



The FIGARO project

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(Environmental statistics and
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Introduction

- *Environmental accounts can be integrated into an IO framework for analysis and modelling purposes*
- *E.g. the EU carbon footprint and the EU's raw material consumption (RMC)*
- *Use for IO analyses of air emission accounts, economy-wide material flow accounts, and energy accounts (2017 onwards)*



Current IO modelling work

- *Greenhouse gas emission footprints for EU*
 - **Using the domestic technology assumption**
> calculation of displaced emissions
- *EU raw material consumption (RMC)*
 - **Based on a hybrid input-output model for the EU**
(hybrid: partial physical structures, use of LCA coefficients to represent different technologies)
- *Drawbacks:*
 - **One average EU technology used (de facto measuring emissions saved through imports vs actual emissions induced abroad)**
 - **No estimates for individual Member States**



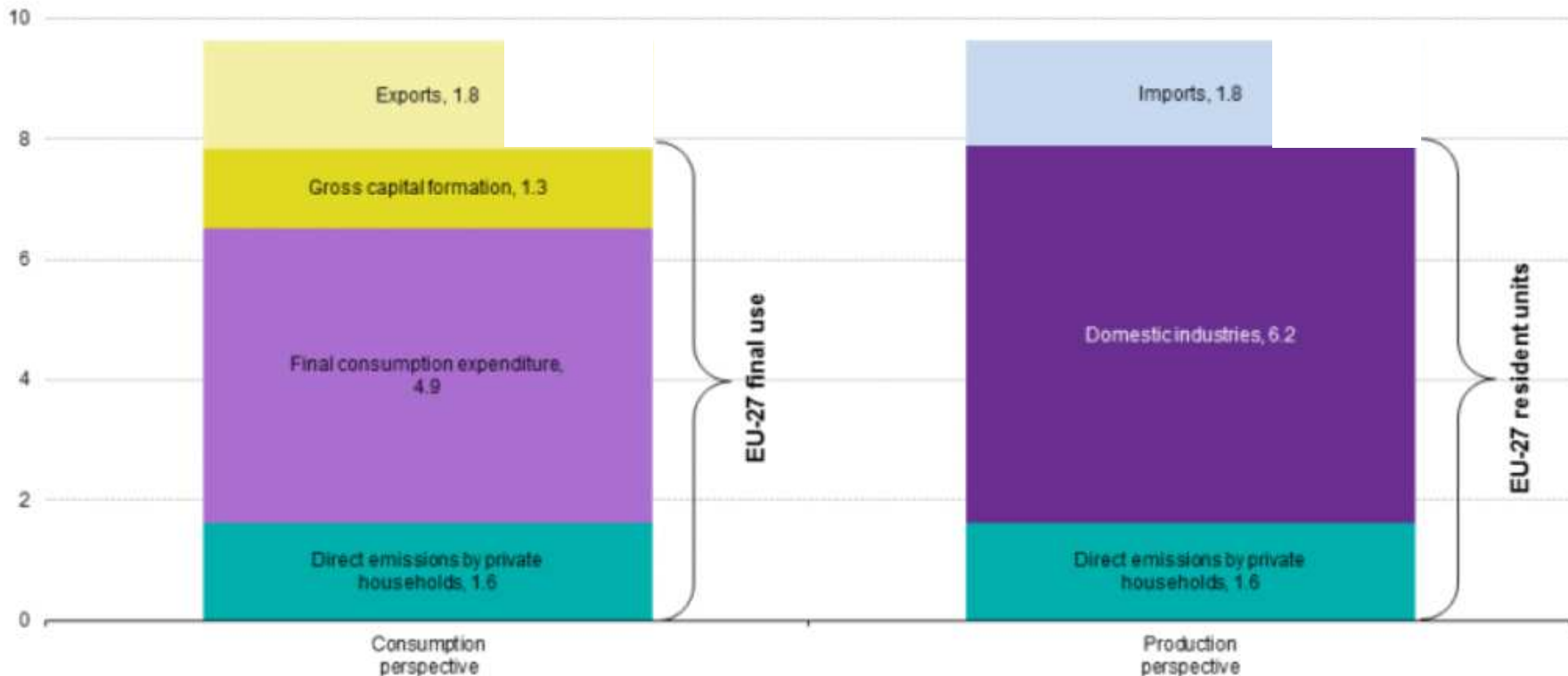
Example: RME

Comparison of actual material flow indicators with material flow indicators expressed in raw material equivalents (RME), EU-27, 2012 (tonnes per capita).



Example: Carbon footprints

Domestic and global CO₂ emissions – consumption and production perspective, EU-27, 2011 (tonnes CO₂ per inhabitant)





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(Full International and Global Accounts for Research in Input-Output Analysis= an EU consolidated SUIOT)

- *Measuring the role of the European economy in globalisation*
 - **Establishing EU inter-country supply-use and input-output tables (EU-IC-SUIOT)**
 - **Develop a standard statistical production method for the EU-IC-SUIOT**
- *Time schedule*
 - **October 2015 until December 2017**
- *First deliverable: an experimental EU-IC-SUIOT for 2010 available in summer 2017*
- *Resources*
 - **3 ½ FTE plus subcontracting some tasks**



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- *Partners are Eurostat and DG Joint Research Centre*
 - **National accountants, business statisticians, external trade statisticians, environmental accountants**
- *Steering Committee to consult international organisations*
 - **DGs, UN, OECD ECB, EIB, WTO**
- *Eurostat unit environmental accounts will supply its environmental accounts and benefit in its modelling applications*
 - **Resources unit E.2: 5.5 person-months**
- *Largest challenge: reconciling data from different statistical domains (and loop back to country data!)*
 - **Differences in underlying definitions of concepts**
 - **Valuation differences, territory-resident adjustments, treatment of re-exports, transit trade**

Objectives

1. *Take stock of current international projects*
2. *Define a suitable methodological framework for the regular production of EU-IC-SUIOT*
3. *Construct EU-IC-SUIOTs at basic prices for the reference year 2010*
4. *Integrate the EU-IC-SUIOTs into Global (World) Supply, Use and Input-Output Tables, in collaboration with the OECD and UN*
5. *Include a reduced version of the EU-IC-SUIOTs at the A10 sector classification with linked capital and labour productivity indicators*
6. *Integrate the EU-IC-SUIOTs with environmental accounts (in particular air emission accounts, material flow accounts and energy accounts)*
7. *Explore possible extensions of the EU-IC-SUIOTs*
8. *Elaborate a strategy for a regular production of Eurostat's annual EU-IC-IOTs and five-yearly EU-IC-SUIOTs*



Present status

- *Kick-off meeting took place on 23 October*
- *Focus first on reconciliation of trade statistics mirror flows*
 - **From now until spring next year**
- *Planned for December 15th: Steering Committee meeting*
- *Work on integrating the environmental accounts into the EU-IC-SUIOT starts in July 2016*
 - **Analyse the consistency between the SUT (economic output) and environmental accounts at country level**
 - **Address the difference between ESA 2010 and SEEA for processing trade**

Related developments

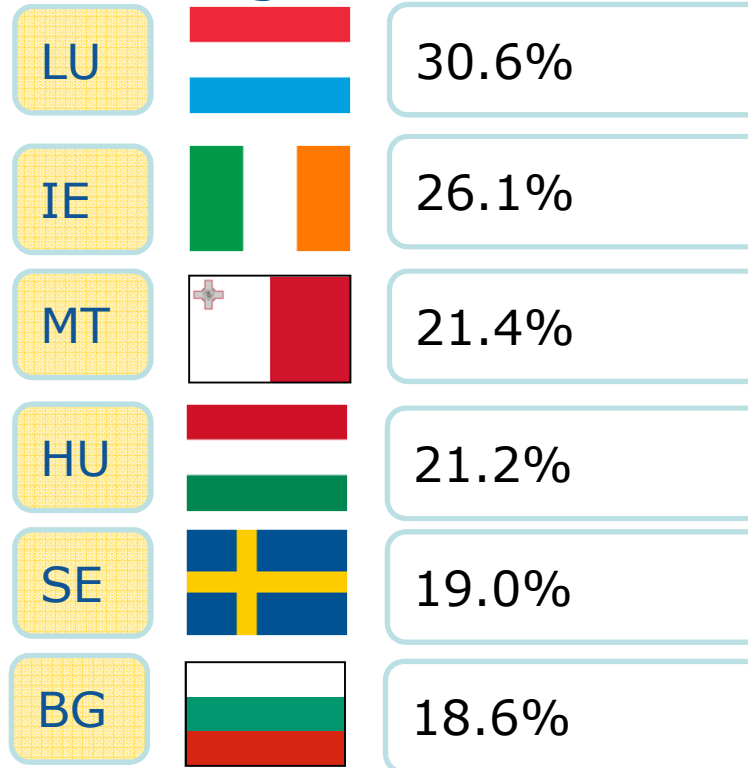
- *Global databases implementing SEEA*
 - **UNEP has developed a global EW-MFA database, next step: ensure continuity**
 - **Potential for other environmental-economic accounts databases**
- *Development of global inter-country input-output database (continuity an issue -> ideally one "official" world IOT)*
 - **In cooperation with OECD, where Eurostat would be responsible for EU countries (FIGARO data)**

Not just environment. E.g. Around 31.1 million jobs in the EU were supported by exports to the rest of the world, of which:

DE		7.060m jobs
UK		3.970m jobs
IT		3.134m jobs
FR		2.583m jobs
PL		1.970m jobs
ES		1.597m jobs



This is 1 in 7 jobs in the EU...



**And last but not least, 19.2 million jobs
outside the EU were supported by EU
exports, of which:**

RW		7.152m jobs
CN		5.131m jobs
IN		2.231m jobs
RU		1.131m jobs
BR		0.872m jobs
US		0.744m jobs





Thanks!

