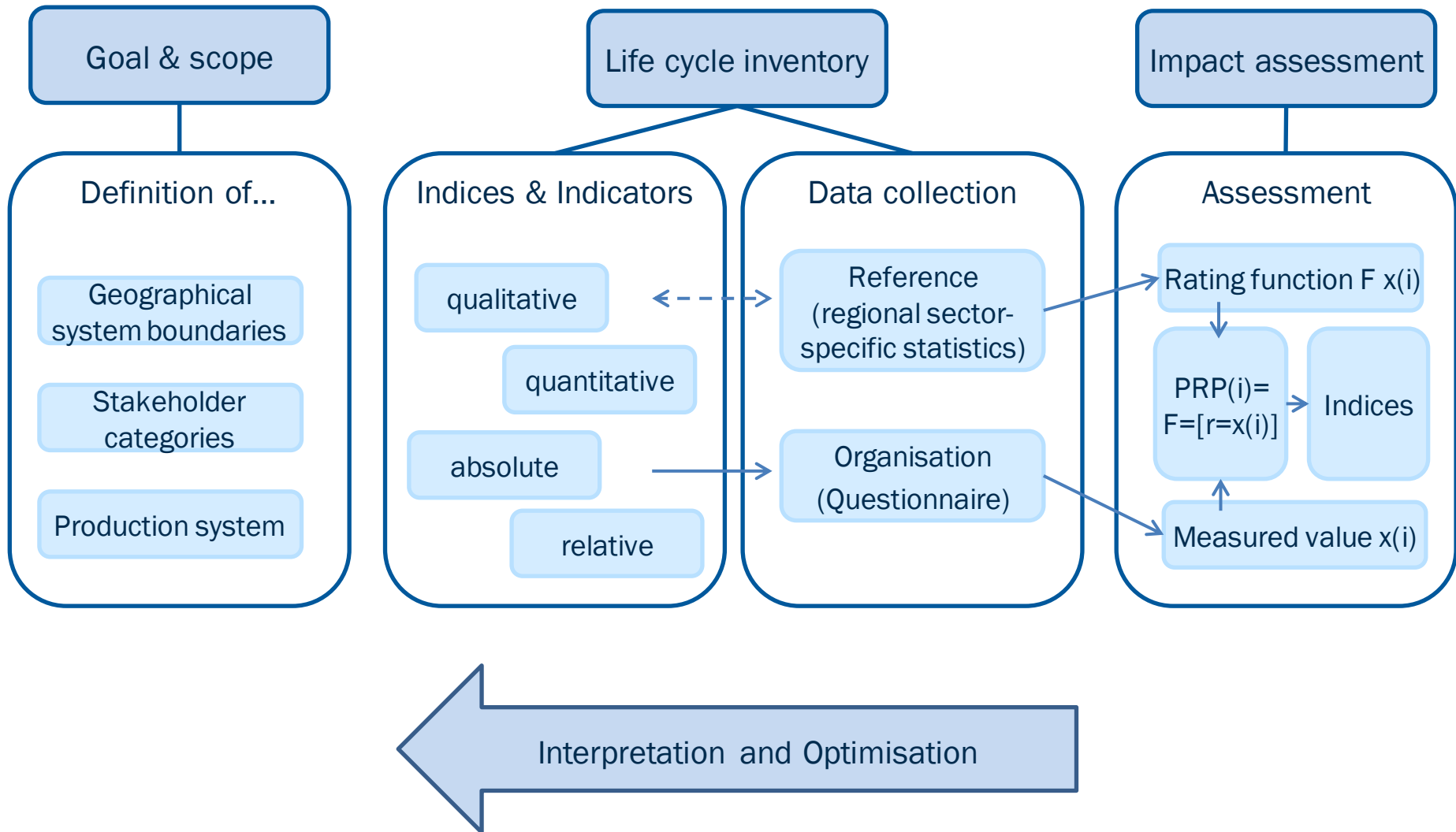


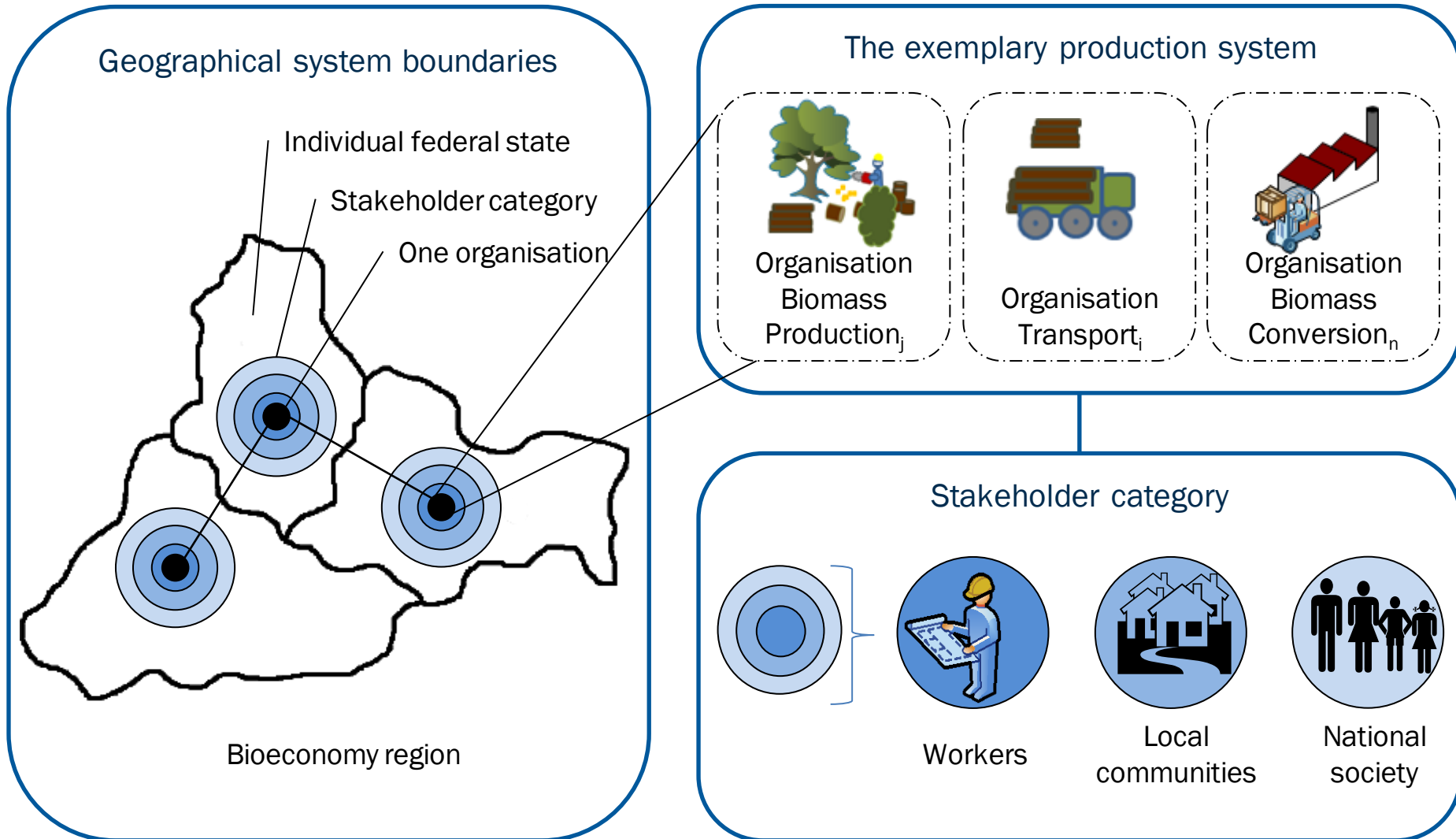
Evaluate and document the social performance of wood-based products from bioeconomy regions

Identify social hotspots and opportunities to improve organisations' social performance

sLCA approach

# RESPONSA - Regional SPecific cONtextualised Social life cycle Assessment





# Life cycle inventory – Indices & Indicators

Index/Sub-index	Indicator	Unit	Equation/Measure
<b>1. Health &amp; safety</b>			
Accidents <sup>a</sup>	Occupational accidents	Nr	Number of accidents per year per 1000 employees
	Occupational fatal accidents	Nr	Number of fatal accidents per year
Sick-leave <sup>a</sup>	Sick-leave days	Nr	Sick-leave days per year per employee
	Preventive health measures	Cat.	Health measures (e.g. sick-leave analysis, health activities)
<b>2. Adequate remuneration</b>			
Payment <sup>a</sup>	Payment according to basic wage	y/n	Payment off basic wage
	Payment above the basic wage	y/n	Payment above the basic wage
	Average remuneration level	€	Average payment per month per full-time employee per total employees
Financial Participation <sup>a</sup>	Rate of employees with capital participation <sup>d</sup>	%	Percentage of employees with capital participation
	Rate of employees with profit-sharing and bonuses <sup>e</sup>	%	Percentage of employees with profit-sharing and bonuses
<b>3. Adequate workingtime</b>			
Working time <sup>a</sup>	Contractual working hours	h	Average contractual working hours per week per full-time employee
	Compensation for overtime	Cat.	Compensation measures (e.g. exclusively payment, payment and free-time, etc.)
	Employees with monetary compensation for overtime	%	Percentage of employees with paid overtime in the last year
Work-life-balance <sup>a</sup>	Access to flexible working time agreements	%	Percentage of employees with access to flexible working agreements
	Rate of part-time employees	%	Number of part-time employees per total employees
<b>4. Employment</b>			
Job conditions <sup>a</sup>	Rate of qualified employees	%	Percentage of employees with professional training per total employees
	Rate of marginally employees (max 450€)	%	Percentage of employees earning max. 450€ per total employees
Duration of employment <sup>a</sup>	Rate of fixed-term employees	%	Number of fixed-term employees in relation to total employees
	Rate of employees provided by temporary work agencies	%	Number of employees provided by temporary work agencies per total employees
Job creation <sup>b</sup>	Rate of new hires	%	Number of new hired employees per year per total employees
<b>5. Knowledge capital</b>			
On-the-job training <sup>a</sup>	Employees/unity participated in training	%	(Qualified) employees/unity participated in training per total employees
	Support for professional qualification	y/n	Assumption of cost or exemption for training programs
Vocational training <sup>b,c</sup>	Rate of vocational trainees	%	Trainees/total employees
	Rate of vocational trainees hired	%	Trainees/trainees employed permanently
R&D	Rate of employees in R&D	%	Employees working permanently or temporarily in the R&D section per total employees
<b>6. Equal opportunities</b>			
Gender equality <sup>c</sup>	Rate of female employees in management positions	%	Percentage of female employees in management positions
	Measures to improve gender equality	Cat.	Measures for family support (e.g. support for child care, support for female employees)
	Rate of female employees	%	Percentage of female employees in relation to total employees
Integrate older employees <sup>a,c</sup>	Measures to support older employees	Cat.	Measures for family support (e.g. support for child care, support for female employees, etc.)
Integrate minorities <sup>c</sup>	Rate of disabled employees	%	Percentage of disabled employees per total employees
	Rate of foreign employees	%	Percentage of foreign employees per total employees
<b>7. Participation</b>			
Workers participation <sup>a</sup>	Works council	y/n	Existence of works councils in the organisation
	Other measures for participation	y/n	Measures to participate in the organisation

We identified  
7 main indices  
and  
16 sub-indices

...and 32 qualitative and quantitative indicators

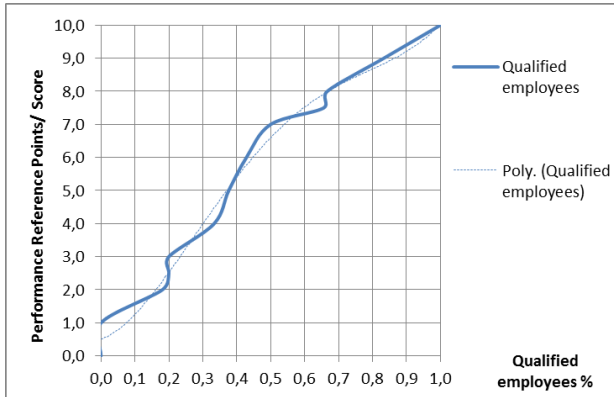
Nr: Number, Cat.: Category, % Percent, y/n: yes and no, h: hours; <sup>a</sup> Workers; <sup>b</sup> Local communities; <sup>c</sup> National society; <sup>d</sup> With capital participation employees provide financial means for the organization and became shareholders (e.g. GmbH shares, employees shares or cooperative shares) (Bellmann, Möller 2006)

<sup>e</sup> With profit-sharing or bonuses employees receive in addition to their regular wage an additional profit-based or performance related pay (Bellmann, Möller 2006)

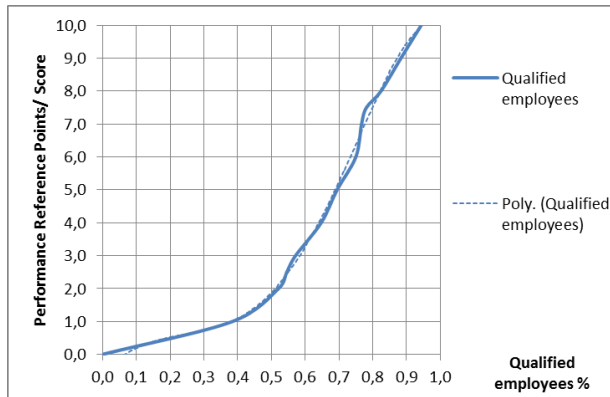
Each collected indicator value from the organisation is characterised with a corresponding national or regional sector-specific reference

Quantitative indicator: Proportion of qualified employees

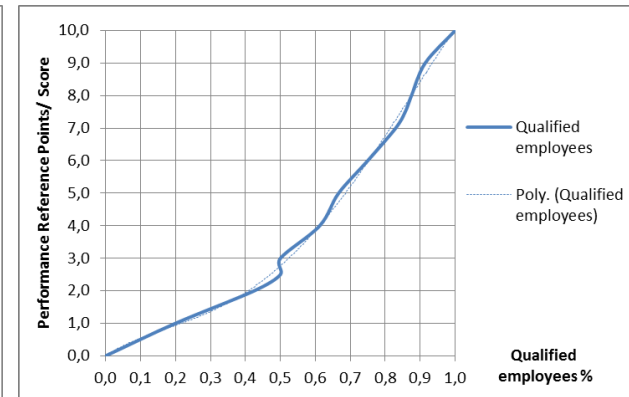
Forestry



Production of organic chemicals

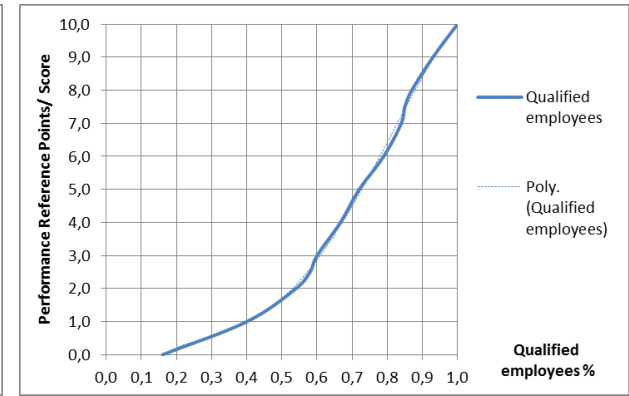
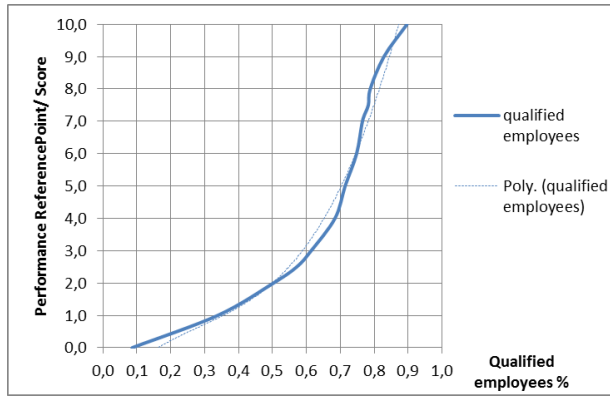


Sales and Distribution



Germany ↗

Central Germany →

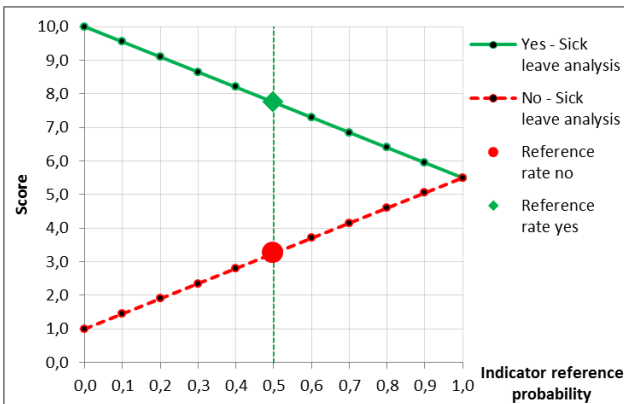


PRP – Performance Reference Points Score – 10 best performance to 1 worst performance

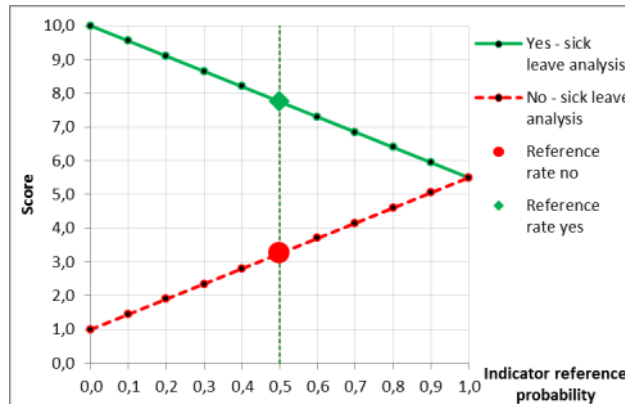


## Qualitative indicator: Existence of sick-leave analysis

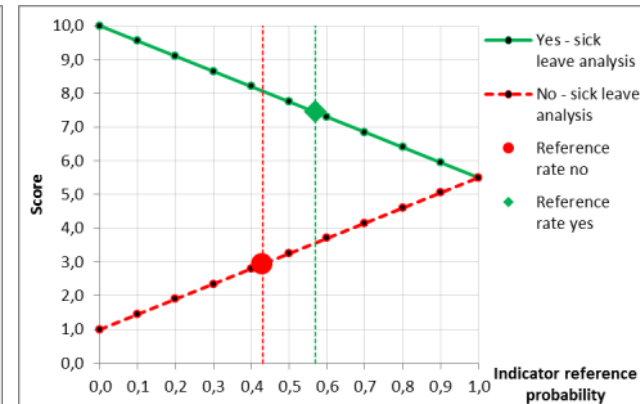
### Forestry



### Production of organic chemicals

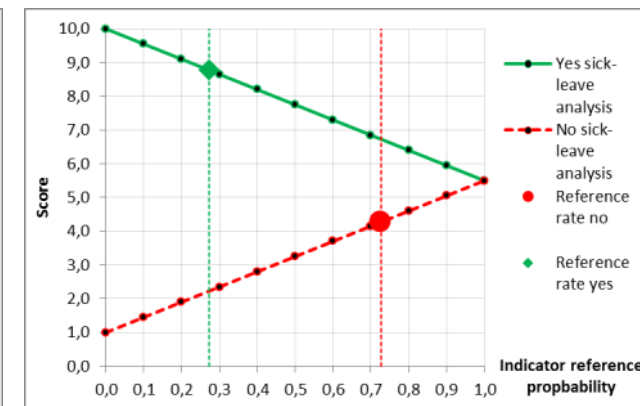
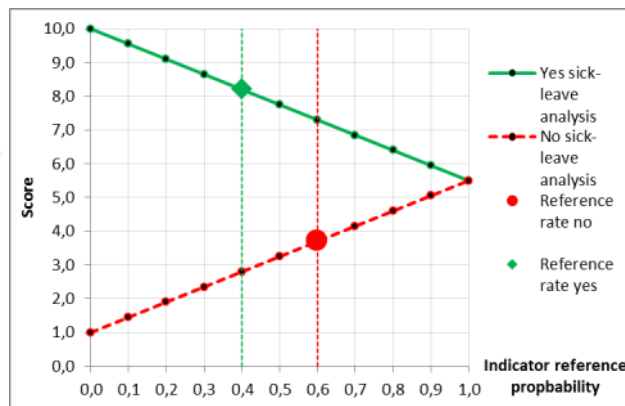


### Sales and Distribution



Germany

Central Germany



PRP – Performance Reference Points  
Score – 10 best performance to 1 worst performance

Which data to collect?

Site-specific data from the organisation in the region

Generic data on potential social issues in countries or sectors associated with activities outside the region

How to decide about good or bad social performance?

Identify the economic sector and federal state for each organisation

Use regional sector-specific benchmarks or desired values

# Merci beaucoup!

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