

Energy priorities in R&I of the Czech republic

Webinar: Roadmap to tracking public energy research investment

5th of April 2023



Program

- 1) National energy R&I priorities - institutional arrangements**
- 2) Collecting energy R&I data**
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National energy R&I priorities - institutional arrangements



National energy R&I priorities and strategic documents

- ➔ **Main strategic documents (covering all relevant sectors):** National Research, Development and Innovation Policy of the Czech Republic 2021+; National priorities for oriented research, experimental development and innovation; National Research and Innovation Strategy for Smart Specialisation of the Czech Republic
- ➔ **Main priorities formulated in State Energy Policy of the Czech Republic (update under preparation):**
 - ▶ Energy infrastructure (smart grids etc.) including power accumulation (battery storage etc.)
 - ▶ Technologies for harnessing energy from renewable (bioenergy etc.) and secondary sources
 - ▶ Energy safety, and development of advanced of nuclear sources
 - ▶ Heat/cooling generation and distribution (advanced district heating systems etc.)
 - ▶ Technologies and processes enabling further system integration
 - ▶ Energy efficiency (in buildings, industry etc.)
- ➔ **Short/mid-term priorities translated through THÉTA program (THÉTA II.)**
- ➔ **Priorities are aligned with SET Plan priorities (if applicable, not all are directly relevant for CZ)**

Main strategic documents related to R&D

- ➔ **National priorities for oriented research, experimental development and innovation:** Approved in 2012; 6 defined priority areas, 24 subareas, 170 specific objectives ([link](#)).
- ➔ **Innovation strategy of the Czech Republic 2019-2030:** Approved in 2019; strategy for putting CZ among the most innovative countries in the EU ([link](#)).
- ➔ **National Research and Innovation Strategy for Smart Specialisation of the Czech Republic (RIS3 strategy):** Main aim is to focus EU, national, regional and private funds to the most promising sectors of research and business; is currently updated ([link](#)).
- ➔ **State Energy Policy of the Czech Republic:** One of the five strategic priorities are focused on R&D&I ([link](#)).
- ➔ **National Energy and Climate Plan of the Czech Republic:** One of the five priorities for EnU is devoted to R&D ([link](#)).

Sources of potential financing of energy

→ Relevant programs of Technology Agency of CZ (TA CR)

- ▶ **THÉTA** – program specifically focused on applied R&D in energy sector (initiation of follow-up program)
- ▶ **KAPPA** – support for international cooperation of entities from the Czech Republic with partners from **Norway, Iceland and Liechtenstein in applied research (30 % allocated for CCS/CCU)**
- ▶ **National Competence Centers** - support for the building of a stable and long-term base of applied research (not related only to energy).
- ▶ **Environment for life & Transport 2020+**

→ Other programs

- ▶ Horizon 2020 (Horizon Europe)
- ▶ Investment fund
- ▶ Large research infrastructures



Collecting energy R&I data



Collecting energy R&I data

- ➔ Publicly funded R&D projects can be searched **through public databases and portals**. These are mainly the ISVAV (<https://www.rvvi.cz/>) and the STARFOS portal (<https://starfos.tacr.cz/cs>).
- ➔ Based on individual code and project name, basic information can be found. These are mainly: **the amount of eligible costs and the amount of public support** (not for every year but only total amount), basic information about an institution carrying the research, project solution time, program of a concrete project, public tender number, R&D categories field, etc.
- ➔ Each specific project has an individual code that serves as a unique identifier. **R&D projects data are collected by the Technology Agency of the Czech Republic (TA CR).**

Collecting energy R&I data

- ➔ The above-mentioned public databases are managed by the **Technology Agency of the Czech Republic (STARFOS)**, respectively by the Research, Development and Innovation Council (ISVAV)
- ➔ The Ministry of Industry and Trade with the help of the Technology Agency of the Czech Republic (TA CR), which has direct access to background data, such as eligible costs and public support for each individual year, searched specific energy projects in the Czech Republic within the STARFOS database
- ➔ These projects were supplemented by already searched projects, as the search was carried out in 2015 while preparing one of the previous questionnaires. These projects were subsequently exported, including the key information necessary to complete the questionnaire

Dissemination

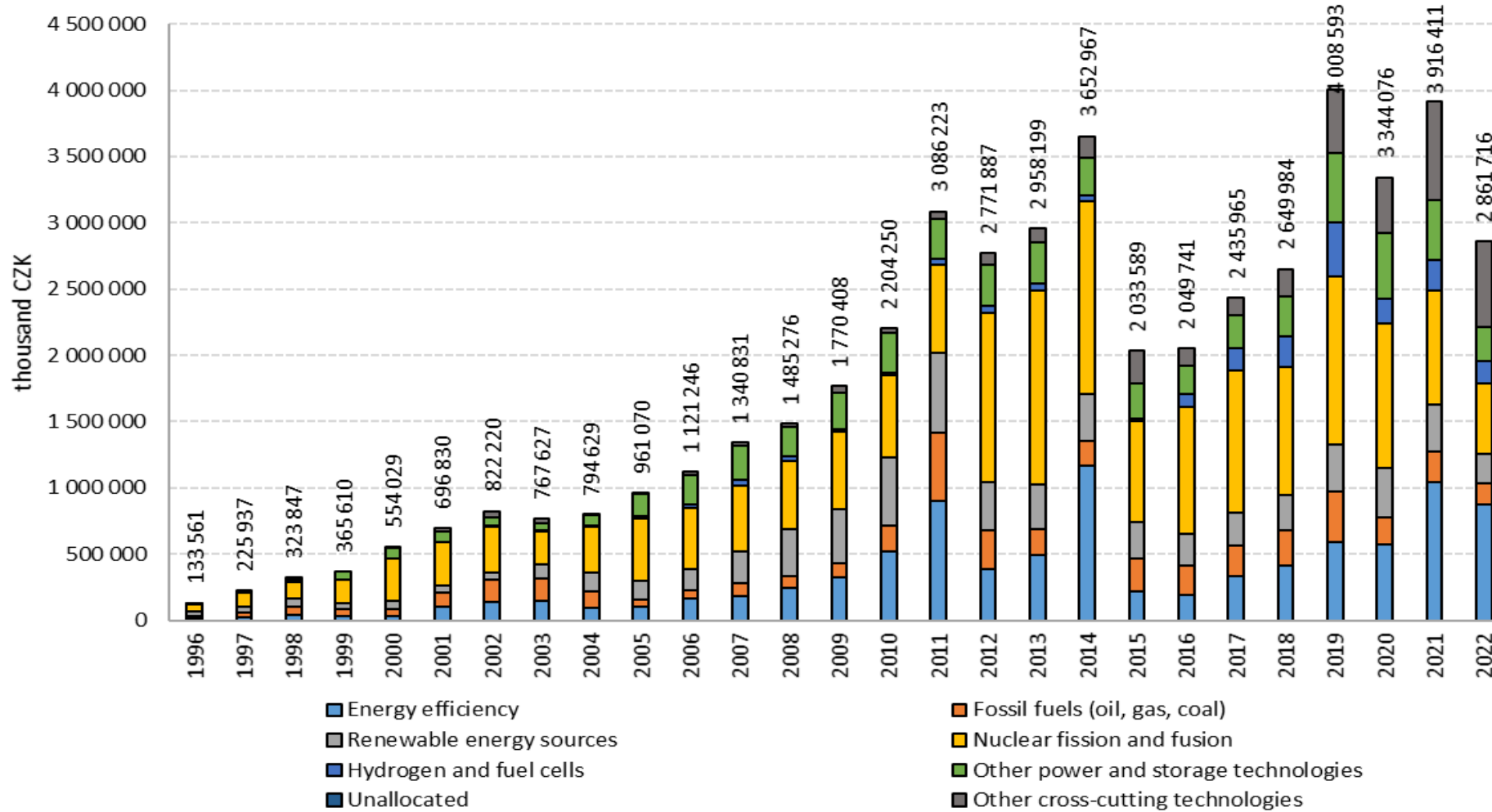


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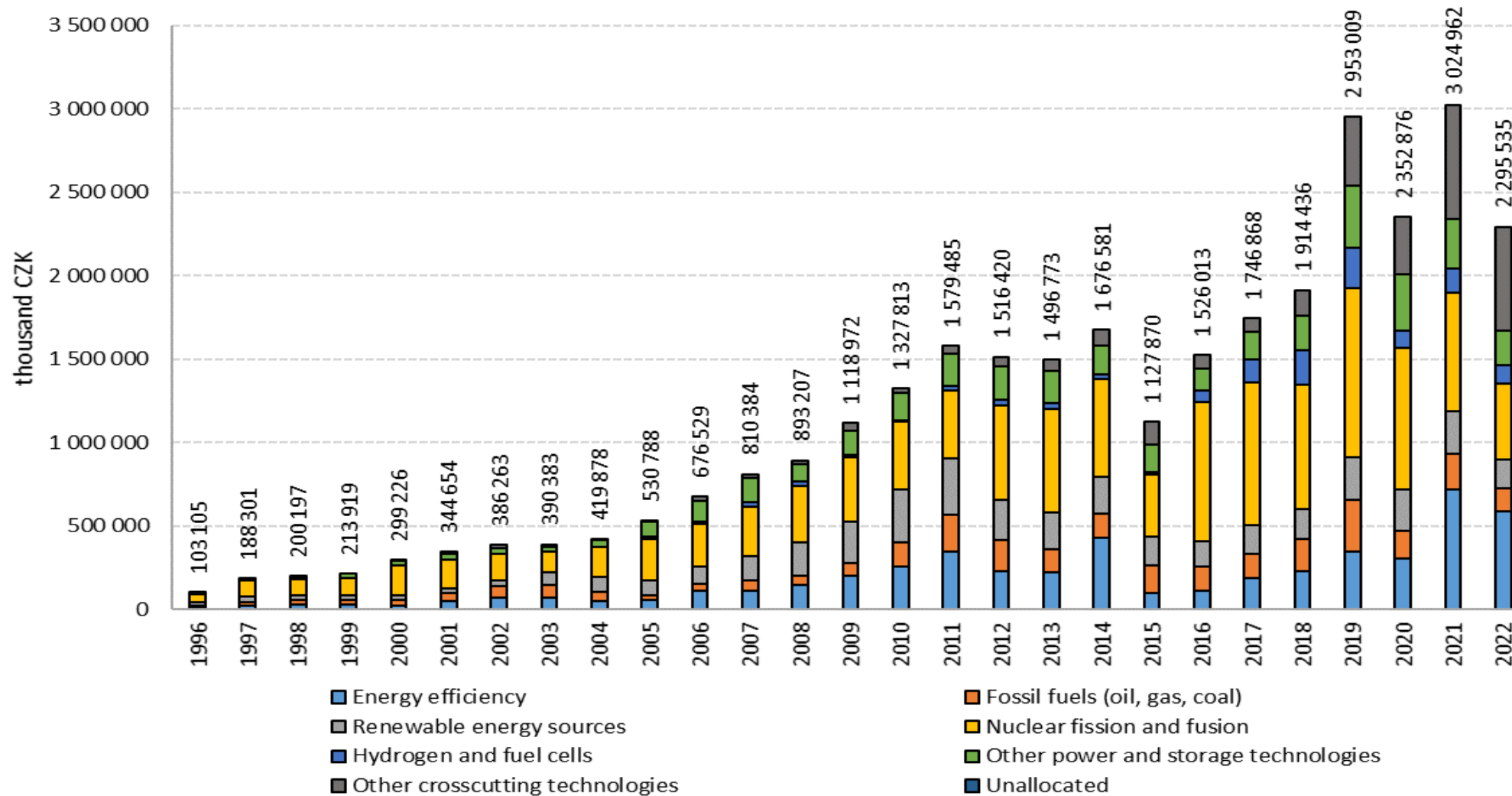
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Eligible costs for RD&D



Public budget on energy RD&D



„Backup“ slides



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Division of responsibilities in R&D

- ➔ **Research and Development Council** – preparation of national policy in the field of R&D and the implementation of this policy, monitors and evaluates research organizations, prepares an annual analysis and it is a part of the approval process of new support programs and schemes
- ➔ **Technology Agency of Czech Republic (TA CR)** – preparation and realization of own support programs of applied research and innovation in cooperation with 10 central government bodies
- ➔ **Ministry of Industry and Trade** – responsible for the area of industrial research and is also recognized as a guarantor for innovation (although it is not strictly codified in Act no. 130/2002 Coll.), which are primarily supported from the operational programs under the jurisdiction Ministry of Industry and Trade
- ➔ **Czech Science Foundation (The Grant Agency of the Czech Republic – GA CR)** – funding of basic (frontier) research on a competitive basis, promotion of international cooperation in basic research
- ➔ **Czech Academy of Sciences** – conduct of basic research in a broad spectrum of the natural, technical and social sciences and the humanities
- ➔ **Ministry of Education, Youth and Sports** – support of research, development and innovation in the Czech Republic is since 2002 governed by the Act No. 130/2002 Coll. on the Support of Research and Development from Public Funds

Clean R&I objectives in NECP

- ➔ Based on „National priorities for oriented research, experimental development and innovation“ app. **18 % of overall public finances should be allocated on a R&D related to sustainable energy and material research** (but only indicative since public expenditure in R&D are not distributed based on sectorial bases).
- ➔ The Czech Republic thus **has not set in NECP any specific quantifiable targets for R&D related to clean energy technologies** (other than indicative 18 % mentioned above and allocation of 0,15 bn. EUR for 2018-2025 through THÉTA program).
- ➔ We are considering **introducing more detailed targets (probably only indicative) in the update of NECP (2023/2024)** and we will provide more details in progress report on fifth dimension.
- ➔ In this regards we **welcome meetings „on Clean energy public R&I policy implications“** (29.4.2021, 4.5.2021) focusing on questions relating to setting clean R&I objectives and keeping track of the progress.

Thank you for your attention

