

THE STRUCTURE OF WORLD-WIDE ENERGY AND MINERAL COMMODITIES

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Annually huge quantities of mineral and energy commodities are extracted for economic purposes on a global scale. In the 2000s 5 billion tones of metallic ores were exploited and used as raw materials for recovery of almost 0.7 billion tones of metal by industrial treatment and metallurgic processing (Fig. 2). A lot of nonmetallic ores and industrial minerals (magnesite, chalk, phosphates, potash salts, native sulphur, unrefined salt, gypsum, natural abrasives, kaolin, bentonite, talc, baryte and witherite, illmenite, zirconium, fuller’s earth, andalusite, kyanite, sillimanite, borate minerals, arsenic trioxide, natural graphite, mica, etc) are extracted and obtained as concentrates; in total about 0.6 billion tones, but the actually exploited quantities are bigger. Building stone exploitation is also on a large scale (6.0 billion tones) and fossil fuels were exploited in huge quantities (in total 9.2 billion tones coal equivalent; Fig. 1): hard coal (3.9 billion tones), lignite (0.8 billion tones), crude petroleum (3.4 billion tones), natural gasoline (0.03 billion tones), natural gas (0.003 billion tones coal equivalent) and peat for fuel (0.017 billion tones). In the 2000s the world production of mineral and energy commodities exceeded 21 billion tones.

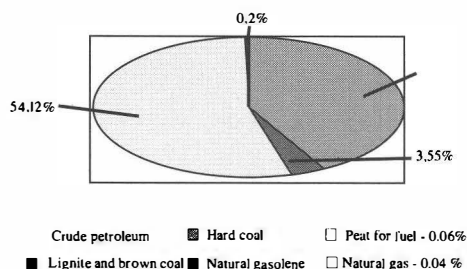


Fig.1 Percentage of global fossil fuels production; based on coal equivalent tones

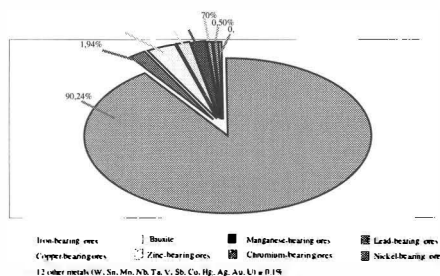


Fig. 2 Percentage of global metal content of ores and concentrates intended for treatment for metal recovery in the 2000s.

References

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