

Towards a resource-efficiency index of nations

The WRF secretariat has granted the Institute of Environmental Sciences (CML) of Leiden University, the Netherlands, a budget for a small pilot project that should result in a discussion paper (and if possible some quantitative examples) of how such an integrated indicator could be formulated.

In the last 25 years, the community of sustainability scientists has done a lot of work on material flow indicators, life cycle impact assessment indicators, and resource footprint indicators for e.g. water, land and resources. As shown in this discussion paper, many of the discussions about what is the 'best' indicator have been far from concluded. It is here inevitable that any attempt to produce an integrated 'resource use' or 'resource efficiency' index will be based on the choices. This is nothing new: as is shown in section 3, the now widely accepted 'Human development index' (HDI) as produced by the United Nations Development Program (UNDP) is also based on a reasoned, but in essence reductionist selection of indicators and one specific weighting method.

In this first attempt, the only thing we can do is come to reasoned choices and being transparent about them. We also do not see the suggested indices as final – we rather would offer them as first proposals that can kick-start a discussion over the next years, allowing for refinement of the approach, until – like happened with GDP, HDI and other now well accepted indicators – a consensus will arise in due time. We further do not see a priori that the indicators



~~proposed would have a different applicability across different countries – the indicators proposed measure what they~~
measure, impartially, although as usual interpretation of values by country and comparisons across countries always needs care. A point may be that certain countries may have more capabilities for in-depth data gathering as others, but as will be shown later our feeling is that many of the indicators proposed can be composed using globally available data sets from e.g the International Energy Agency (IEA) and the Food and Agricultural Organisation (FAO).

The [RE Indicator for Nations discussion report \(PDF\)](#) is built up as follows:

- a) Chapter 2 gives some policy backgrounds, and options of how to structure resource indices in general, next to deliberations about data inventory
- b) Chapter 3 discusses possible reference indicators, such as GDP and HDI, to assess resource efficiency
- c) Chapter 4 discusses possible indicators for individual resource categories (e.g. water, land, materials)
- d) Chapter 5 discusses how such indicators for resource categories could be weighted.
- e) Chapter 6 ends with reflections, key deliberations and relevant choices, conclusions

© 2020 World Resources Forum

