

Wuppertal Institute
for Climate, Environment
and Energy

Assessing Sustainable Development Impacts

MRV Autumn School
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Energy, Transport and Climate
Policy

Agenda

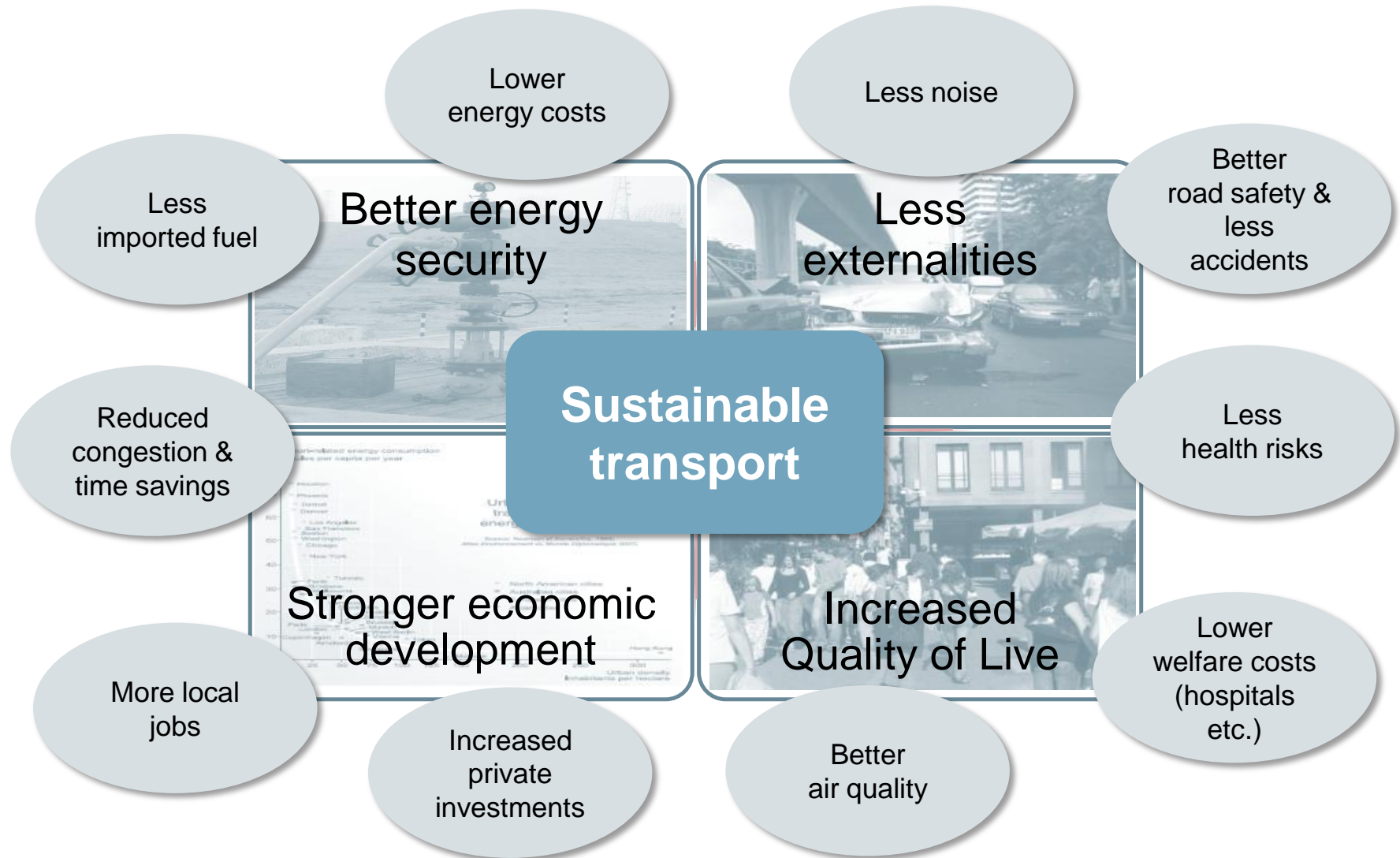
- **Mitigation and Sustainable Development**
- How to Identify SD Impacts
- How to MRV SD Impacts



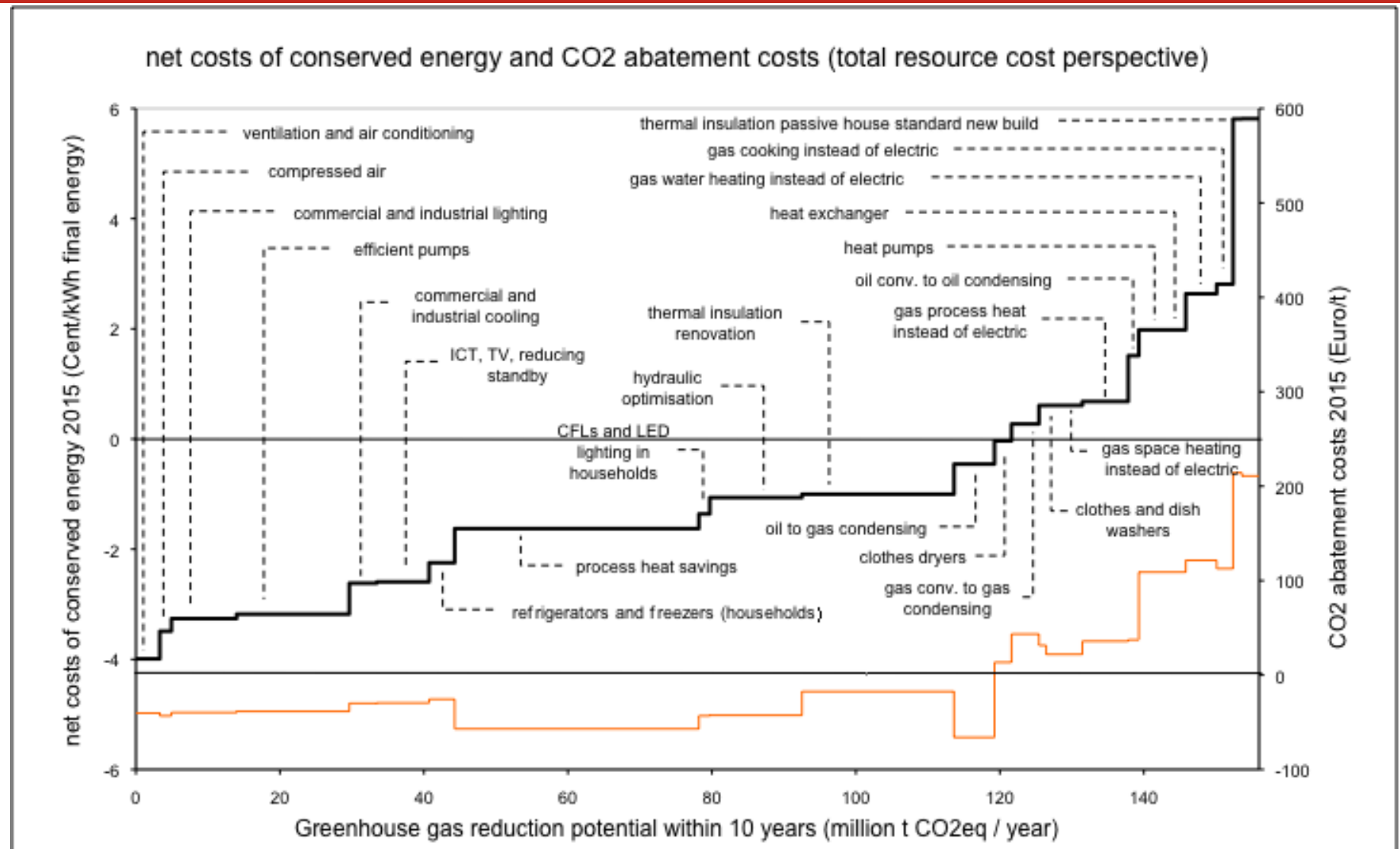
International Negotiations

- Economic and social development and poverty eradication are “the first and overriding priorities of the developing country Parties” (UNFCCC, Art. 4.7)
 - NAMAs are to take place “in the context of sustainable development” (Bali Action Plan)
- ⇒ Climate protection and development seen as antagonistic
- ⇒ In fact, there exist many local externalities within the global climate change externality

For Example Sustainable Transport



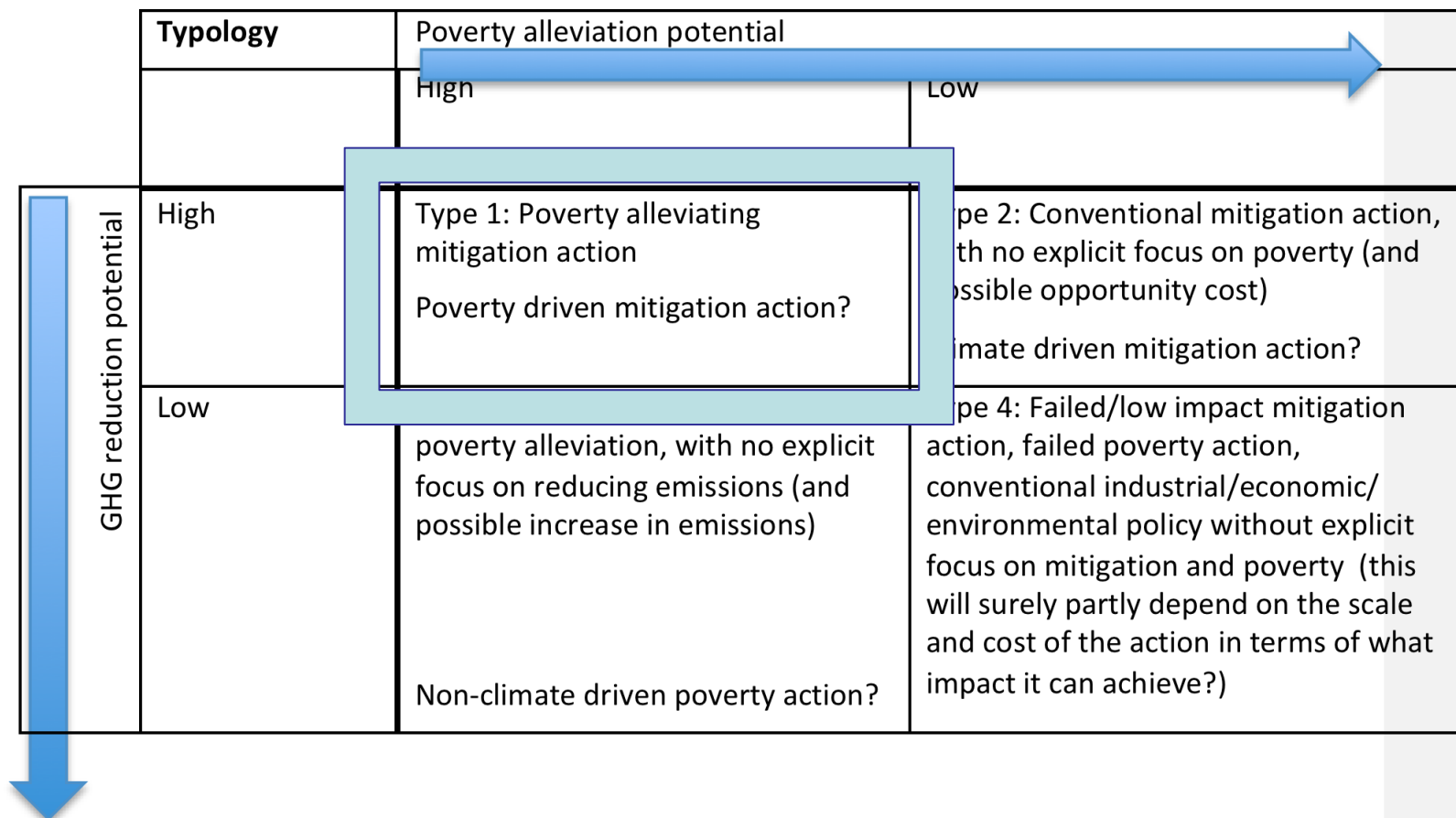
Energy Savings Potential in Germany



Differentiating Means and Objectives

- What are the underlying development objectives?
 - Is building a coal power plant an objective?
 - Or is the objective energy access and the power plant is just a means to an end?
 - Are households interested in energy as such?
 - Or is their interest in lighting, heat, cooking, communication, entertainment etc.?
- ⇒ What are climate-friendly means to achieve development objectives?

Mitigation and Poverty Alleviation



Source: Wlokas et al, 2012. Low Carbon Development and Poverty: Exploring poverty alleviating mitigation action in developing countries. Research Report for MAPS (Mitigation Action Plans and Scenarios). Energy Research Centre, University of Cape Town.
http://www.mapsprogramme.org/knowledge-sharing/research_lce-and-poverty-paper_120330/

Agenda

- Mitigation and Sustainable Development
- **How to Identify SD Impacts**
- How to MRV SD Impacts



Identification of SD Impacts

- Bindingness: voluntary vs. mandatory identification
- Approach:
 - No format at all – Write up whatever comes to mind
 - Qualitative guidance – “Tell a story”
 - Clearly defined criteria and indicators – MRVable

Possible Criteria

Environmental protection	Social development	Economic development
Air quality	Quality of employment	Quantitative employment, income generation and user cost savings
Water quality and quantity	Human and institutional capacity	Balance of payments and investment
Soil quality and quantity	Gender equality and empowerment	Technology transfer
Other pollutants	Proneness to natural disasters and climate change and/or ecosystem resilience	
Biodiversity and ecosystem services	Access to affordable and clean energy services	
	Public health	

Agenda

- Mitigation and Sustainable Development
- How to identify SD Impacts
- **How to MRV SD Impacts**



How to MRV Impacts Depends on...

... their quantifiability

... the available capacity

... the purpose of MRVing:

- Determination of whether actions are actually taking place or whether money has been used for the assigned purpose
- Assessment of the extent of the impact
- Usage of results to plan future actions

Output-based MRV

Input-based MRV

Easy

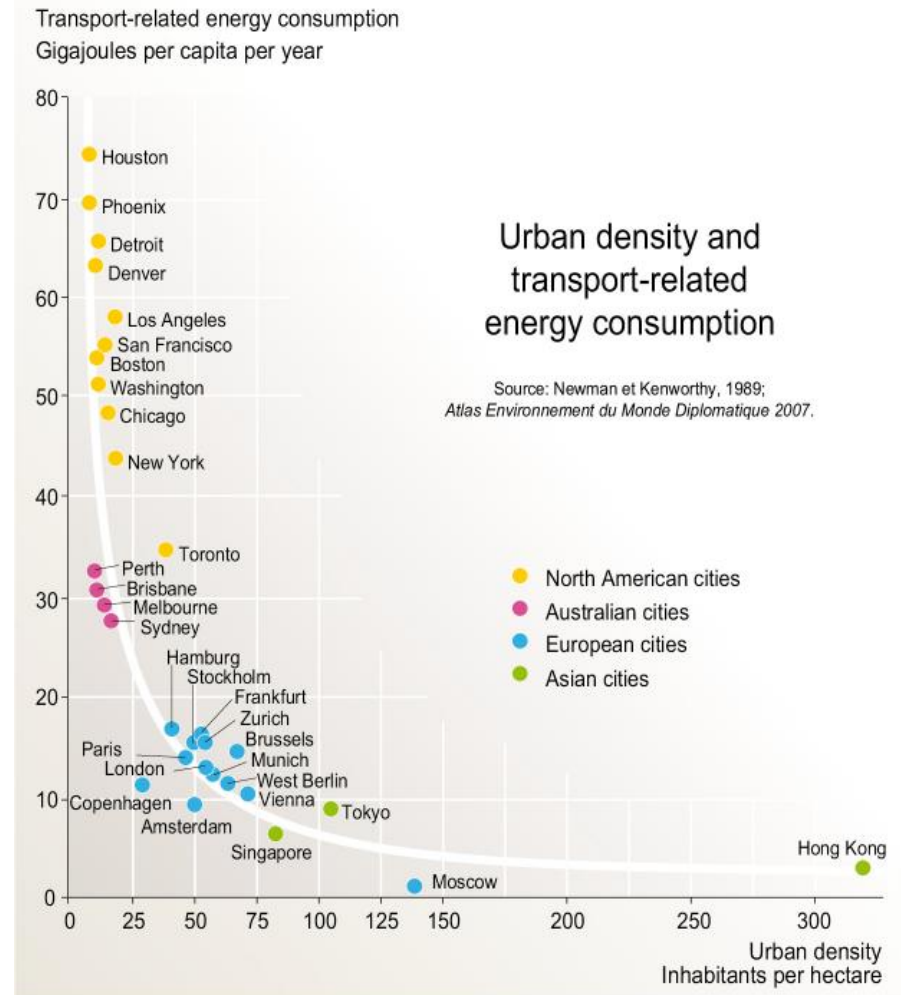
Quantifiability

Difficult

→ When quantification is difficult, move from output-based MRVing of results to MRVing of indicators for inputs

Effectiveness and MRV-ability

- Dense settlement structures
- Mixed use – working, living, leisure
- National urban planning guidelines
- Rationalisation of logistics
- Minimise road infrastructure development – „He who sows roads will reap traffic“



Source: UNEP/GRID-Arendal

<http://maps.grida.no/go/graphic/urban-density-and-transport-related-energy-consumption1>

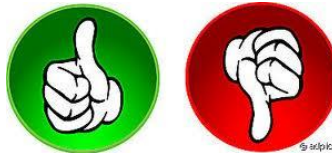
Options for Output-Based Indicators

Criterion	Indicator
Environmental protection: Air quality	NO _x , SO _x , Pd, Co, Ozone, POPs, Hg, CFCs, Halons, RSPM, NH ₃ , PM ₁₀ , VOC, BC, CO ₂ , CH ₄ , N ₂ O, HFCs, PFCs, SF ₆ etc.
Social development: Quality of work	Certificates, existence of a company policy guaranteeing labour rights, existence of an OHS management system, employment arrangements, educational activities, hours of work, existence of overtime arrangements, entitlement to wages, assessment of the skills required, solid legal framework, quality/ monitoring of contracted enterprises, highly or poorly qualified activities, etc.
Economic development: Quantitative employment, income generation and user cost savings	Number of working contracts, household income generated from the project, change in income and asset distribution by region, ethnicity, religion, and socio-economic groups, user cost savings, income from employment in the formal and informal sector, etc.

How to MRV Indicators for Co-benefits and Co-costs

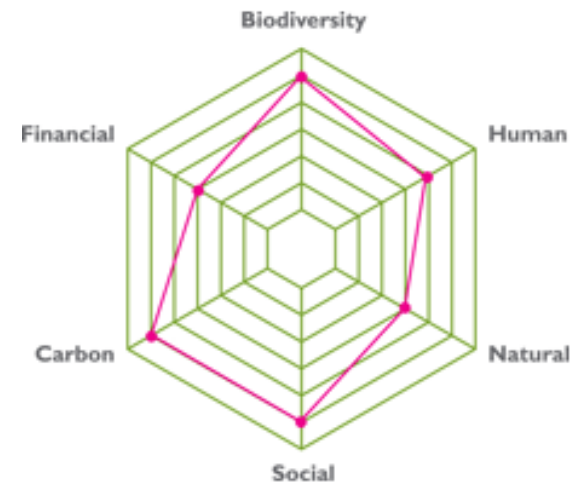
- Qualitative description
- Quantification
 - absolute, e.g. income generation: 10.000 \$
 - relative

- + / -



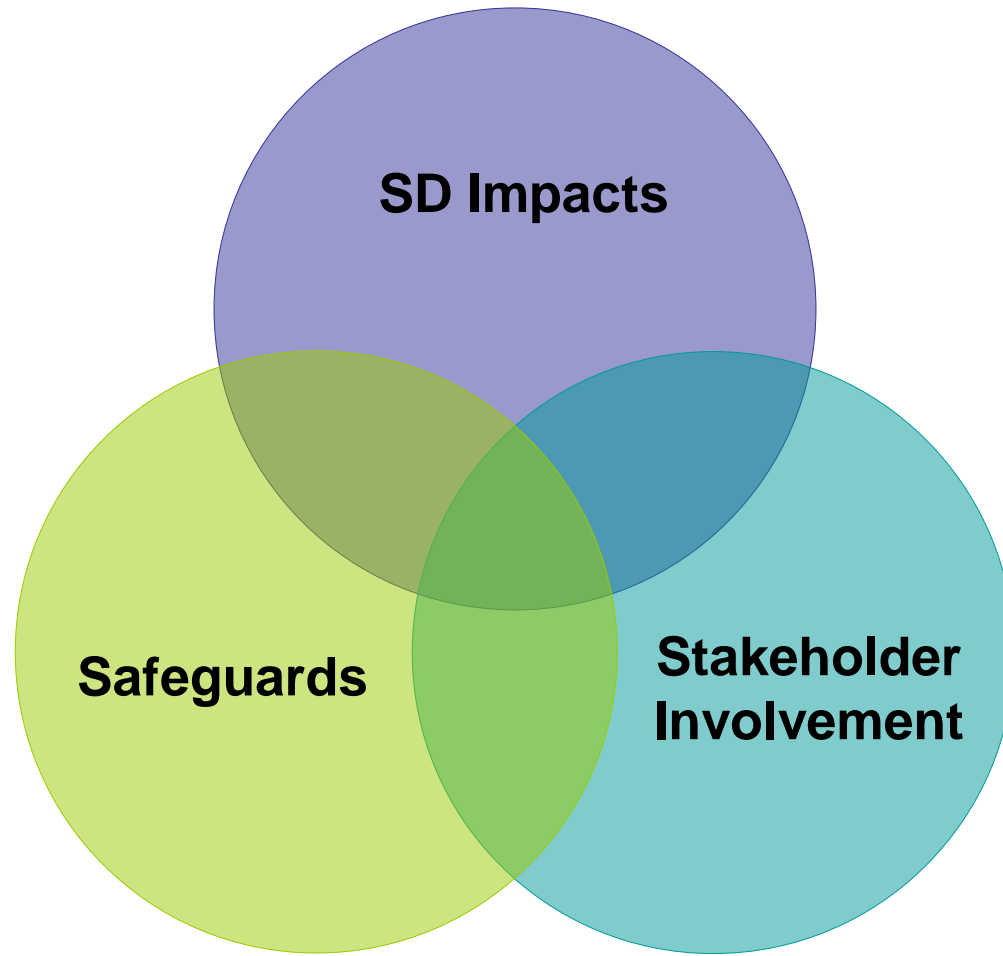
- on a scale

- separate scales for co-benefits and co-costs
- continuous scale leading from co-costs to co-benefits



Six aspects of project sustainability are individually measured using the SOCIALCARBON hexagon: carbon, biodiversity, social, financial, human and natural.

Complementary Elements



Safeguards

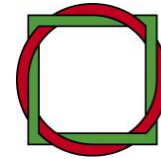
	<i>Human rights</i>	
1	Does the project ensure to respect internationally proclaimed human rights?	<input type="checkbox"/> Yes <input type="checkbox"/> No
2	Does the project ensure to respect the right to information and participation of stakeholder?	<input type="checkbox"/> Yes <input type="checkbox"/> No
3	Does the project ensure not to involve and/or be complicit in involuntary resettlement?	<input type="checkbox"/> Yes <input type="checkbox"/> No
4	Does the project ensure not to involve and/or be complicit in the alteration, damage or removal of any critical cultural heritage?	<input type="checkbox"/> Yes <input type="checkbox"/> No
	<i>Labour Standards</i>	
5	Does the project ensure to respect the employees' freedom of association and their right to collective bargaining?	<input type="checkbox"/> Yes <input type="checkbox"/> No
6	Does the project ensure not to involved and/or be complicit in any form of forced or compulsory labour?	<input type="checkbox"/> Yes <input type="checkbox"/> No
7	Does the project ensure not to employ, involve and/or be complicit in any form of child labour?	<input type="checkbox"/> Yes <input type="checkbox"/> No
8	Does the project ensure not to involve and/or be complicit in any form of discrimination based on gender, race, religion, sexual orientation or any other basis?	<input type="checkbox"/> Yes <input type="checkbox"/> No
9	Does the project ensure to provide workers with a safe and healthy work environment?	<input type="checkbox"/> Yes <input type="checkbox"/> No
	<i>Environmental protection</i>	
10	Does the project ensure to take a precautionary approach in regard to environmental challenges?	<input type="checkbox"/> Yes <input type="checkbox"/> No
11	Does the project ensure not to involve and/or be complicit in significant conversion or degradation of critical natural habitats?	<input type="checkbox"/> Yes <input type="checkbox"/> No
	<i>Anti-Corruption</i>	
12	Does the project ensure not to involve and/or be complicit in corruption?	<input type="checkbox"/> Yes <input type="checkbox"/> No
	<i>Additional questions for projects for specific project types</i>	
13	...	<input type="checkbox"/> Yes <input type="checkbox"/> No

Stakeholder Involvement

= Important information, consulting and controlling mechanism

Helps to save time and money by improving a project's performance and impacts

- Better understanding of potential obstacles, problems, risks and chances
- Identification of already existing measures, maximisation of synergies, avoidance of duplications
- Ensure coordination and cooperation
- Creation of trust, transparency and accountability



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Thank you very much for your attention!

For further information please visit our website:

www.wupperinst.org

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