

# Baseline reviews of fossil energy and mineral statistics: Guide for national consultants

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# Goal of baseline reviews

- Improve national capacity for the collection of fossil energy and mineral reserve statistics that are coherent with the:
  - *UNFC*
  - and
  - *UN SEEA (System of Environmental-Economic Accounting)*

See [https://www.unece.org/fileadmin/DAM/energy/se/pdfs/UNFC/pub/UNFC2009\\_Spec\\_ES42.pdf](https://www.unece.org/fileadmin/DAM/energy/se/pdfs/UNFC/pub/UNFC2009_Spec_ES42.pdf) and [https://seea.un.org/sites/seea.un.org/files/seea\\_cf\\_final\\_en.pdf](https://seea.un.org/sites/seea.un.org/files/seea_cf_final_en.pdf) for more details

# Role of national consultants

- Prepare a *Baseline Review of Fossil Energy and Mineral Reserve Statistics* to:
  - assess the systems in place to produce fossil energy and mineral reserve statistics
  - assess the quality of existing fossil energy and mineral reserve statistics, including their coherence with the UNFC and UN-SEEA
  - recommend actions that could lead to improvements in the completeness/quality of the statistics

# Scope of baseline reviews

- The Baseline Review is to be focused on official statistics related to fossil energy and mineral reserves
  - Official statistics are defined as publicly available statistics produced by the national statistical office and/or other ministries/agencies of the national government, including publicly available statistics produced by state-owned enterprises. Statistics produced by international agencies are out of scope for this review.
  - Fossil energy and mineral reserve statistics are defined as those related to physical quantities of commercially important fossil fuels and mineral reserves found within the borders

# Part I of the baseline review: Basic description of the national system

- Names and roles of the ministries/agencies/companies involved
- Brief description of the legal basis for collecting fossil energy and mineral reserve statistics (e.g., the national statistical law or other relevant national legislation)
- Brief description of relevant national policies/programs affecting fossil energy and mineral reserves (e.g., a sustainable mining policy)
- Names of major national energy statistics databases/publications containing fossil energy and mineral reserve data and, where available, their Internet addresses
- Brief summary of the financial and human resources devoted to the collection of fossil energy and mineral reserve statistics
- Brief summary of any major statistical improvement programs underway or planned for the near future that are relevant to the completeness/quality of fossil energy and mineral reserve statistics.

## Part II of baseline review:

### Quality of official fossil energy and mineral reserve statistics

- Quality is to be evaluated by assessing the statistics against the following criteria:
  - **timeliness**: the delay between the reference period and the date of public release
  - **frequency**: the interval (months, quarters, years) between release
  - **time series**: the earliest and most recent dates for which statistics are available
  - **coverage**: the completeness of the data in terms of periods; are there periods for which data were not collected?
  - **accessibility**: the ease with which users can access the statistics
  - **interpretability**: the availability of information, such as metadata, to help users understand the statistics
  - **transparency**: the availability of information regarding the methodology used to gather the statistics
  - **accuracy**: the availability of information regarding the degree to which the information correctly describes the phenomena it was designed to measure
  - **consistency**: the degree to which data are collected in a consistent manner across time
  - **coherence with international frameworks**: the degree to which the statistics are coherent with the concepts and definitions used in the UNFC and UN-SEEA.

# Part III of the baseline review: Recommendations

- The recommendations should cover:
  - a list of gaps in fossil energy and mineral reserve statistics prioritized from most to least important
  - a list of changes required in fossil energy and mineral reserve statistics in to make them coherent with the UNFC and UN-SEEA
  - means to overcome the main obstacles standing in the way of improving fossil energy and mineral reserve statistics in (institutional, legal, technical and human/financial).

# National consultant's key tasks

- Assess fossil energy and mineral reserve statistics according to the scope laid out above.
  - This will require arranging meetings with representatives of the relevant organizations in and carrying out research into their data holdings, both electronic and, where necessary, paper-based.
- Submit draft report to the international consultant and UNECE project leads for one or more rounds of comments and responding to their comments in a timely and complete fashion
- Based on comments from the international consultant and UNECE project leads, prepare a final Baseline Review report.
- Communicate regularly with the UNECE project lead(s) to ensure that project timelines are being respected and to resolve any difficulties encountered

# Baseline review: report structure

- **Executive Summary** (maximum 4 pages)
- **Introduction** (maximum 1 page)
- **Production of fossil energy and mineral reserve statistics** (maximum 5 pages)
  - Ministries/agencies/companies involved in the system and their roles
  - Legal basis
  - Relevant national energy policies/programs
  - Major national energy statistics databases/publications
  - Financial and human resources devoted to the collection of fossil energy and mineral reserve statistics
  - Major statistical improvement programs underway or planned
- **The quality of fossil energy and mineral reserve statistics** (maximum 10 pages)
  - Summary of quality of fossil energy reserve statistics
  - Summary of quality of mineral reserve statistics
- **Recommendations for the improvement of fossil energy and mineral reserve statistics** (maximum 5 pages)
  - Prioritized list of gaps in fossil energy and mineral reserve statistics
  - Means to overcome the main obstacles standing in the way of improving fossil energy and mineral reserve statistics
- **Annex A – Detailed review of quality of fossil energy reserve statistics** (this annex should be in the form of a table structured according to the format of the table on the next slide)
- **Annex B – Detailed review of quality of mineral reserve statistics** (this annex should be in the form of a table structured according to the format of the table on the next slide)

Statistic	Availability	Source	Quality assessment	Comment
<p><b>Reserves of fossil energy/mineral XXXX*</b></p> <p>(*Note: a table like this should be prepared for each commercially important fossil energy or mineral resource in the country)</p>	<p>Indicate as either “available” or “not available”</p>	<p>Indicate the name of producing organization and provide the Internet link or name of printed publication where the statistics can be obtained; indicate what languages the statistics are available in</p>	<p>Timeliness: Indicate the delay between the reference period and the date of public release (measured in months)</p> <p>Frequency: Indicate the intended interval (months, quarters, years) between releases</p> <p>Time series: Indicate the earliest and most recent dates for which statistics are available</p> <p>Coverage: Indicate the completeness of the time series: Complete (no gaps); Some gaps (less than half of data points missing); or Significant gaps (more than half of data points missing)</p> <p>Accessibility: Indicate the ease with which users can access the statistics: High (ready access via a publicly available electronic database managed by the national statistical office); Medium (access via a publicly available electronic database managed by an official organization other than the statistical office); or Low (access via some other means)</p> <p>Interpretability: Indicate whether readily accessible information, such as metadata, is available to help users understand the statistics (Yes/No)</p> <p>Transparency: Indicate whether readily accessible information on the methodology used to compile the statistics is available to users (Yes/No)</p> <p>Accuracy: Indicate whether readily accessible information regarding the degree to which the statistics correctly describes the phenomena they were designed to measure is available to users (Yes/No)</p> <p>Consistency: Indicate the degree to which the statistics are collected in a consistent manner across time: High (no important breaks in the time series due to changes in methods); Medium (no more than one important break in the time series); Low (more than one break in the time series)</p> <p>Coherence with international frameworks: The degree to which the statistics are coherent with the concepts and definitions used in the UNFC and UN-SEEA</p>	<p>Add any additional information relevant to this statistic</p>

# Thank you

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