

# **Handbook on Mineral and Energy Asset Accounting**

**A first outline  
- For presentation at the 11th London Group Meeting**

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# This presentation

The purpose of the handbook

Approach to writing the handbook

The content of the Handbook

- Three parts including 25 chapters

Some questions/issues

## Purpose of the handbook

- Overview of mineral and energy asset accounts
- Practical advice and guidelines on the accounting
- Show actual country examples of accounting
- Step by step manual
- Include guidelines for publication, use and analyses of the accounts.

# Approach

- Use existing material  
SEEA 2003, Eurostat guidelines on oil and gas, UNFC
- Quite a lot of rewriting necessary –  
Simplify if possible  
No duplication of text
- Include country examples  
Some material already collected  
but updating required
- References  
To documents, reports  
Cross references in the handbook

Three parts:

Part I Introduction to mineral and energy asset accounting

Part II Guide to Mineral and Energy accounting in Practice

Part III Examples and Use of Accounts

# Part I Introduction to mineral and energy asset accounting

1-4 Overview and basics

5 Definitions and classifications of mineral and energy

- a) McKelvey box, UNFC,
  - b) List of mineral and energy resources
- } → SEEA classification

6 Physical asset accounts for mineral and energy

Accounts and accounting items

7 Monetary asset accounts

SEEA 2003 accounts and accounting items

SNA93 accounts

Correspondence SEEA and SNA accounts (terminology)

## **Part I Introduction to mineral and energy asset accounting**

### **8 The mining and quarrying industry in the national accounts**

- The SNA93 production and generation of income accounts for the mining and quarrying industry
- Use of assets other than mineral and energy – fixed assets
- Mineral exploration and evaluation
- Decommissioning and terminal costs
- Recording of ownership
- Payments from extractor to owner of resource

## Part I Introduction to mineral and energy asset accounting

### 9 Permissions to use mineral and energy resources

- ? Explicitly mentioned in the list of assets in SNA93 rev. 1

### 10 Valuation of mineral and energy assets

The net present value method (NPV)

- Basic idea
- Interpretation
- How is it calculated
- Formula and mathematics



## **Part II Guide to Mineral and Energy accounting in Practice**

- 11 Mineral and energy accounting in practice –  
Introduction and overview
- 12 Determining the assets to include  
Start from what's available  
- then convert to SEEA classification
- 13 Collecting the physical data  
National and international data sources
- 14 Setting up the physical accounts  
Filling in standard tables

## **Part II Guide to Mineral and Energy accounting in Practice**

### **15 Collecting economic data**

- National accounts data
- Other sources
- Own estimations

### **16 Estimation of the resource rent**

- Standard method and standard tables  
Now based on Eurostat guidelines
- Capital service approach is mentioned as an option  
(following SNA rev. 1)
- Allocating resource rents to different products
- Practical advice on extraction patterns, discount rate,  
return to capital etc.
- What to do with negative and zero resource rent

## **Part II Guide to Mineral and Energy accounting in Practice**

### **17 Constant price calculations**

- Why and how to calculate

### **18 Estimating the flow items of the monetary mineral and energy asset accounts**

- Step by step guide on how to estimate the different items:
  - Discoveries, Reappraisals, Extractions, Revaluations, etc.

### **19 Completing the monetary accounts**

- Wrapping up the monetary accounts
- Combining the items
- Filling out standard tables

## **Part II Guide to Mineral and Energy accounting in Practice**

### **20 Up-dating and revising the accounts**

- Principles for update
- Revision policy when new information becomes available

### **21 Publication and use of the accounts**

### **22 Documentation and quality check**

## Part III Examples and use of accounts

### 23 Country examples

### 24 Examples of analysis

Sensitivity analysis

Government appropriation of resource rent

Valuation related to parameter changes

Analysis of the

- Effect of discoveries and reappraisals
- Effect of extraction;
- Return to the natural resource (effect on the NPV of time passing)
- Effect of changing extraction
- Effect of changing resource rent

APPENDIX - Explanation of terms used

# Some questions ?

- What else should be included ?
- Including energy and mineral flow accounts: How much ? How ?
- How can the structure be improved ?
- Other things ?