EU-MORE

EUropean MOtor REnovation initiative

Estonia

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

EU-MORE

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List of Acronyms

Acronym	Description	English
MKM	Majandus- ja Kommunikatsiooniministeerium	Ministry of Economic Affairs and Communications
ENMAK	Energiamajanduse Arengukava Aastani	Estonian Energy Policy Development Plan
NECP	-	National Energy and Climate Plan
EMTAK	Eesti Majanduse Tegevusalade Klassifikaator	Estonian Classification of Economic Activities

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REnovation initiative

1. ESTONIA

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

The Estonian Ministry of Economic Affairs and Communications elaborates and implements national policies and development plans in the energy sector. The Ministry of the Environment
The Energy Sector Development Plan (ENMAK, 2017)[1] outlined Estonia's energy sector's vision with the aim to ensure affordable and accessible energy supply for consumers, aligning with the European Union's long-term energy and climate goals. In the ENMAK, it is stated that by 2030 the national primary energy consumption will be decreased by 10% and the energy intensity of Estonian economy more than halved (from 5.6 to 2 MWh/k€ GDP) with respect to 2012 values.
The ENMAK emphasizes enhancing energy efficiency in the building and transport sectors rather than focusing on industry. This approach is justified by the trend observed in the Estonian economy over the past decade, where there has been a shift towards services. Consequently, the industrial sector lags in terms of final energy consumption with a share of 16%, while residential and transport sectors account for nearly two-thirds of the consumption[2].
A year later, in the National Energy and Climate Plan[3] (NECP, 2018), formulated to fulfill the requirements outlined in Regulation (EU) 2018/1999 on the Governance of the Energy Union and Climate Action, the Estonian government reformulates the targets to be achieved by 2030 in terms of reduction of primary energy and final energy consumption, respectively of 2.7 and 4.2 % from 2017 values. The new measures listed in the NECP focused once again on the building and transport sectors, in particular concerning residential heating and cooling, reduction of the transport demand and better organization of the mobility system.
The same focus on building renovation and district heating enhancement is found in the 2021-2027 Strategic Plan[4], which plans to allocate 3.37 billion euros from European Union cohesion policy subsidies. One of the targets for the subsidies is the enhancement of resource utilization efficiency in companies, which comprehends the improvement of energy efficiency and renovation of non-efficient appliances such as electric motors [5].

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

No specific measures targeted to the enhancement of the energy efficiency in the industrial sector have been declared, since the focus is put on buildings renovation and district heating for the residential sector. Energy efficiency in industries is somehow accounted with measures supporting the efficient use of resources in companies.

[1] https://www.mkm.ee/en/energy-sector-and-mineral-resources/energy-economy/energy-sector-development-plan
[2] https://iea.blob.core.windows.net/assets/21965e0d-c9a9-4617-b1ad-5b4539d91ad7/Estonia_2019_Review.pdf
[3] https://energy.ec.europa.eu/system/files/2019-03/ec_courtesy_translation_ee_necp_0.pdf
[4] https://www.iea.org/policies/13883-2021-27-strategic-plan-energy-efficiency-of-residential-buildings
[5] https://www.rtk.ee/rohelisem-eesti#majandus-ja-kommunikatsiooniministeerium

Estonia is thus lagging in the enhancement of industrial energy efficiency and is definitely not a frontrunner in the field of electric motors renovation. This is partially motivated by the minor share of the industrial sector in the national final energy consumption, compared to the residential and transport ones.

Measure 1: Grant support for resource efficiency in enterprises

	Overview
Short Description	Grant (up to 200.000 € for small projects) aimed at increasing resource productivity in companies through the introduction of innovative technologies and solutions.
Responsible Authority	Estonian Ministry of the Environment
Status	Ongoing
Issue Date	January 2017
Start Date	January 2017
Ending Date	December 2023
Duration	21 months
Reference:	- https://www.riigiteataja.ee/akt/103082018003 - https://ringmajandus.envir.ee/sites/default/files/2022-08/10.08_L%C3%B5pparuanne_Ressursit%C3%B5hususe%20meetme%20tulemuslikkuse%20ja%20m%C3%B5ju%20hindamine.pdf -

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 grant support is based on the national Regulation 30/07/2018 No.27, resulting from the article 14 of the Structural Support Act 2014-2020. The grant is targeted to small and medium enterprises in the mining and manufacturing sectors[6] and provides up to 200.000 € to cover the costs for small projects promoting the best possible resource-efficient technology, supporting resource management systems and IT applications. The grand also allowed, until August 2018, the financing of large projects with a maximum support of 2 million €. Among the eligible activities there is the acquisition and/or replacement of equipment with innovative and resource-saving ones. For energy efficiency projects, the maximum rate of support for a large enterprise is 45%, for a medium-sized enterprise 55% and for a small enterprise 65% of the eligible costs, but not

[6] EMTAK (Classification of Estonian economic activities) section B/subsections 05-09 and section C/subsections 10-33 except for subsection 12

more than 50% of the project costs. Eligible costs are investment costs in tangible and intangible assets, setup costs related to investments, costs of trainings of the support recipient's personnel. The applicants must be in possess of an energy audit not older than 2 years, able to certify the attainable energy savings.

	Characteristics
Budget	111 million € (up to 200 thousand € per project)
Financing of the measure	European Union Regional Development Fund
Policy focusses	[Product / service] (Indication if the policy support package targets/focuses on product ('physical') interventions or service ('soft') interventions
Intervention Type	Equipment upgrade
Main Barriers Addressed	High investment cost
Key Driver(s)	National Law on structural support for the period 2014–2020
Replicability	High
EU Inclusion	No
Related Characteristics	No focus is given to electric motor renovation, but the among the promoted measure's activities there is the acquisition and/or replacement of equipment with innovative and resource-saving ones.

1.1.2 Impacts

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

Until February 2022 a total number of 138 companies received grant support, surpassing the target of 135 set for 2022. The resource productivity in 2019 was 0.54 €/kg against 0.44 €/kg of 2012 (+18.5%). The impact of the measure until December 2021 was of 214 GWh of overall energy saving[7]. No disaggregated data is available concerning the type of implemented projects or GHG emissions savings.

	Impacts
Case level impact	-
Policy level impact	High
Size	Unknown
Energy	214 GWh (overall)

[7] https://www.odyssee-mure.eu/publications/national-reports/energy-efficiency-estonia.pdf

Impact evaluation	The measure achieved the targets in terms of resource productivity increase and supported companies, for the activity 4.3.1: "*Investment in the best possible resource-efficient technology; supporting resource management systems and supporting IT applications*" in the eligible companies before the ending date.

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

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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.

A total number of 30 interviews were conducted with beneficiaries, representatives of professional associations and representatives of the implementing agency. The interviews allowed to receive feedbacks about the criticalities and areas of concern related to the measure's activities. The following barriers were reported:

- The conditions to apply to the grant support are unclear and/or too complicated. Additional instructional materials and preliminary counselling should be provided. In order to increase the attractiveness of the measure, it is recommended to prepare additional guidance materials (in addition to the existing one) for each application round. Companies also need confirmation and information about the duration and openness of the measure, which gives companies the confidence to invest money more narrowly in conducting resource audits and, in the long term, make investment plans to increase resource efficiency.
- Insufficient time for requests and resource audits puts entrepreneurs in an unequal situation. In order to ensure equal opportunities for all companies when applying for subsidies, the application rounds should announce the opening at least 9 months in advance.
- Finding self-financing can be problematic for companies. It is more difficult for small and microenterprises to find the required financial means to fulfil the self-financing necessary for the implementation of projects, compared to large enterprises with a large turnover and financial buffer. It is thus necessary to increase state guarantees and/or guarantees for companies with less financial capacity.
- The metrics developed to assess performance are inadequate. It is thus necessary to update the resource productivity evaluation metric.

	Lessons Learnt
Key takeaways	The measure was found to be successful and permitted to achieve the targets of supported companies and increase in resource productivity.

	The measure is cross-sectoral and not focused on attainable energy savings or GHG emissions reduction, but rather on general resource utilization efficiency. It thus comprehends energy efficiency and motor renovation as eligible activities, however no disaggregated data of the measure's impact in this regard is available yet.
Recommendations	- Increase the support in the grant application procedure - Ensure enough time for the companies to prepare requests and resource audits - Increase the financial support to small and microenterprises - Update and improve the evaluation metric for the achieved savings
Linked measures	-
Reference (s)	- https://www.riigiteataja.ee/akt/103082018003 - https://www.odyssee-mure.eu/publications/national-reports/energy-efficiency-estonia.pdf - https://ringmajandus.envir.ee/et/ettevotete-ressursitohususe-meede - https://ringmajandus.envir.ee/sites/default/files/2022-08/10.08_L%C3%B5pparuanne_Ressursit%C3%B5hususe%20meetme%20tulemuslikkuse%20ja%20m%C3%B5ju%20hindamine.pdf
Other	- Inge Roos, Department of Energy Technology, Tallinn University of Technology (TalTech), E-mail: inge.roos@tech.ee (author of the Odysee-Mure report: https://www.odyssee-mure.eu/publications/national-reports/energy-efficiency-estonia.pdf) - marika.lillemets@envir.ee, Advisor to the Department of Environmental Management, Subject: audits and investments
Thoughts, comments, considerations ...	Despite the understandable inclination to implement general energy efficiency policy measures, no specific policy measures related to the renovation of electric motors in industries could be identified in Estonia. This is significant considering the relatively low final energy consumption of the industrial sector in Estonia. Therefore, it is crucial to enhance the level of detail in policy measures to address motor renovation in this sector.

Table 1: National Policy Measure Overview - Estonia

#	Measure Title	Short Description	Type of Measure	Start Year	End Year	Duration	Target Groups	Source link / Reference	Case Level Impact of the measure
1	Grant support for resource efficiency in the enterprises	Incentive aimed at increasing resource productivity in companies through the introduction of innovative technologies and solutions.	Grant support	January 2017	December 2023	6 years	Enterprises of the mining and processing industries	https://www.riigiteataja.ee/akt/103082018003	High