# 2013 Freshwater Eionet Workshop - 19/20 September 2013, Copenhagen

## **Session 1: Use of the data, integration and DPSIR assessment**

## **Document 1c: Resource Efficiency indicators (REI) as impact and response indicators – do we have the data for them?“ by Petra Ronen, ETC/ICM**

### Relevant Indicator Titles

(WREI01) Emission intensity of agriculture in Europe (<http://www.eea.europa.eu/data-and-maps/indicators/untitled-indemission-intensity-of-agriculture/view>)

(WREI02) Emission intensity of domestic sector in Europe (<http://www.eea.europa.eu/data-and-maps/indicators/emission-intensity-of-domestic-sector/view>)

(WREI003) Emission intensity of manufacturing in Europe (<http://www.eea.europa.eu/data-and-maps/indicators/emission-intensity-of-manufacturing-industries/view>)

### Background

Consequences of economic activities with regard to water quality and quantity have been analyzed under the WFD through the Member States’ River Basin Management Plans. The study of the link between water status (quality and quantity), relevant pressures and their economic driving forces provides important basis for the decision making and prioritization of measures with regard to achieving the objectives of the WFD. Moreover, it can help to indicate whether the economic growth in a particular industry/sector is decoupled from its environmental impact and thus whether the sector movers towards higher resource efficiency. Easily understandable indicators will be necessary to provide signals and measure progress in improving resource efficiency

Decoupling represents a strategic approach for moving forward a global Green Economy –one that “results in improved human well-being and social equity, while significantly reducing environmental risks and ecological scarcities”.

The WREI indicators illustrate decoupling of economic growth (Gross Value Added-GVA) from the environmental impact as well as the specific emission intensity of particular economic sector.

[WREI001](http://www.eea.europa.eu/data-and-maps/indicators/untitled-indemission-intensity-of-agriculture/view):

*Environmental risk (pressure/impact)*: The gross nutrient balance for nutrients provides an indication of potential water pollution and identifies those agricultural areas and systems with very high nitrogen loadings. As the indicator integrates the most important agricultural parameters with regard to potential nitrogen surplus it is currently the best available measure for nutrient leaching risk.

*Economic driver*: Economic growth of agriculture sector is defined as the added (monetary) value of all final goods and services produced within the sector per country in a given period of time, usually a calendar year.

[WRE002:](http://www.eea.europa.eu/data-and-maps/indicators/emission-intensity-of-domestic-sector/view)

*Environmental risk (pressure/impact)*: The emission of nutrients from waste water treatment plants provides an indication of potential water pollution. Human activity-the driver- is in this indicator represented by population connected to the waste water treatment.

*Economic driver: Human activity-the driver- is in this indicator represented by population growth*

[WREI003:](http://www.eea.europa.eu/data-and-maps/indicators/emission-intensity-of-manufacturing-industries/view)

*Environmental risk (pressure/impact)*: The emission of pollutants from point sources (industrial facilities) provides an indication of potential environmental impact on water quality.

*Economic driver:* Economic growth is defined as the added (monetary) value of all final goods and services produced within a country (or economic sector) in a given period of time, usually a calendar year.

### Related policy documents

1. Roadmap to a Resource efficient Europe, <http://ec.europa.eu/environment/resource_efficiency/about/roadmap/index_en.htm>
2. Europe 2020 strategy, <http://ec.europa.eu/europe2020/index_en.htm>
3. A resource-efficient Europe – flagship initiative under the Europe 2020 strategy, <http://ec.europa.eu/resource-efficient-europe/pdf/resource_efficient_europe_en.pdf>

**Related Reports**

1. EEA Water 2012 report, <http://www.eea.europa.eu/themes/water/water-assessments-2012/water-assessments-2012>
2. UNEP (2011) Decoupling natural resource use and environmental impacts from economic growth, A Report of the Working Group on Decoupling to the International Resource Panel, UNEP (2011), <http://www.unep.org/resourcepanel/decoupling/files/pdf/decoupling_report_english.pdf>
3. Gross nutrient balance - outlook from EEA (<http://www.eea.europa.eu/data-and-maps/indicators/agri_f03-gross-nutrient-balance-outlook/>)
4. Resource efficiency in Europe, Policies and approaches in 31 EEA member and cooperating countries, EEA Report, No 5/2011, <http://www.eea.europa.eu/publications/resource-efficiency-in-europe>

### Issues to be discussed

* Relevance of the WREI.
* Data suitability, gaps, uncertainties
* Methodology gyps, uncertainties
* Results of country review
* Further development

### Questions to NRCs

1. Have REI related to the impact of economic development on the emission of pollutant in water been developed in your country?
2. What factors should be discussed (in the indicator assessment section) as crucial for the development of the gross value added GVA[[1]](#footnote-1) of particular economic sectors at national level?
3. Do you have any suggestion on how to improve the data behind the water resource efficiency indicators?

1. GVA has been used in the indicators as a proxy for economic development [↑](#footnote-ref-1)