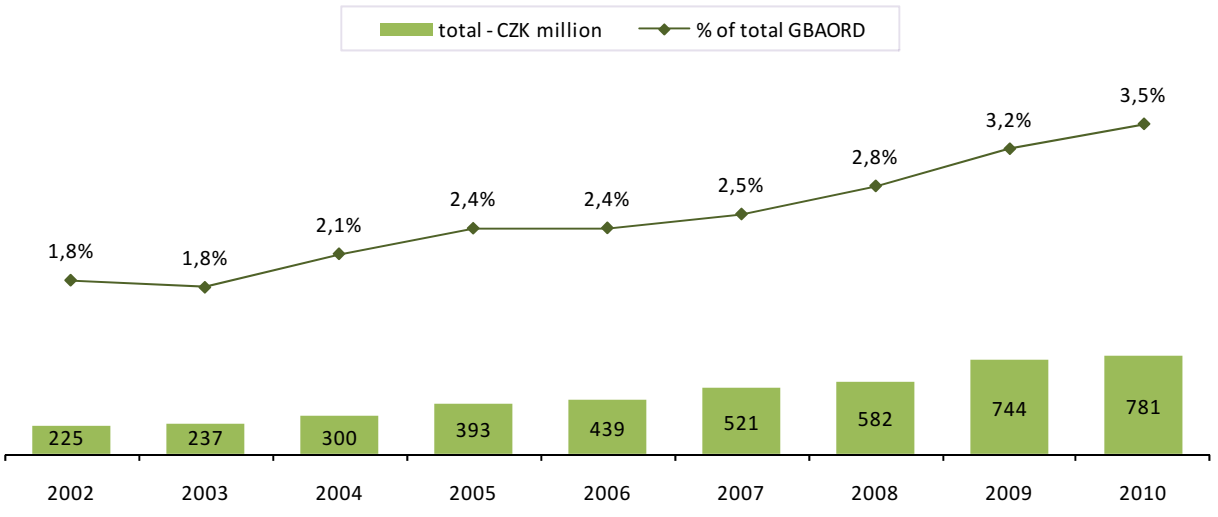
2.5 PRODUCTION, DISTRIBUTION AND RATIONAL UTILIZATION OF ENERGY (SEO 05)

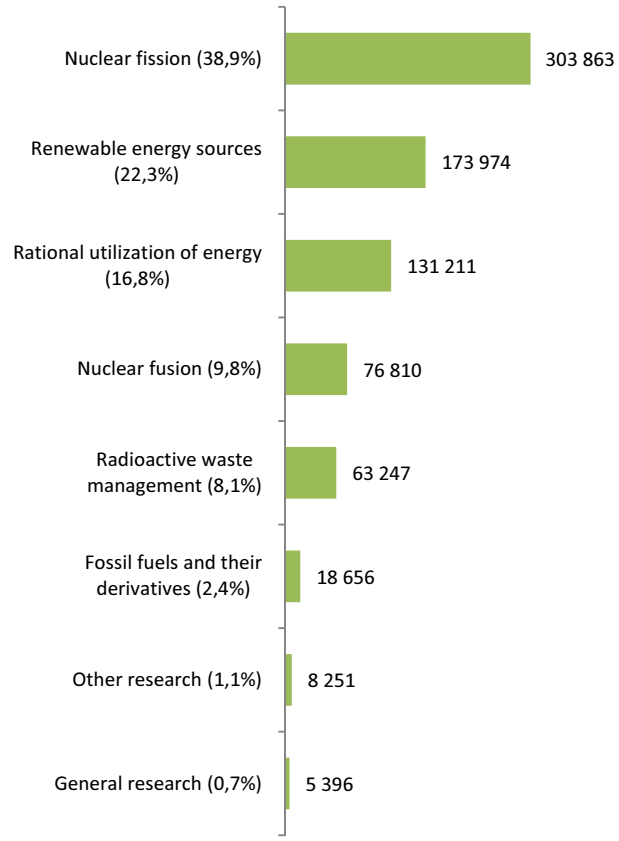
The socio-economic objective includes research on production, storage, transmission, distribution and rational utilization of all forms of energy, as well as research processes aimed at increasing the efficiency of production and distribution of energy and studies of its conservation.

- **Expenditures on research and development in production, distribution and rational utilization of energy have grown every year since 2002. The average annual growth rate reached 16.8% between 2002 and 2010. In addition, the share of this socio-economic objective on the total GBAORD has been increasing (from 1.8% in 2002 to 3.5% in 2010), expect for the years 2003 and 2006, when the share on total GBAORD stagnated.**
- Most of the funds in SEO 05 were directed to R&D in nuclear fission (CZK 303,863 thousand). The proportion of the total SEO 05 was 38.9% in 2010. This is followed by R&D in renewable energy sources (CZK 173,974 thousand; 22.3%), where the sub-category SEO 05054 – Research into biomass conversion received the largest funding (CZK 155,653 thousand; 89.5% of the total SEO 0505 funds). The share of R&D in the rational utilization of energy reached 16.8% (CZK 131,211 thousand). The smallest funding went to R&D in fossil fuels and their derivatives (CZK 18,656 thousand; 2.4%), if SEO 0509 – Other research (1.1%) and SEO 5000 – General research (0.7%) are not taken into account.
- In the period 2005–2010, the highest average annual growth in support was recorded for SEO 0501 – Fossil fuels and their derivatives (an annual increase of 66.2%) and SEO 0505 – Renewable energy sources (29,4%), while the largest average annual decline was found in General research (a annual decrease of 33.1%) and Other Research (a annual decrease of 8.2%).
- Targeted funding played the dominant part in funding the research and development of this objective from the state budget (CZK 632,183 thousand; 80.9% of SEO 05). Four objectives were supported by means of institutional funding. Institutional funding (CZK 60,241 thousand; 78.4%) prevailed over targeted funding (CZK 16,569 thousand; 21.6%) in case SEO 0504 – Nuclear fusion. SEO 0502 – Nuclear fission was supported by means of institutional funding with the share of 28.8%.
- The largest funding for research and development in this socio-economic objective was provided by the Ministry of Industry and Trade (CZK 580,192 thousand; 74.2% of total SEO 05) and the Ministry of Education, Youth and Sports (CZK 166,328 thousand; 21.3%). On the other hand, the smallest funding was granted by the Academy of Sciences of the Czech Republic and the Ministry of Interior with the aggregate share of 0.3% (CZK 2,347 thousand). A proportion of 0.7% was given by the State Office for Nuclear Safety (CZK 5,500 thousand). Only the Ministry of Education, Youth and Sports provided the SEO 05 any institutional funding of CZK 149,225 thousand.

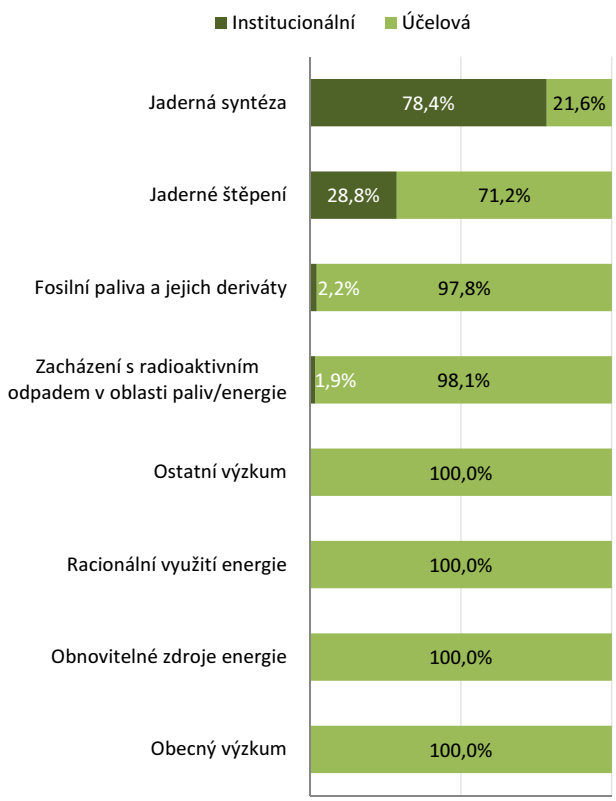
GRAPH 2.5-1: Production, distribution and rational utilization of energy (SEO 05) in mil. CZK / as % of total GBAORD; 2002–2010



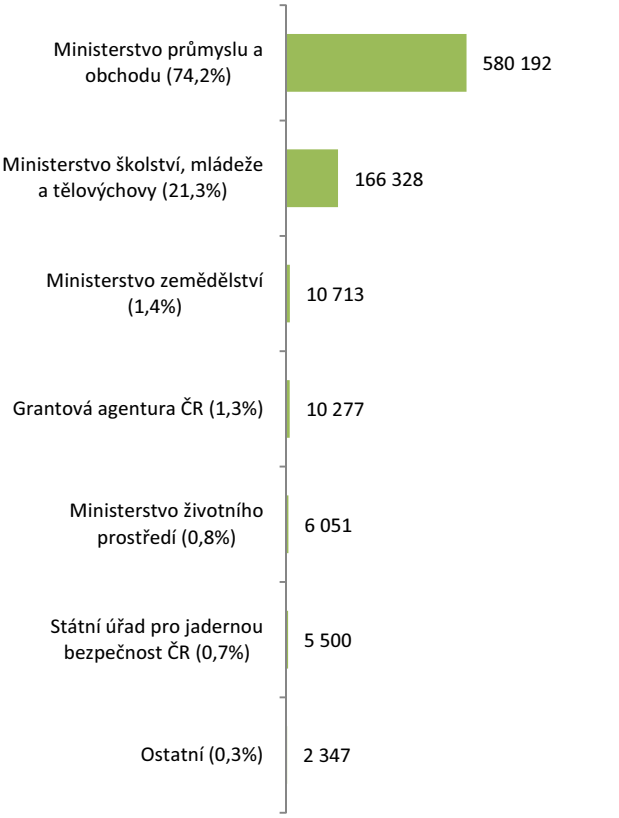
GRAPH 2.5-2: Production, distribution and rational utilization of energy (SEO 05) – objectives by NABS1992 (% and CZK thousand): 2010



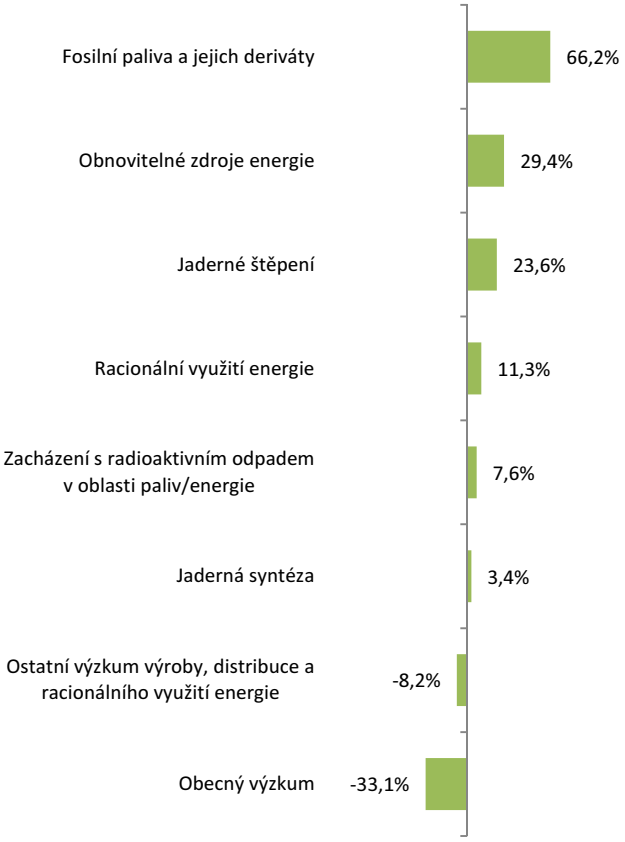
GRAPH 2.5-3: Production, distribution and rational utilization of energy (SEO 05) – the structure by the type of funding; 2010



GRAPH 2.5-4: Production, distribution and rational utilization of energy (SEO 05) – the support by providers (% and CZK thousand): 2010



GRAPH 2.5-5: Production, distribution and rational utilization of energy (SEO 05) – the average annual growth rate; 2005–2010



NOTE: In graphs 2.5-2 and 2.5-4, the proportions of SEO 05 are in brackets.