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**In-Stream**



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# **IN-STREAM WP 2**

## **Qualitative evaluation of indicators**

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## WP 2 – Main research objectives

- ▶ Methodological and institutional issues of selected indicators
- ▶ Suitability of indicators to implementation in the EU policy context
- ▶ Modifications to and uses for indicators that will improve their usefulness



# Indicator selection

## Filters

- ▶ Relevance to EU policy
- ▶ Bridging of SD/economic divide
- ▶ Feasibility of analysis
- ▶ Progress beyond the state-of-the-art
- ▶ Little overlap with other efforts

## Criteria

- ▶ Quantifiable vs. non-quantifiable
- ▶ Stock vs. flow
- ▶ Social vs. environmental
- ▶ Mix of indicator types



## Indicators analysed under WP 2

- Gross domestic product (GDP)
- Adjusted Net Savings (ANS)
- The System of Integrated Environmental and Economic Accounting (SEEA-2003)
  
- Basket of resource indicators (EF, EMC, HANPP, LEP)
- Common bird index
- Favourable Conservation Status (FCS)
- Marine Trophic Index (MTI)
- Red List index
- Potentially Disappeared Fraction (PDF)
  
- GDP GHG intensity
- GDP Energy intensity
- Per capita waste generation and energy from waste
  
- Human Development Index
- Happy Planet Index
- National Accounts of Well-being

→ Evaluations in D2.1  
and D2.2 (forthcoming)



## Evaluation method applied: RACER Analysis

- ▶ **R**elevant – i.e. closely linked to the objectives to be reached
- ▶ **A**ccepted – e.g. by staff and stakeholders
- ▶ **C**redible – for non experts, unambiguous and easy to interpret
- ▶ **E**asy to monitor – e.g. data collection should be possible at low cost
- ▶ **R**obust – e.g. against manipulation



## Example: Potentially Disappeared Fraction (PDF)

- ▶ Measures biodiversity loss in terms of number of species (vascular plants) missing due to land use change
- ▶ Unit of measurement: ratio – relative difference between # species in reference condition ( $S_{ref}$ ) and after land use conversion ( $S_{use}$ )

$$PDF = \frac{1 - S_{use}}{S_{ref}}$$

- ▶ Data: CORINE land use maps & data on vascular plant itineraries + database on restoration costs. Recalculated for each project that uses it



## The EU's post-2010 biodiversity strategy

- ▶ Objectives:
  - ▶ Halting the loss of biodiversity and ecosystem services in the EU by 2020;
  - ▶ Restoring them in so far as feasible;
  - ▶ Stepping up the EU contribution to averting global biodiversity loss.
- ▶ Evaluation of policy options
- ▶ Impact assessment



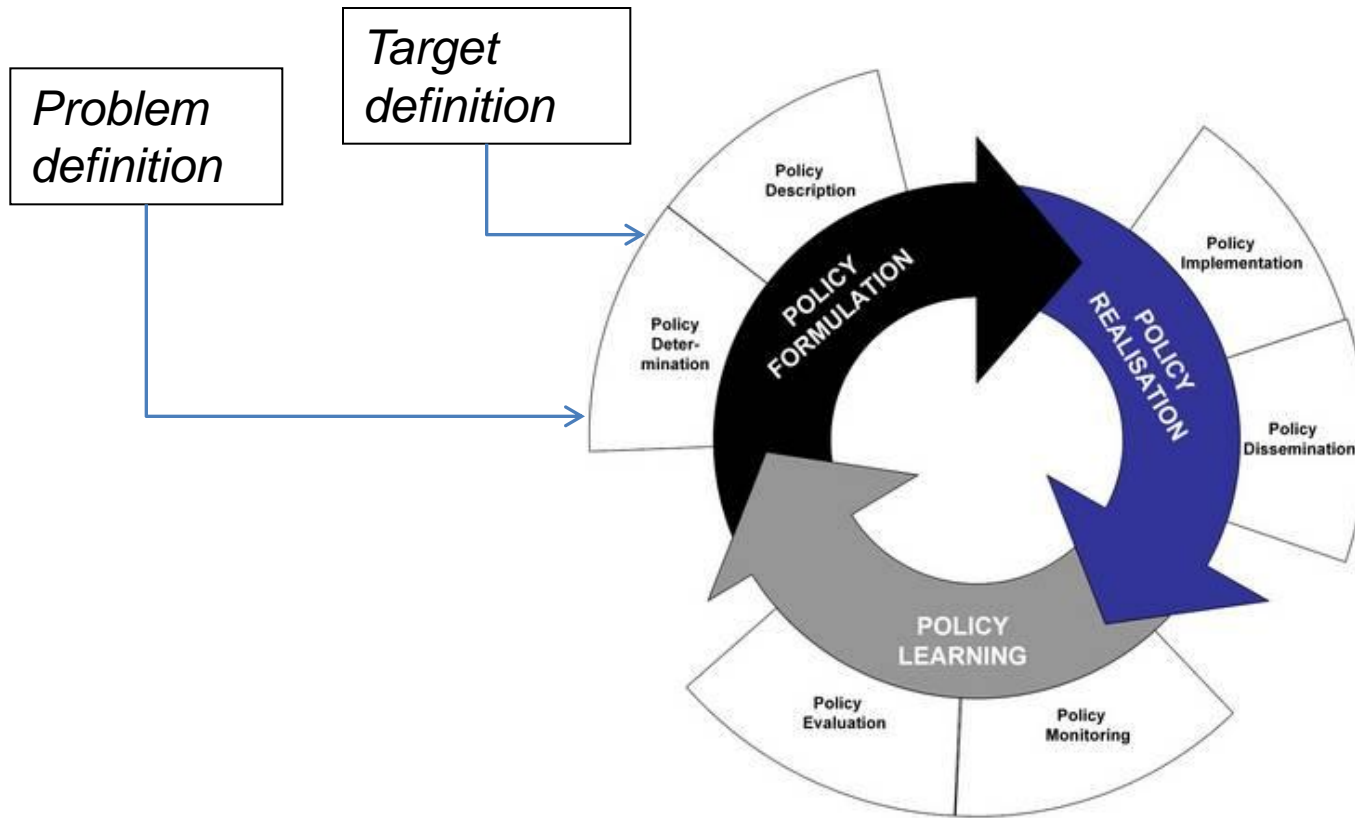
## PDF – Racer Analysis (carried out by IEEP)

<b>Relevant</b>	+ incorporates indirect measures of pollution (acidification, eutrophication), can track changes through time, ready for implementation in EU - Comparison with <b>baseline rather than target</b> , no forecast
<b>Accepted</b>	+ Used by UNEP - <b>Not used in EU</b>
<b>Credible</b>	+ theory unambiguous, <b>transparent</b> methodology - S ref data collection <b>involves subjectivity</b>
<b>Easy</b>	+ species richness techniques are well understood, <b>data available</b> for major EU biomes
<b>Robust</b>	- Simplistic assumptions, spatio-temporal generalisation, <b>does not recognise nonlinearity of ES</b> , potentially unreliable data for S res, focus on vascular plants only





# RACER in the policy process





# Thank you!

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