Results form the GBEP Task Force on Sustainability: ENV Indictors

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research sponsored by
ENV Achievements in 2017

Environment Sub-Group (ENV)

• 6 virtual meetings during 2017, each meeting addressed 1 or 2 ENV indicators
• Broad participation of GBEP partners and observers
• Very good inputs and material provided, covering new data, methods, and country experiences
• Concise and timely note-taking by the Secretariat
• Draft Report for Implementation Guide
• TFS ENV Subgroup **Draft Report** on Indicators 1 – 8
ENV Indicator 1: Key findings

Lifecycle GHG emissions – main challenges:

• Scope of LCA (imports?)
  Coherence in scope for bioenergy and fossil life-cycles

• Accounting for potential climate feedbacks (albedo...)
  Suggested approach: outside of scope, focus on GHG

• Inclusion of potential soil organic carbon (SOC) storage
  Focus on flows, not stocks

2018 potential further work:
Inclusion of guidance concerning imports for bioenergy
ENV Indicator 2: Key findings

Soil Quality – main challenges:

- Data availability on soil organic carbon content and its development
- Data availability regarding the amount and distribution of soil improvement measures
- Attribution to bioenergy production (cross-cutting)

2018 potential further work:
Further guidance on how to identify high-risk areas, describe bioenergy crop properties in terms of risks for soil quality (e.g. erosion risk, humus depletion)
ENV Indicator 3: Key findings

Harvest levels of wood resources – main challenges:

• Data availability in some countries

• Determination of the share of woodfuel coming from forests (attribution)

• Aggregated national data – can be misleading when masking regional differences

2018 potential further work:
See ENV draft report
ENV Indicator 4: Key findings

Emissions of non-GHG air pollutants, incl. air toxics – main challenges:

• Measurement is quite burdensome (data and tools required; LCA scope – see Indicator 1)

• Very skill intensive, requires involvement of team of expert chemists and engineers

2018 potential further work:

Supplementary data sources to be determined
ENV Indicator 5: Key findings

Water use and efficiency – main challenges:

- Correct level and timeframe for analysis
  Suggested approach: consider dry years when determining the average

- Ensuring that reference values are available for comparison of data

2018 potential further work:
Compile reference from which to compare watersheds
ENV Indicator 6: Key findings

Water quality – main challenges:

• Attribution - often good data on national level on pollutant loading as contributions by sector - but bioenergy is not a sector (transcends sectors)
  Coherence in scope for bioenergy and fossil life-cycles

• Several tools available – which one to use?

2018 potential further work:
Attribution; more tools, e.g. SWAT
ENV Indicator 7: Key findings

Biological diversity in the landscape – main challenges:

- Data availability
- Definition of “nationally recognized areas”
  Suggested approach: extend to available mapped areas
- Habitat corridors between areas of high biodiversity value or critical ecosystems should be considered

2018 potential further work:
Consider “connectedness”, update data sources
ENV Indicator 8: Key findings

Land use and land-use change related to bioenergy feedstock production – main challenges:

• Attribution (cross-cutting issue)

• Time component of land-use change (variations due to weather etc.); suggested approach: averaging!

• Data sources (UNCCD...)

2018 potential further work:
Attribution; update of data sources
Towards an Implementation Guide!

- **Consider additional** virtual meetings to resolve open issues (LCA scope...) in early 2018
- **Prepare draft ENV section** of Implementation Guide (April/May)
- Virtual discussion on draft (June)
- **Final draft** (July/August)
More Information

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