



# OECD TASK FORCE ON THE IMPLEMENTATION OF THE SEEA-CF

*9<sup>th</sup> meeting of the UNCEEA  
New York, June 2014*

Pierre-Alain PIONNIER  
OECD – Statistics Directorate



## Composition and objectives of the Task Force

---

- 12 countries (Australia, Canada, France, Japan, the Netherlands, New Zealand, Norway, Russia, Sweden, Turkey, the United Kingdom and the United States) and 3 institutions (Eurostat, the UNSD and the World Bank) have accepted the invitation to join the OECD Task Force. The Chair of the London Group is kept informed of the ongoing work.
- 1<sup>st</sup> meeting on November 21<sup>st</sup> at the OECD Headquarters in Paris.
- Main objectives:
  - Develop standard tables for the collection of internationally comparable data on air emissions (volumes) and natural resources (stocks and flows, volumes and monetary units);
  - Provide guidelines and practical examples showing how to build air emissions accounts starting from inventories or energy accounts;
  - Provide methodological guidelines on the monetary valuation of natural assets;
  - Advise on other areas where standard tables could be developed in line with the SEEA and the OECD Green Growth strategy.



## Air emissions

---

- Key data for the implementation of the OECD Green Growth strategy. 2 out of 6 headline indicators relate to air emissions: CO<sub>2</sub> productivity, population exposure to PM<sub>2.5</sub>
- Focus on 4 gases (CO<sub>2</sub>, CH<sub>4</sub>, N<sub>2</sub>O, HFC) and PM<sub>2.5</sub>. A limited breakdown by industry is envisaged for the OECD Tier 1 questionnaire.
- How the OECD questionnaire will be filled in practice:
  - EU countries: appropriate data already sent to Eurostat
  - Non-EU countries: transposition of UNFCCC inventories into SEEA-type tables or, for energy-related emissions, conversion of IEA energy balances.



# Natural resources

- Objective: to collect data on stocks and flows, in volume and in monetary units.
- Key data for the implementation of the OECD Green Growth Strategy: 2 out of 6 headline indicators relate to natural resources: adjusted MFP, index of natural resources.

<b>Physical account</b> (physical units)
<b>Opening stock of resources</b>
<u>Additions to stock:</u>
Growth in stock
New discoveries
Upwards reappraisals
Reclassifications
<b>Total additions</b>
<u>Reductions in stock:</u>
Extraction
Normal losses
Catastrophic losses
Downwards reappraisals
Reclassifications
<i>Total reductions</i>
<b>Closing stock of resources</b>

<b>Monetary account</b> (currency units)
<b>Opening stock of resources</b>
<u>Additions to stock:</u>
Growth in stock
New discoveries
Upwards reappraisals
Reclassifications
<b>Total additions</b>
<u>Reductions in stock:</u>
Extractions
Normal losses
Catastrophic losses
Downwards reappraisals
Reclassifications
<i>Total reductions</i>
Revaluation of the stock of resources
<b>Closing stock of resources</b>



## Natural resources: measuring stocks in physical units (1/3)

---

- Main challenge: to align different classifications used at the country level .
- The SEEA-CF classification is derived from the UNFC classification:
  - UNFC: 3 dimensions to assess resource stocks: commercial viability (E), technical feasibility (F) of the project and geological uncertainty on the volume to be extracted (G).
  - SEEA-CF: 3 classes of resources (A,B,C), whose definition is based on the 3 UNFC dimensions.
- Main issues encountered in practice:
  - Even if it is possible to move from one classification to the other in theory, countries do not always publish disaggregated enough data.
  - Some countries prefer to discard geologically uncertain resources.
  - Other differences between existing international datasets and national statistics.



# Natural resources: measuring stocks in physical units (2/2)

UNFC classes defined by categories and subcategories								
Extracted	Sales production							
	Non-sales production							
	Class	Sub-class	E	F	G			
Total commodity initially in place	Known deposit	Commercial projects	On production	1	1.1	1	2	
			Approved for development	1	1.2	1	2	
			Justified for development	1	1.3	1	2	
		Potentially commercial projects	Development on pending	2	2.1	1	2	3
			Development on hold	2	2.2	1	2	3
		Non-commercial projects	Development unclarified	3.2	2.2	1	2	3
	Development non viable		3.3	2.3	1	2	3	
	Additional quantities in place			3.3	4	1	2	3
	Potential deposit	Exploration projects	No sub-classes defined	3.2	3			4
		Additional quantities in place		3.3	4			4

BP and EIA databases

SEEA class A

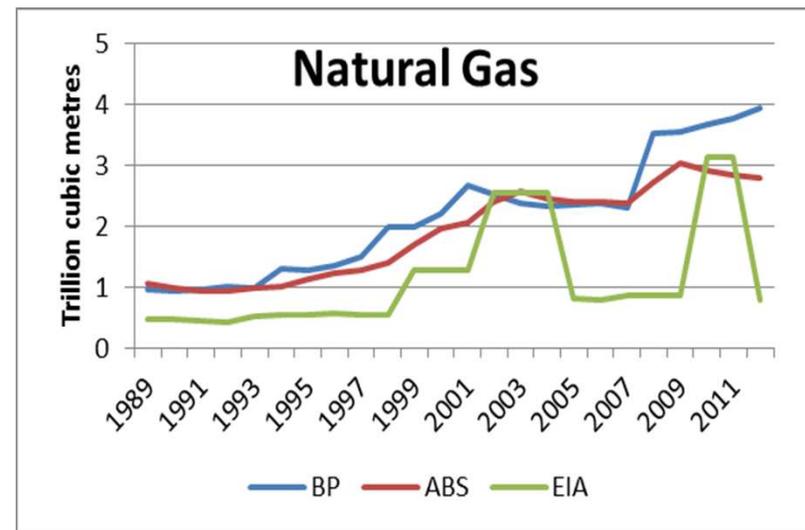
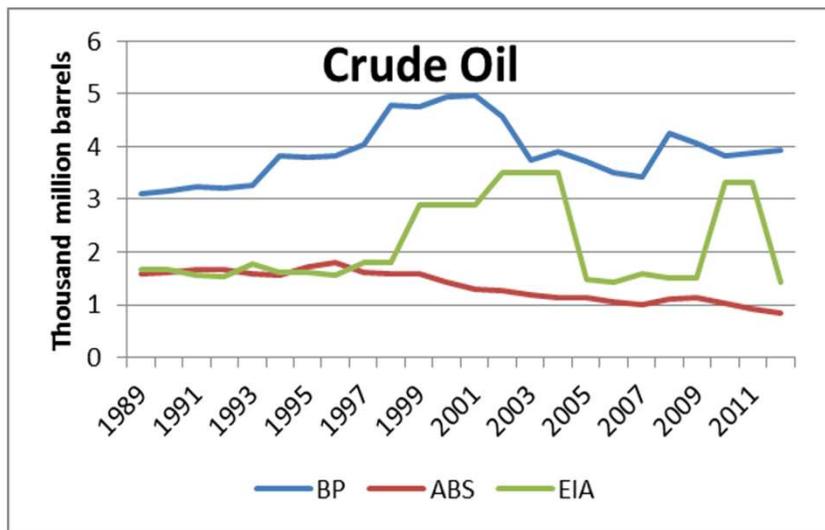
SEEA class B

Light + dark blue: Economic Demonstrated Resources considered by the ABS.



## Natural resources: measuring stocks in physical units (3/3)

Example of currently available estimates: physical stocks of crude oil and natural gas in Australia (1989-2012)





## Natural resources: measuring stocks in monetary units (1/2)

---

- Main issue for the valuation of stocks of natural resources: absence of observable market prices.
  - > Need to compute the Net Present Value (NPV) of the stock (SEEA-CF recommendation).
  - > Need to forecast extracted quantities, prices and extraction costs.
- Even if the same volumes are considered, results can significantly differ in practice: differences in forecasting assumptions, but also differences in current and past resource rents (prices and extraction costs).



## Natural resources: measuring stocks in monetary units (2/2)

---

- Additional challenge for the valuation of NR stocks: how to take the uncertainty related to commodity prices, and the capacity of producers to adjust to changing economic conditions, into account?
  - >Economic modelling can help.
- A better understanding of extraction costs (e.g. how they depend on current production and remaining stocks in different locations) is crucial:
  - to assess current and past resource rents
  - to build sensible economic models.