

Energy Accounts in the European Statistical System (ESS) – state of the art

London Group Meeting

2-4 October 2012

Ottawa



Energy Accounts – structure according to SEEA central framework (2012)

■ Physical Energy Flow Accounts

- Describing national economy in physical energy terms
- Exchanges of energy between economy and environment

■ Monetary Energy Flow Accounts

- Highlighting energy relevant transactions in the sector accounts, IO framework
- ...“zooming” into existing accounts

■ Energy Asset Accounts (in physical and monetary terms)

- Produced energy assets in physical terms
- Selected energy assets in physical and monetary terms

Physical Energy Flow Accounts (PEFA)

■ Objective

- Consistent and comprehensive recording of energy flows
- ...from natural environment to economy
- ...within economy
- ...from economy to natural environments

- ...taking into account international methodological developments, in particular revised SEEA (chapter on Physical Flow Accounts)

Process

- 2009: Reflection Group => paper on scope and recommendations
- 2010: Working Group on Environmental Accounts agreed to start European development activities with PEFA
 - Energy Asset and Monetary Energy Flow Accounts may follow later
- 2010: start of NAMEA Task Force on Energy Accounts
- 2012: first testing
 - set of reporting tables (PEFA-questionnaire)
 - draft manual

Scheme providing an overview on the set of reporting tables

Table A: Physical Supply Table for Energy Flows

	industries	households	accumulation	rest of world	environment	Total
natural energy inputs					A.	
energy products	C.			D.		
energy residuals	I.	J.	K.	L.	M.	

$$I. = B. + E. + N. - C.$$

$$J. = F.$$

Table D: Vector(s) of key energy indicators

	industries	households
energy key indicator(s)		

Table E: Bridge Table

energy key indicator (resident principle)
- energy use by resident units abroad
+ energy use by non-residents on territory
= energy key indicator (territory principle)

Table B: Physical Use Table for Energy Flows

	industries	households	accumulation	rest of world	environment	Total
natural energy inputs	B.					
energy products	E.	F.	G.	H.		
energy residuals	N.		O.	P.	Q.	

Table B.o: Physical Use Table for Energy Flows - of which: own use

	industries	households	accumulation	rest of world	environment	Total
natural energy inputs						
energy products	E.o					
energy residuals						

Table C: Physical Use Table of Emission-relevant Use of Energy Flows

	industries	households	accumulation	rest of world	environment	Total
natural energy inputs	B.er					
energy products	E.er	F.er	G.er			
energy residuals						

Legend:

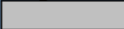


-  grey shaded cells do not contain anything
-  white cells: numbers or symbols '-' (not applicable), '.' (not available)
-  R. capital letters denote sub-matrices (cells) in accordance with draft chapter 3 of revised SEEA

Table A: Physical Supply Table for Energy Flows

	industries	households	accumulation	rest of world	environment	Total
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Table B: Physical Use Table for Energy Flows

	industries	households	accumulation	rest of world	environment	Total
natural energy inputs	B.					
energy products	E.	F.	G.	H.		
energy residuals	N.		O.	P.	Q.	

Interim conclusions

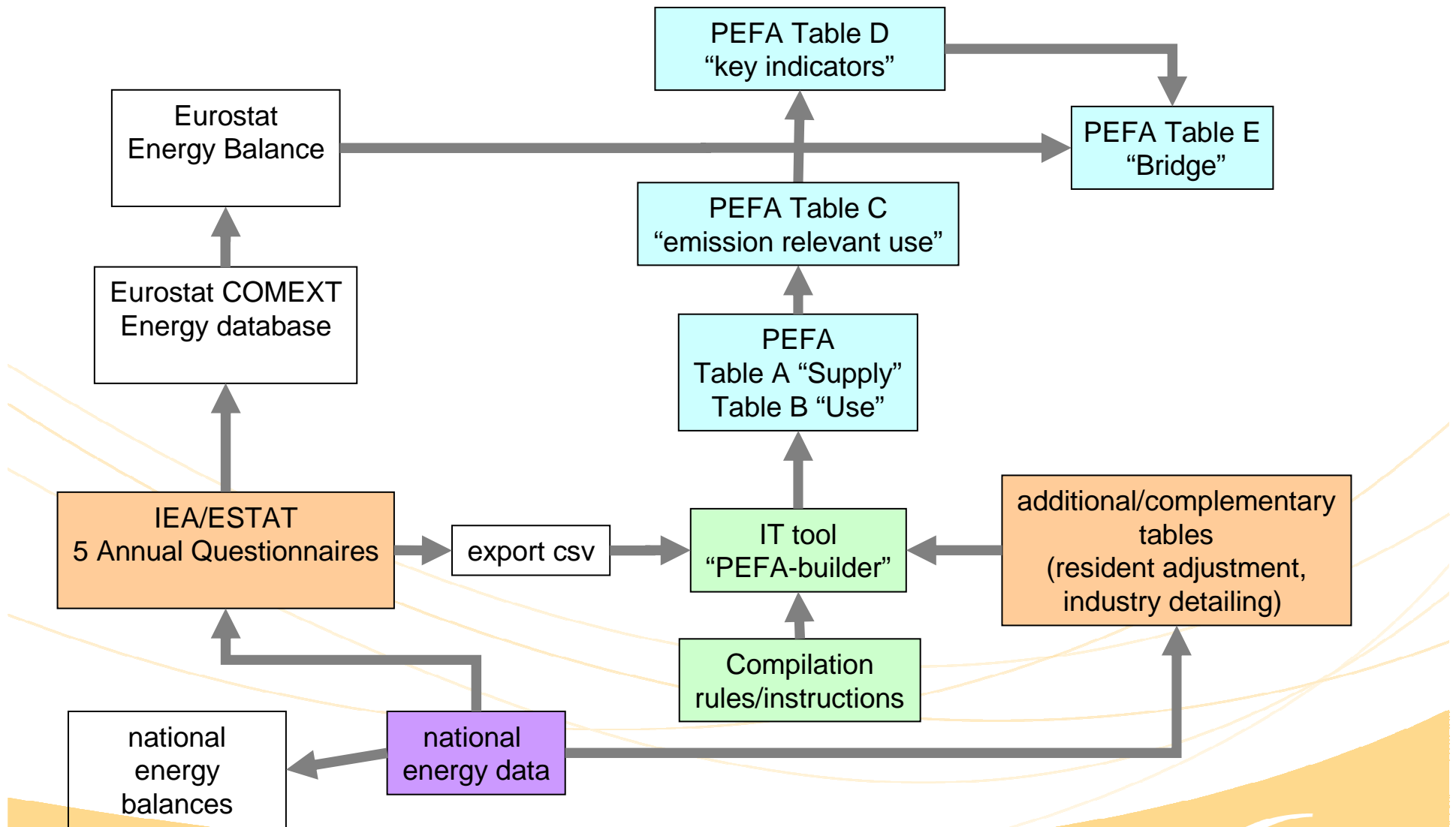
(spring 2012 after testing)

■ Conceptually: PEFA tables seem mature
=> legal base process may run in parallel

■ In practice significant problems: compilation of PEFA tables seems not feasible without some supporting tools

■ Conclusion: develop "PEFA-builder" (2012-2013)

Compilation IT tool: “PEFA-builder”



Outlook

- "PEFA-builder" ready for testing (2013)

main challenges:

- resident adjustments (internat. transport)
- "autoproducer" (own account&sec. activity production)
- industry detail (distribution of road transport, final energy consumption in service industries)

- Voluntary PEFA data collection (2013/2014)
- adding as a module with the "second wave" to Regulation 691/2011