Minerals Yearbook of Poland

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VERTICAL STRUCTURE OF RAW MATERIALS AND MINERAL COMMODITIES

SOURCES
- PRIMARY
  - Mainly deposits
  - OUTPUT
    - CONCENTRATE OR SEMI PRODUCT
      - MINERAL COMMODITIES PRODUCT
        - FINAL PRODUCT
- SECONDARY
  - Waste, tailings, slugde, scraps
  - OUTPUT
    - CONCENTRATE OR SEMI PRODUCT
      - MINERAL COMMODITIES PRODUCT
        - FINAL PRODUCT
SUPPLY & DEMAND

POLAND

SOURCES PRIMARY/SECONDARY

OUTPUT OF RAW MATERIAL

PROCESSING OR BENEFICATION

DIRECT USE

PRODUCTION OF CONCENTRATE OR SEMI PRODUCT

SUPPLY & DEMAND

PRODUCTION OF MINERAL COMMODITIES

SUPPLY & DEMAND

PRODUCTION OF FINAL PRODUCTS

SUPPLY & DEMAND

EU

SOURCES PRIMARY/SECONDARY

OUTPUT OF RAW MATERIAL

PROCESSING

EXPORT

IMPORT

PRODUCTION OF CONCENTRATE OR SEMI PRODUCT

SUPPLY & DEMAND

PRODUCTION OF MINERAL COMMODITIES

SUPPLY & DEMAND

PRODUCTION OF FINAL PRODUCTS

SUPPLY & DEMAND

WORLD

SOURCES PRIMARY/SECONDARY

OUTPUT OF RAW MATERIAL

PROCESSING

EXPORT

IMPORT

PRODUCTION OF CONCENTRATE OR SEMI PRODUCT

SUPPLY & DEMAND

PRODUCTION OF MINERAL COMMODITIES

SUPPLY & DEMAND

PRODUCTION OF FINAL PRODUCTS

SUPPLY & DEMAND

APPARENT DEMAND/CONSUMPTION = PRODUCTION – EXPORT + IMPORT
REAL DEMAND/CONSUMPTION = PRODUCTION – EXPORT + IMPORT ± RESERVES
Collecting data of the reserves and resources of deposits in Poland and output of raw materials at the MIDAS System.
Public annually mineral resources datafile (list of raw material deposits and output of each extracted deposit).

Collecting data of the production and consumption of concentrate or semi products, mineral commodities and final products.
Public annually Minerals Yearbook of Poland (English version) and Minerals Yearbook of Poland and World (Polish version).

Polish professional organization e.g.
CEMENT-LIME-READYMIX CONCRETE ASSOCIATIONS
KGHM POLISH COPPER, ZGH BOLESŁAW etc.

USGS
AMS ABARE Australia
CMYNR Canada
Copper ISG
Lead&Zinc ISG
Nickel ISG
Nacional de Producao do Brasil
World Metal Statistics
Oil Information
AE de la Mineira Mexicana
IMY India
Steel Statistical Yearbook
Main scope

• The vertical structure of each mineral commodity has been clearly defined and covers all varieties of commodities, obtained from different sources in a specific process, involving all stages of production and trade.

• This is utilized as a tool for analysis of the mineral management in Poland, UE and World.

• The vertical structure of mineral commodities coincides very well with the classifications of various products, i.e. in Poland.
  - in production statistics the Polish Classification of Goods and Services (PKWiU) in force since 1\textsuperscript{st} July of 1999, based on the European Classification Nomenclatures des Activitites de Communante Europeane (NACE), which replaced Systematic List of Commodities (SWW), being in force since 1971
  - in foreign trade statistics – the Combined Nomenclature (CN) in force since 1992, based on the EU Combined Nomenclature and revised in subsequent years
On the basis of the vertical structure of the each mineral commodity it is possible to calculate the real consumption:

real consumption = production – exports + imports ± stocks

or

apparent consumption = production – exports + imports

Apparent consumption showing annual level of demand of each mineral commodity.

Monetary date of trade in mineral commodities are very useful to estimate the value of trade in these sectors.

The vertical structure of mineral commodities showing the relationship between domestic and international markets and showing surpluses or deficits of mineral commodities in country, regions.
Problems

• The lack of the quality standards of many mineral commodities, mainly of industrial minerals and coal also are the threshold (barrier) for real statistics data on the regional and world scale

• The different quality standards for coal production and trade (much higher than in the output/production) do not indicate the real consumption of that mineral commodity

• The different quality data is of the output or production for many industrial minerals i.e. kaolin, feldspar, etc. have been made mistakes at regional or world statistics

• Other huge problem is lack of many data, because companies, organizations or administration do not give that due to the confidentiality or secret requirements

• In spite of many difficulties, many national geological surveys as BGS, USGS, CGS, BRGM, BGR, PGI-NRI and MEER still develop mineral commodities statistics and data, often at the unformal meetings, for example the International Statistics Group – mainly for ores and metals

• At the request of the readymix concrete producers in Poland authors of Mineral Yearbook of Poland on the basis of output, quality of raw sand and gravel material and knowledge of technical equipment in quarries have been estimating production of classified gravel, mixes and sand, as a raw sand and mixes, used mainly in the road construction.