



Czech Republic

Review of past and existing policy options for
the acceleration of electric motor renovation

EU-MORE

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List of Acronyms

Acronym	Text
API	Business and Innovation Agency
ERDF	European Regional Development Fund
MIT	Ministry of Industry and Trade
OP TAC	Operational Program Technologies and Application for Competitiveness



1. Czech Republic

Introduction and description of the national policy framework and important related national programmes, measures and/or developments:

Taken directly from [CZ NECP \(2019\)](#):

1.1.1.1 Political context

"The Czech Republic is a stable democratic State, a member of the UN, OECD, EU and NATO and other international organisations. The Czech Republic has a directly elected President and a bicameral Parliament, which consists of the Senate and the Chamber of Deputies.

As part of self-government, the Czech Republic is divided into 14 self-governing regions, 76 districts and more than 6 200 self-governing municipalities. Municipalities and regions are managed by elected assemblies. Regions are headed by governors, statutory cities by statutory mayors and cities and municipalities by mayors (starosta). Prague has a special status, being simultaneously a region, statutory city and the capital."

(...)

3.1.1.5 Industry sector

"In order to reduce greenhouse gas emissions in the industry sector, it is crucial to implement cross-cutting measures based on EU legislation. In addition to the EU ETS, especially integrated pollution prevention and control, in accordance with Act No 76/2002, on integrated prevention, has a major contribution to reducing emissions. Emissions of fluorinated gases are regulated by Act No 73/2012, on ozone-depleting substances and on fluorinated greenhouse gases, and Implementing Decree No 257/2012, on the prevention of emissions of ozone-depleting substances and on fluorinated greenhouse gases, which transpose the relevant EU regulations.

The achievement of climate and energy goals in the area of manufacturing industry, which includes, for example, the steel, chemical, ceramic, cement, glass, paper, brick and lime industries, is a separate and very complex issue. These industries have a particularly significant potential in this regard and this fact should be considered in the framework of creating national strategies and policies. It is mainly due to the specific needs of this sector and the great variety of technologies used and developed in it that this sector is not dealt with in detail in the submitted material. The prerequisite is the rapid development of an independent industrial policy of the Czech Republic for the period 2021-2030 with a view to 2050, which will address the sector in a comprehensive way, i.e. including maximising support (including state support) in developing and applying all technologies contributing to climate and energy goals, physical and price affordability of energy, maximum protection of competitiveness, etc. In this respect, the 'National Economic Strategy 2030' is being prepared, which includes also the National Investment Plan."

Brief evaluation of the overall size and scope of national actions in relation to the replacement of electric motors and the EU-MORE project as a whole

One measure relating to the EU MORE objective was identified and verified through the CZ Ministry, SVN and ENVIROS, namely the **Operational Program Technologies and Application**

for Competitiveness (OP TAC) prepared as part of the funding available through the *European Regional Development Fund (ERDF)*

No other related policy measures were found relating to replacement of electric motors in processes.

1.1 Measure 1: Operational Program Technologies and Application for Competitiveness 2021-2027

	Overview
Short Description	The OP TAC was prepared for the operational programme of the ERDF financial mechanism; providing investment aid for increasing the energy efficiency of technological and production processes in industry and on improving the energy performance of buildings intended for business.
Responsible Authority	The managing authority of Operational Program Technologies and Application for Competitiveness (OP TAC) is the Ministry of Industry and Trade (MIT) (Ministerstvo Průmyslu a Obchodu) ¹ . The Business and Innovation Agency (API) acts as the intermediate body. ²
Status	Ongoing
Issue Date	2021
Start Date	2022
Ending Date	2027
Duration	60 months (5 Years)
Reference:	https://www.agentura-api.org/cs/op-tak/ https://www.mpo.cz/en/

1.1.1 Main Description

A detailed description of the policy measure – including references to (if applicable) anchoring national law, EU directives, other schemes.

The specific objective 4.1 Energy efficiency measures aims to provide investment support to increase energy efficiency in the business sector (industry and services) and to improve energy performance of buildings intended for business.

- increasing energy efficiency of production and technological processes;
- improving the energy performance of buildings (building envelope, technical equipment);
- reconstruction and replacement of energy production equipment for own consumption;
- reconstruction of electricity, gas and heat distribution;
- recovery of waste energy in production processes;
- construction of buildings in high (passive) energy standard;

¹ <https://www.mpo.cz/en/>

² <https://www.agentura-api.org/cs/op-tak/>

- implementation of monitoring, automation and energy management features in buildings;
- energy management.

From geographical point of view, the programme supports improvements in the energy performance of the industry sector in all regions of the Czech Republic, excluding the capital City of Prague.

The support may have a form of a grant or a financial instrument. The latter is intended to be provided to small projects with shorter payback periods.

The lifetime savings in the case of the implementation of investment measures exceeds the length of the commitment period (10 years for industrial technologies; 12-30 years for buildings) while for the energy management is considered for 2 years.

The operational programme consists of 5 priorities that are further divided into specific objectives, each of which has defined supported activities. The target group is SMEs, and specific activities are suitable for large enterprises. Newly, it is also possible to support the categories of enterprises marked as mid-cap or small mid-cap companies.

The 5 defined priorities are:

1. Research and Development and Innovation and their Digital Transformation
2. Growth and Competitiveness of SME's
3. Digital Infrastructure
4. Low Carbon Economy
5. More Efficient Use of Resources

Priority #4 is most related to the EU MORE project and defines 3 subgoals:

- 4.1 Promoting Energy efficiency and reducing greenhouse gas emissions
- 4.2 Promoting Renewable Energy
- 4.3 Developing Smart Energy Systems and storage

The activities under SC 4.1 are most related to EU MORE objectives.

Priority access 4 is allocated 17,2% (0,5) bn EUR of the programs funding

One of the obligatory annexes to the subsidy application is an energy assessment / energy performance certificate for the project carried out by a certified energy specialist. The overall energy savings under the programme will be calculated based on the ex-post evaluations that verify each implemented project (individual measure).

	Characteristics
Budget	<p>A total of EUR 3.2 billion, equivalent to approximately CZK 81.5 billion, has been prepared for this operational programme from the ERDF.</p> <p>EUR 0.5, (17,2%) of that total funding is allocated to priority action 4. Low Carbon Economies, for which the measures relating to EU MORE are part of subgoal 4.1. Promoting energy efficiency and reducing greenhouse gas emissions.</p>

	<p>In the previous period 44.5% of the funds³ were part of increasing energy efficiency of production and technological processes, subgoal 4.1. The CZ ministry estimates of those funds 10% to be used on motor improvements., meaning an estimated:</p> <p>EUR 22,25 million was spent on EU-MORE related motor improvements or an approximate 5% from the 0.5 bn EUR under priority action 4. (estimated and verified by the CZ ministry directly).</p>
Financing of the measure	Co-financing of projects with support from the OP TAC
Policy focusses	Measure overall – Both , for the activities under SC4.1 Promoting Energy Efficiency and Reducing Greenhouse Gas Emissions Primarily Physical .
Intervention Type	Promotion of Energy Efficiency in Businesses
Main Barriers Addressed	High initial cost, financial viability of projects
Key Driver(s)	<p>Article 7/8 EED</p> <p>The need to reduce the Czech Republic's final energy consumption and to meet the obligation of new energy savings under Article 7 of Directive 2012/27/EU of the European Parliament and of the Council, as well as the need to contribute to the fulfilment of the targets in relation to the renovation and construction of buildings under Directive 2010/31/EU of the European Parliament and of the Council on the energy performance of buildings.</p>
Replicability	Medium – blanket measure that relies on the ERDF funding
EU Inclusion	Yes – the OP TAC is the flagship program implemented in the CZ supporting Czech entrepreneurs meet the energy efficiency requirements set.
Related Characteristics	This is a very broad blanket measure which covers much more than Electric Motors.

³ Verified by the CZ Ministry

1.1.2 Impacts

A detailed description of the final (expected) results of the measure implementation and any achievements related to the measure implementation.

Each project is subject to a substantive evaluation process of proposed individual energy saving measures. The evaluation also assesses the energy savings resulting from the implementation of the project ex-ante. Project execution and energy savings are verified for all projects even ex-post after project implementation. The ex-post control is supported by documentation demonstrating the implementation of the measure and an ex-post random on-the-spot check of a randomly selected sample of projects.

The ex-ante and ex-post energy evaluation of individual measures and calculation of savings are carried out by independent certified energy specialists. The processing of the documents in question, the accuracy of the calculations and the declared savings are subject to control by the State Energy Inspectorate and by the provider of financial support when checking the aid application.

Verification of achieved energy savings according to the criteria of Article 7 and Annex V of the Directive is carried out by the relevant department of the Ministry of Industry and Trade responsible for the implementation of the energy efficiency improvement policy.

Expected impact figures of the OP TAC program are:

Cumulative total savings for 2030: 8.8 PJ

Public budgets: k€ 400,000.0 from 2022 to 2027

Investments: k€ 1,012,658.0 from 2022 to 2027

	Impacts																																			
Case level impact	Medium																																			
Policy level impact	High																																			
Size	<p>Unknown – however in theory all electric motor replacements are potentially supported through this funding measure in varying degrees.</p> <p>In 2022: EUR 22,25 million was spent on EU-MORE related motor improvements or an approximate 5% of the 0.5 bn EUR available for priority action 4⁴.</p>																																			
Energy	<p>Cumulative annual savings:</p> <table><tr><td>Year:</td><td>2021</td><td>2022</td><td>2023</td><td>2024</td><td>2025</td><td>2026</td><td>2027</td><td>2028</td><td>2029</td><td>2030</td><td>2020</td></tr><tr><td>PJ:</td><td>0</td><td>0.21</td><td>0.419</td><td>0.629</td><td>0.838</td><td>1.048</td><td>1.257</td><td>1.467</td><td>1.467</td><td>1.467</td><td>-</td></tr></table>												Year:	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2020	PJ:	0	0.21	0.419	0.629	0.838	1.048	1.257	1.467	1.467	1.467	-
Year:	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2020																									
PJ:	0	0.21	0.419	0.629	0.838	1.048	1.257	1.467	1.467	1.467	-																									

⁴ Estimated figure received from CZ Ministry of Industry and Trade

	Total: 8.8 PJ
Impact evaluation	<ul style="list-style-type: none"> Reducing the energy intensity / improving the energy efficiency of production and technological processes Modernisation of traction substations and traction power supply system

Description of the method used for calculating the final energy- / cost- savings achieved through the measure.

See impacts section above.

1.1.3 Lessons Learnt

Description of the lessons learnt and/or (initial) feedback gathered in response to the measure's implementation. The main barriers found that hamper and/or the conditions that are necessary for the implementation of the measure.

This is the fourth iteration of the flagship programme in the CZ which has led to the definition of the following 5 priority axes for the subsequent program to address the main barriers.

PA 1 Promotion of research and development for innovation

PA 2 Development of entrepreneurship and competitiveness of small and medium-sized enterprises

PA 3 Efficient energy management, development of energy infrastructure and renewable energy sources, support for the introduction of new technologies in the management of energy and secondary raw materials

PA 4 Development of high-speed Internet access networks and information and communications technologies

PA 5 Technical assistance

The budget and name of related previous programs were OPIE, OPEI, and OPEIC with allocated budgets:

OPIE (2004-2006): 0,26 bn EUR

OPEI (2007-2013): 3,67 bn EUR

OPEIC (2014-2020): 4,3 bn EUR

OP TAC (2021-2027): 3,2 bn EUR (not-final)

	Lessons Learnt
Key takeaways	<ul style="list-style-type: none"> Clear Communication and Guidance Streamlined Application Process Target Support for SMEs
Recommendations	

Linked measures	ERDF funded programs: OPIE (2004-2006): 0,26 bn EUR OPEI (2007-2013): 3,67 bn EUR OPEIC (2014-2020): 4,3 bn EUR OP TAC (2021-2027): 3,2 bn EUR (not-final)
Reference(s)	https://www.agentura-api.org/cs/op-tak/ https://www.mzp.cz/C1257458002F0DC7/cz/statni_politika_zivotniho_prostredi/\$FILE/SPZP-2030_4AK_EN-20220525.pdf https://sustainabledevelopment.un.org/content/documents/15717Czech_Republic.pdf https://energy.ec.europa.eu/system/files/2020-03/cs_final_necp_main_en_0.pdf
Other	
Thoughts, comments, considerations ...	

Table 1: National Policy Measure Overview – Czech Republic

#	Measure Title	Short Description	Type of Measure	Start Year	End Year	Duration	Target Groups	Source link / Reference	Case Level Impact of the measure
1	Operational Program Technologies and Application for Competitiveness 2021-2027(OP TAC)	The OP TAC provides investment aid for increasing the energy efficiency of technological and production processes in industry and improving the energy performance of buildings intended for business.	Fund	2021	2027	6	Business	https://www.agentura-api.org/en/op-tak/	Medium