LC-map: Life Cycle Assessment

Amman Students Workshop on using C-MAP for RES

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“THERE CAN BE NO PLAN B, BECAUSE THERE IS NO PLANET B.”

Ban Ki-moon

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WHAT IS SUSTAINABLE DEVELOPMENT?

Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs.

ref: World Commission on Environment and Development (the Brundtland Commission) Our common future (1987)
WHAT IS SUSTAINABILITY?

The SUSTAIN is the pedal that keeps constant the sound over time.

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Sustainability VS. unsustainability

- Sustainability cannot be measured because it is not a physical phenomenon; sustainability is an ideal state

- We can invert the problem and measure unsustainability, as the distance from the ideal of sustainability

- PROBLEM: how to measure unsustainability (and how to reduce it)?
Is it possible to measure the (UN)sustainability?

indicators

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What are sustainability indicators?

• Sustainability Indicators are **tools** for the environmental management and communication that allow for the **environmental profiling of products** and show clear and easily understandable outcomes.

• Sustainability Indicators are based on **environmental assessment methodologies** such as the **Life Cycle Assessment (LCA)**.
What is LCA?

The LCA - Life Cycle Assessment – is a method that assesses different environmental impact categories of a production process/system.

Based on international standards (ISO 14040-14044), the LCA allows for estimating potential environmental impacts in air, water and soil due to the lifecycle of a product “from cradle to grave”, that is from raw material drawing to the end-of-life, including all processes involved in the supply chain.
THE LC-MAP
THE LIFE CYCLE ASSESSMENT (LCA) EXPLAINED IN A C-MAP
CONCLUSIONS

Sustainability assessment needs:

• to reverse the approach and evaluate **UNsustainability**;

• metrics able to identify impacts and mitigation strategies such as Life Cycle Assessment.
THANK YOU

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