

Modernisation Fund

Annual report

2022

Estonia

1. Introduction

Estonia submitted to the EIB two priority investment proposals (“Improvement of energy efficiency and renewable energy use in public sector buildings” and “Energy-efficient low-emission public transport”) for financing from the Modernisation Fund on 14.09.2021. The EIB gave preliminary approval on financing both on 11.10.2021.

First disbursement

The first disbursement from EIB was received in the amount of EUR 24 590 000 on 15.12.2021.

The sum was distributed between two schemes as follows:

Scheme	Disbursement by the EIB	Disbursement by the Ministry of Environment	Amount	Responsible ministry
“Programme for improvement of energy efficiency and renewable energy use in public sector buildings” (Modernisation Fund reference number MF 2021-2 EE 0-001; MF 2022-2 EE 0- 001)	15.12.2021	19.10.2022	15 530 000 EUR	Ministry of Finance
“Energy-efficient low-emission public transport programme” (Modernisation Fund reference number MF 2021-2 EE 0-002; MF 2022-2 EE 0- 002)	15.12.2021	30.05.2022	9 060 000 EUR	Ministry of Economic Affairs and Communication

Second disbursement

On the basis of the approved two priority investment schemes, the second disbursement proposals were submitted by Estonia on 12.09.2022 and the EIB subsequent disbursement decisions were made on 10.10.2022.

In 2022, the second disbursement was received from EIB in the amount of EUR 62 420 400 on 21.12.2022.

The sum was distributed between two schemes as follows:

Scheme	Disbursement by the EIB	Disbursement by the Ministry of Environment	Amount	Responsible ministry
“Programme for improvement of energy efficiency and renewable energy use in public sector	23.12.2022	30.12.2022	39 423 400 EUR	Ministry of Finance

buildings" (Modernisation Fund reference number MF 2021-2 EE 0-001; MF 2022-2 EE 0- 001)				
"Energy-efficient low-emission public transport programme" (Modernisation Fund reference number MF 2021-2 EE 0-002; MF 2022-2 EE 0- 002)	23.12.2022		22 997 000 EUR ¹	Ministry of Economic Affairs and Communication

1.1. "Programme for improvement of energy efficiency and renewable energy use in public sector buildings"

The main objective of the "Programme for improvement of energy efficiency and renewable energy use in public sector buildings" is to improve energy efficiency in public sector buildings in Estonia. The scheme covers two subprogrammes, targeting energy efficiency in buildings of the central government and buildings of the municipalities. In relation to these subprogrammes, the targeted beneficiaries are owners of buildings occupied by central government, and the local municipalities, respectively. The scheme covers the period of 2021-2030 and the initially expected Modernisation Fund funding/contribution is EUR 170 000 000. The amount will be updated on the basis of updated Modernisation Fund revenues forecasts, since based on the Long-term Building Renovation Strategy (approved by the government in 2020), the actual financing needs in relation to public sector buildings' energy efficiency considerably exceed the initial total financing amounts foreseen in the initial programme proposal in 2021.

The form of financing is grant, which will be given for energy saving investments, renovation or in some case replacement and accompanying construction works.

In accordance with the State Budget Strategy, the Ministry of Finance bears responsibility for development of conditions related to use of MF support, and for planning of the budget of the programme as well as subprogrammes. Based on, and in accordance with, the relevant regulations of the Minister of Public Administration, State Shared Service Centre performs tasks related to implementation of the programme / sub-programmes.

The programme is necessary for contributing to the objectives of the:

- Energy Sector Development Plan 2030 (ENMAK 2030);
- Estonia's National Energy and Climate Plan 2030 (NECP 2030) and the Long-term building renovation strategy of Estonia. The objectives include, in addition to serious energy efficiency improvement, reduction of greenhouse gas (and other) emissions related to the use of public sector buildings, and improvement of the „interior climate“ of the buildings (in relation to health impact).

¹ The sums are disbursed according to the application of the responsible ministry. The Ministry of Economic Affairs and Communication presents the application at the end of 2022 and the disbursement will be done in 2023.

The scheme contributes to the key objectives of NECP 2030 as follows: Achievement of an 80% reduction in GHG emissions by 2050 (a new climate neutrality objective for 2050 was set in the strategy Estonia 2035 after the adoption of the NECP; the NECP 2030 is currently being updated and the preliminary updated version will be submitted for review in June, 2023) and 70% by 2030:

- energy and climate measures by sector
 - building stock

Redevelopment of public sector (central and local government) buildings, business and residential premises and street lighting.

The expected contribution of the scheme to achieving the objectives related to public sector buildings in the NECP: The total floor area of public sector buildings to be renovated using MF support in the period 2021-2030 to achieve the energy efficiency target will be approximately 255 000 - 425 000 m². The expected impact of the scheme has been estimated (based on 2020 prices) at approximately 1500 - 2500 MWh/year energy savings, 500 - 1000 CO₂ t/year CO₂ emission reduction, and 15 000 – 25 000 m² renovated buildings net floor area per 10 million € of investment support (the overall investment may be larger in relation to works financed by the beneficiary).

1.2. “Energy-efficient low-emission public transport programme”

The main objective of the “Energy-efficient low-emission public transport” programme is to improve energy efficiency in public transport in order to support the decarbonisation of the transport sector. The scheme is targeting the development of energy efficient public transport projects and comprising a low emission ferry, electric trains and electric buses. The investment is intended to replace less efficient fossil fuel vehicles. The scheme covers the period of 2021-2030 and the initially expected Modernisation Fund funding is EUR 130 000 000. The amount will be updated on the basis of updated Modernisation Fund revenues forecasts, since based on the Transport and Mobility Development Plan 2035 (approved by the government in 2021), the actual financing needs in relation to public sector transport’ energy efficiency considerably exceed the initial total financing amounts foreseen in the initial programme proposal in 2021.

In accordance with the State Budget Strategy, the Ministry of Economic Affairs and Communications is responsible for development of conditions related to use of MF support, and for planning of the budget of the programme. In the case of the low-emission ferry, the investment will be implemented by Estonian Transport Administration (ETA). Under the subprogramme targeting the energy efficient low-emission buses based on, and in accordance with, the relevant decrees of the Minister of Economic Affairs and Infrastructure, the Estonian Environmental Investment Centre will perform tasks related to implementation of the grant scheme to support the uptake of energy efficient low-emission buses in public transport. Under the subprogramme targeting the electric trains, the Ministry of Economic Affairs and Communications provides the finances for the procurement based on the public procurement that has been conducted by train company AS Eesti Liinirongid (100% state owned). Under the stipulated conditions, AS Eesti Liinirongid is obliged to provide the procured trains to, if and

when, in the future a different railway undertaking would provide passenger train services under public service obligation instead of AS Eesti Liinirongid.

The programme and the proposed investments are in accordance with the following state level strategies:

- Transport and Mobility Master Plan 2021-2035 – which states as a strategic goal to reduce transport's energy consumption from 9,4 TWh to 8,3 TWh, of which renewable energy is 24%; reduction of transport emissions from 2369kt to 1700kt CO₂e.
- ENMAK 2030 (energy development plan) – goal to increase share of renewable energy in transport,
- National energy and climate plan 2030 (NECP 2030) (https://ec.europa.eu/energy/sites/ener/files/documents/ee_final_necp_main_en.pdf) – in line with the main goals as well as specific measures (see 5.2 from plan and table 40): TR 2, TR5, TR 10, TR 13, TR 15, TR 16.

2. Implementation

Planning of the Modernisation Fund resources form a part of the Estonian State Budget Strategy which is based on national objectives and the objectives of sectoral development plans. Ministry of the Environment is the coordinator of the Modernisation Fund related issues. The implementation of the schemes is carried out by the ministries responsible for the relevant budget area.

Paragraph 165¹ of the Atmospheric Air Protection Act (<https://www.riigiteataja.ee/akt/A%C3%95KS>) specifies the general conditions of the usage of the Modernisation Fund. The Government Regulation No 25 specifying more specific conditions for the usage of the Modernisation Fund was approved on 10.03.2022 (<https://www.riigiteataja.ee/akt/112032022023>).

The state of implementation of the schemes as of the end of 2022 is as follows:

1) Improvement of energy efficiency and renewable energy use in public sector buildings

Regulation of the Minister of Public Administration No. 36 of 05.08.2022 (<https://www.riigiteataja.ee/akt/109082022031>) stipulates the conditions and procedure for using support from the Modernization Fund to improve the energy efficiency of central government buildings. The act regulates for example: the main objective; the implementing administrative bodies; supported activities; the period of eligibility; the list of eligible costs; the financial information of the call for proposals (support budget for the call and co-financing requirements); requirements for the applicants, the applications and the energy audits of the buildings; procedure for application submission and processing; preconditions for payments; responsibilities of the beneficiary; conditions for the submission of final report; changing the decision on the project and reclaiming the support.

The State Shared Service Center (<https://www.rtk.ee/en>), which is a government agency under the administration of the Ministry of Finance, is responsible for carrying out the open call for proposals and for supervision of the implementation of the projects and payments.

The first Call for Applications based on the referred ministerial regulation, with the call budget of 28 million euros, was open from 20.10.2022 to 31.01.2023³. On the basis of the ministerial regulation, the submitted applications were evaluated and the first projects selected for MF support in early 2023.

The specific content and budget of the next call (energy efficiency projects of central government or local government buildings) will be decided in the first half of 2023.

2) Energy-efficient low-emission public transport

In accordance with the strategic plans and decisions of the government, the first investment under the programme is related to the energy-efficient low-emission ferry (due to the period of availability of complementary funding from other budget revenue). The sequence and timing of investments into energy-efficient electric passenger trains and zero-emission buses has been developed and is updated on the basis of updated forecast of available MF support as well as on updated information concerning other potential sources of funding.

- Ferry

The market research for procurement of an extended concept design service for a ferry (incl. preparation for procurement, answering inquiries, evaluation of procurement results, conclusion and performance of a contract) was carried out and the preparation of procurement documents started in 2021. The public procurement process was open from 14.04.2022 until 24.05.2022. Six bids were received. The contract with the successful tenderer was signed on 23.08.2022. The deadline for providing the service is 1st quarter, 2023.

The finalization of the procurement of ferry concept design acceptance and review services from a maritime classification society (incl. preparation for procurement, response to inquiries, evaluation of procurement results, conclusion and performance of contract) is planned in the III quarter of 2023.

Preparation of the procurement of the basic design and construction of a ferry (incl. preparation of the tender and documents, review of potential tenderers, etc.) started in the IV quarter of 2022. Launching this procurement is planned in the III quarter of 2023.

- Electric trains

The procurement procedure has been carried out and the producer of the trains was chosen. The contract with the successful tenderer was signed on 19.12.2022. The total price of 10 electric mobile units (trains) with necessary spare parts is 90 713 449 EUR.

The first payment (15 per cent – pre-payment) for the trains was made in December, 2022. According to the signed contract the final delivery of 10 electric trains will be in March, 2026.

- Electric busses

Usage of the Modernisation Fund support is planned for the later programme years, depending on the available amounts of support and foreseeing the completion of ferry and trains related investments for the MF contribution of the first years of implementation.

2. Information on each investment

“Programme for improvement of energy efficiency and renewable energy use in public sector buildings”	
1.2 Number of completed investments	0
1.2 Number of discontinued investments	0
2.1. total investment triggered (total investment costs);	Estimated cost within 2021-2030: 170 mln € (without VAT) (Total volume will be updated based on the results of negotiations of the “Fit-for-55” package of legislative proposals that would have impact on the Modernisation Fund related legal framework)
2.2. dates and amounts of payments from the Modernisation Fund to the project proponent or the scheme managing authority;	The Ministry of Environment has made to Ministry of Finance payment in the amount of 54 953 400 EUR (Programme “Improvement of energy efficiency and renewable energy use in public sector buildings”).
2.3. amounts received from the Modernisation Fund by the beneficiary Member State but not yet paid to the project proponent or the scheme managing authority;	0
2.4. any amounts recovered by the beneficiary Member State from the project proponent or the scheme managing authority, and the dates of recovery;	0
2.5. an assessment of the added value of the investment in terms of energy efficiency and modernisation of the energy system, including information on the following: (a) the energy saved in MWh; (b) expected cumulative MWh saved by the end of the investment lifetime;	0 The information on the assessments will be available after the decisions of the projects as the project applications will provide the preliminary assessment on energy savings and reduction of greenhouse gas emissions ² .

² The applicant has to present data on the calculations of changes in energy use (including the annual total energy savings achieved as a result of the project and the expected cumulative energy savings during the economic life of the energy efficiency works) and calculations of the forecast of the reduction of greenhouse gas emissions as a result of the implementation of the project (including the annual reduction of greenhouse gas emissions that can be achieved as a result of the implementation of the project and the expected cumulative reduction of greenhouse gas emissions during the economic life of the energy efficiency works). The calculations must be

(c) the greenhouse gas emissions saved in tCO ₂ ; (d) expected cumulative tCO ₂ saved by the end of the investment lifetime; (e) the additional renewable energy capacity installed, if applicable; (f) achieved leverage of funds (total amount invested in relation to the contribution from the Modernisation Fund);	
3.1 Milestones achieved since the previous annual report	Not applicable as apply to projects, and not to schemes.
3.2 Expected entry into operation	Not applicable as apply to projects, and not to schemes.
3.3 Identified or expected delays in implementation	Not applicable as apply to projects, and not to schemes.
3.4 Identified or expected changes in eligible costs, technology applied or results of an investment	Not applicable as apply to projects, and not to schemes.
4.1 Confirmation of co-financing from private sources	Not applicable as apply to projects, and not to schemes.

“Energy-efficient low-emission public transport programme”	
1.2 Number of completed investments	0
1.2 Number of discontinued investments	0
2.1. total investment triggered (total investment costs);	130 000 000 EUR (without VAT) (Total volume will be updated based on the results of negotiations of the “Fit-for-55” package of legislative proposals that would have impact on the Modernisation Fund related legal framework and on the updated forecast of the volume of MF revenues)
2.2. dates and amounts of payments from the Modernisation Fund to the project proponent or the scheme managing authority;	9 060 000 EUR
2.3. amounts received from the Modernisation Fund by the beneficiary Member State but not yet paid to the	22 997 000 EUR

made by a certified energy efficiency specialist. After the implementation of the project the energy use calculations of the building used by the central government unit will be prepared based on the heat and electricity requirement resulting from the limit of the achievable energy efficiency figure in the typical use of the building.

project proponent or the scheme managing authority;	
2.4. any amounts recovered by the beneficiary Member State from the project proponent or the scheme managing authority, and the dates of recovery;	0
2.5. an assessment of the added value of the investment in terms of energy efficiency and modernisation of the energy system, including information on the following: (a) the energy saved in MWh; (b) expected cumulative MWh saved by the end of the investment lifetime; (c) the greenhouse gas emissions saved in tCO ₂ ; (d) expected cumulative tCO ₂ saved by the end of the investment lifetime; (e) the additional renewable energy capacity installed, if applicable; (f) achieved leverage of funds (total amount invested in relation to the contribution from the Modernisation Fund);	The information on the assessments will be available after the concrete investment objects are contracted or projects approved. <u>Electric trains</u> The effect of purchasing 10 electric trains would be ³ : a) increase of use of renewable energy in transport sector according to estimated calculations based on approximate assumptions is 12 GWh per year b) considering the expected lifetime of the train 25 years, cumulative saving is 300 GWh c) CO ₂ e emissions reduction by approximate estimated calculations is 10.8 kt per year d) considering the expected lifetime of the train 25 years, cumulative saving is 270 kt
3.1 Milestones achieved since the previous annual report	Not applicable as apply to projects, and not to schemes.
3.2 Expected entry into operation	Not applicable as apply to projects, and not to schemes.
3.3 Identified or expected delays in implementation	Not applicable as apply to projects, and not to schemes.
3.4 Identified or expected changes in eligible costs, technology applied or results of an investment	Not applicable as apply to projects, and not to schemes.

³ The estimation of expected cumulative GHG saving is based on the assumption that one average diesel train runs 250 000 km per year and consumes 1,627 liters per km. Consequently, an average diesel train would consume 406 750 l/yearly and emit 1,08 kt/CO₂ per year. Transition to the use of electric trains would mean that the earlier consumed diesel fuel would be replaced with electricity. The replacement of 10 diesel trains with electric trains would therefore results in 10,8 ktCO₂ reduction from the operation of trains. Based on the assumption that one litre of diesel has energy content of approximately 10 kWh (one train 4,067,500 kWh) and efficiency of diesel motor is about 0,3 (30%) , then the estimated energy use per average train (4,067,500 kWh * 0,3= 1,220,250 kWh = 1.2 GWh) would result in the overall saving of energy use per 10 trains of (1.2 GWh * 10 trains =) 12 GWh per year.

4.1 Confirmation of co-financing from private sources	Not applicable as apply to projects, and not to schemes.
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