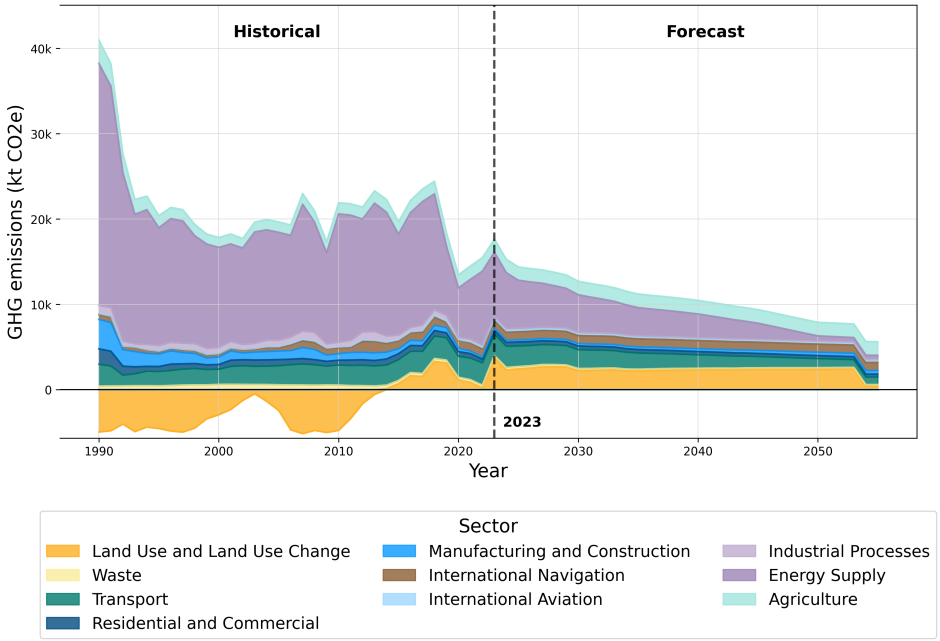
# National system for policies and measures and greenhouse gas projections of Estonia

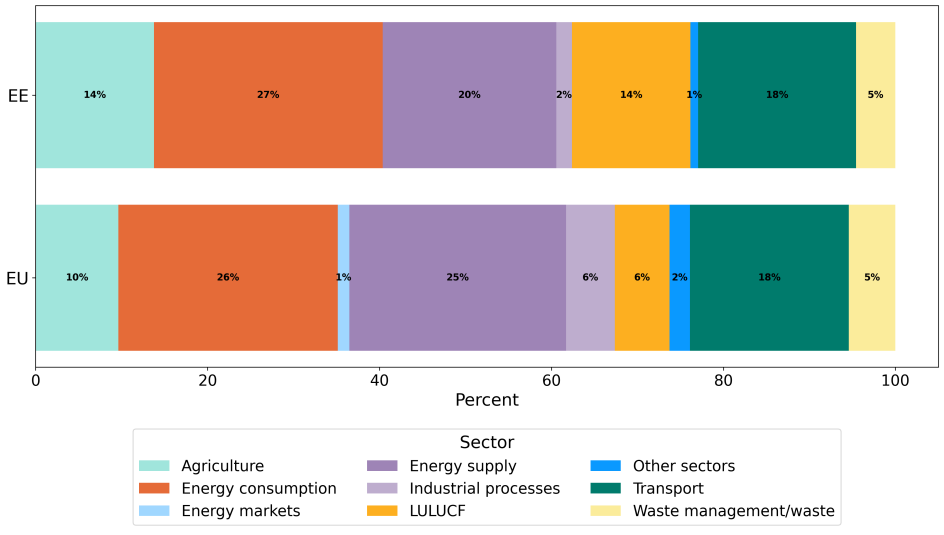
## Information reported in 2025

A robust and complete national system ensures the delivery of good-quality information on the projections of anthropogenic greenhouse gas emissions by sources and removals by sinks, as well as policies and measures in place to implement National Climate and Energy Plans. The two figures provide an overview of the information submitted by Estonia in 2025, enabled by the national system, as laid out below.

*Historical and projected greenhouse gas emission in Estonia by sector in 2025.*




*Reported climate and energy Policies and Measures by affected sector in Estonia.*



## Institutional and procedural robustness

### *Institutional arrangements*

Estonian Environmental Research Centre (EERC) compiles the policies, measures and projections report based on contract agreements with the Ministry of Climate (MoC).

Air Quality and Climate Department of EERC coordinates the compilation of the report on policies and measures and projections. EERC is also responsible for the collection of the data and compilation of the final policies and measures and projections report for the Energy, Industrial processes and product use, Agriculture and Waste sectors. The Forest Department of the Estonian Environment Agency (EstEA) is responsible for LULUCF sector. Sectoral experts collect data on policies and measures and activity data for projections, prepare GHG projections, implement QC procedures and record the results, fill in sectoral data to the relevant templates and prepare the sectoral parts of the explenatory report. These experts are also responsible for archiving activity data, estimates and all other relevant information according to the archiving system. Information on the LULUCF sector PaMs and projections are compiled by the EstEA who forwards the compiled information to EERC coordinators who then include the sectoral result to the overall report. Estonia is working towards a system where sectoral experts can cover cross-sectoral topics to backup the work of a co-expert if needed.

The MoC is responsible for:

- maintaining together with EERC the national system for policies and measures and projections reporting;
- entering into formal agreements with the policies and measures and projections coordinator (EERC) as financial resources for projection compilation and methodological developments are planned in the National Administrative Agreement.; and.
- making the policies and measures and projections report available to the public.

EERC is responsible for:

- maintaining together with MoC the national system for policies and measures and projections reporting;
- coordinating the policies and measures and projections preparation process as a whole;
- compiling the policies and measures and projections report according to the parts submitted by the sectoral experts;
- coordinating the implementation of the QA/QC activities and final QA/QC of the policies and measures and projections report;
- sending the final policies and measures and projections report to the MoC and approving the report before the official submissions;
- reporting the policies and measures and projections report to the EC on behalf of MoC;
- coordinating cooperation between the policies and measures and projections report compilers and the EC;
- coordinating the reviews and communication with the expert review team, including responses to the review findings.
- informing the report compilers of the requirements of the national system and ensuring that existing information in national institutions is considered and used in the report where appropriate;

- informing the report compilers of new or revised guidelines; and
- the overall archiving system.

Several State institutions are responsible for actions related to climate change and support the activities concerning it, among other things taking part in the policies and measures and projections

report compilation by providing necessary data for the report.

The following ministries are directly related in the policies and measures and projections report compilation process:
• Ministry of Climate (MoC) – the lead entity and responsible for providing input and feedback on relevant policies and measures as well as to GHG estimates in energy, housing, building, and transport and traffic management, waste, LULUCF, industrial processes and product use (including F-gases) sectors.
• Ministry of Economic Affairs and Communications (MoEAC) – develops and implements national economic policy and prepares economic development plans in fields of industry and trade that have a direct impact on climate change. Provides input and feedback on relevant policies and measures as well as to GHG estimates in the before-mentioned sectors.
• Ministry of Regional Affairs and Agriculture (MoRAA) – advises the Government in the field of agriculture and rural life. Provides input and feedback on relevant policies and measures as well as to GHG estimates in the agriculture and LULUCF sectors.
• Ministry of Finance (MoF) - responsible for fiscal policy and together with MoC directing the use of EU ETS revenues. Develops measures regarding public sector building reconstruction and support for activities in Ida-Viru County contributing to just transition objectives for climate and energy policy objectives

### *Procedural and administrative arrangements and timescales*

Estonia's national system has established several procedural arrangements which ensure the timeliness, transparency, accuracy, consistency, comparability and completeness of information reported on policies and measures and projections. These include:
1. a clear timetable for the cycle for preparation of the report on policies and measures and projections (preparation, QA/QC and submission );
2. a clear coordination process between EERC and EstEA experts and relevant ministries to approve the assumptions, methodologies, and models used in projections and policy evaluation, as well as a list of relevant policies and measures;
3. sectoral meetings are held between experts appointed by the MoC, MoEAC, MoRAA, EERC, EstEA and relevant stakeholders (incl. trade union and environmental organizations representatives), to help to coordinate the QA process, to approve or amend initial results of the projections and to ensure the transparency of the process.

Timeliness
The EERC has developed a system that sets out the schedule for the preparation of reporting of policies and measures and projections that is updated before every reporting cycle (see attachment).
Every reporting cycle starts with a meeting between the experts to discuss the outcome of the previous reporting cycle. Weak points of the report and complications are underlined by the experts. During the meeting decisions on what should be improved and/or changed in the current report and the reporting cycle timeline are adopted.
Another kick-off meeting is held with relevant stakeholders (ministries, agencies, trade unions and environmental organizations' representatives) to introduce the policies and measures and projections compilation plan.
EERC coordinates the assumptions, methodologies, and models to be used in projections and policy evaluation and the list of relevant policies and measures, with the relevant experts from the relevant ministries, who then when necessary provide additional information concerning the policies and measures and projections. EERC generates GHG projections by using jointly agreed

models and methods and compiles a report which presents the basis for the final policies and measures and projections report.
After finalizing the draft report on policies and measures and preliminary projections, EERC sends the draft interim results to MoEAC, MoRAA and MoC for QA. Shortly after this, sectoral meetings are held with relevant ministry representatives to go through the projections.
EERC then analyses received comments, incorporates necessary changes and provides an updated version to the relevant ministries.
After the projections are approved, the EERC compiles the final report. The schedule leaves sufficient time to perform the remaining QA/QC activities. This process is iterated until all concerned parties have agreed on the report compiled and prepared by the EERC. Latest by 15th of March, EERC will submit the report to the European Commission on behalf of the MoC.

Transparency
The reporting of policies, measures and projections is prepared transparently. Meaning that the reporting uses publicly available data as much as possible (not all data can be published due to being confidentially reported by companies). EERC experts describe clearly what sources, assumptions and methods were used.
Sectoral meetings with relevant stakeholders are held to introduce the process of projections compilation (including relevant parameters), to approve the parameteres used for projection compilation as well as to approve the final projections. During the meetings stakeholders have the opportunity to make suggestions on parameters used for projections as well as any comments on the end projection results.
ensure a coherent and transparent approach between sectors

Consistency and comparability
Under the coordination of EERC, interrelated assumptions are discussed and decided between experts from relevant ministries before starting the projections compilation process. This ensures consistency and comparability of assumptions and results between the different sectors in the report but also ensures the coherence of information with other relevant reports/plans. Also, GHG projection assumptions are in-line with the assumptions used in ambient air projections reported under the Directive (EU) 2016/2284 of the European Parliament and of the Council of 14 December 2016 on the reduction of national emissions of certain atmospheric pollutants, amending Directive 2003/35/EC and repealing Directive 2001/81/EC.

Accuracy
Most of the information and assumptions used in the report are publicly available and verified by relevant institutions/companies. Projections follow the greenhouse gas source and sink categorization recommended by the European Commission (based on the 2006 IPCC Guidelines for National Greenhouse Gas Inventories and CRT tables on inventory reporting).

### *Procedures for the official consideration and approval of the Member States national system*

EERC in close coordination with the MoC set up the system for reporting on policies and measures and projections.

MoC as the single national entity with overall responsibility for the Estonian greenhouse gas reporting approves the national system for policies and measures and projections.

### *Description of the information collection process*

EERC coordinates data inquiries for the preparation of the GHG inventory as well as for the policies and measures and projections reporting.
Sectoral experts from EERC and EstEA manage the collection of necessary data reporting on policies and measures and projections from a variety of sector-specific sources (governmental experts, national statistics, official documents, studies by institutions of higher education and consulting companies, business associations, Trade Union representatives etc.) and based on this choose relevant methods and models for compiling the projections or making policy evaluations and make a preliminary list of policies and measures.

Collecting relevant information/data on policies and measures as well as for projections follows the same process.
EERC experts and coordinators check the collected data and compile the estimates that conform to the data quality objectives of the historical time-series.

EERC coordinates data inquiries for the preparation of the GHG inventory as well as for the policies and measures and projections reporting.
Sectoral experts from EERC and EstEA manage the collection of necessary data reporting on policies and measures and projections from a variety of sector-specific sources (governmental experts, national statistics, official documents, studies by institutions of higher education and consulting companies, business associations, Trade Union representatives etc.) and based on this choose relevant methods and models for compiling the projections or making policy evaluations and make a preliminary list of policies and measures.

Collecting relevant information/data on policies and measures as well as for projections follows the same process.
EERC experts and coordinators check the collected data and compile the estimates that conform to the data quality objectives of the historical time-series.

Methodologies and assumptions used to estimate the GHG emission reductions or removals for sectoral PaMs varies for different sectors and are used based on availability of data.
- In the Energy sector, methodologies for estimating GHG emission reduction of policies and measures focus on calculating the impact through energy savings and/or the fuel exchange from fossil fuels to renewables. This kind of information is retrieved from institutions (e.g. ministries) responsible for the measures. Also, studies carried out in Estonia are used as input source for impact estimations. Assumptions about used fuel types and carbon content are taken from the national inventory datasets as they are particularly critical for accurate emissions estimates, as the national inventory defines the base year. Ultimately, rigorous methodologies and conservative assumptions help to ensure that reported GHG reductions in the Energy sector are both realistic and credible, providing a sound basis for measuring and verifying climate benefits.
- In the Transport sector, methodologies for estimating GHG emission reduction of policies and measures primarily focus on assessing changes in fuel consumption, vehicle efficiency and modal shifts due to new initiatives. Key assumptions include travel distances, fuel economy, and vehicle stock, which help estimate baseline emissions that would occur without interventions. Accurate reductions are calculated by incorporating factors such as improvements in vehicle technology, the adoption of alternative fuels, and shifts to lower-carbon modes of transport like public transit or cycling. Emission factors and the baseline fuel consumption of the sector are taken from the national inventory datasets, as they are particularly critical for accurate emissions estimates, as the national inventory defines the base year. By using standardized methodologies and conservative

assumptions, transport sector estimates ensure a credible understanding of GHG reductions, providing clear insights into the effectiveness of sustainable transport projects.
- In the Agriculture sectors impacts of certain WEM scenario measures have been estimated using alternative parameters from the Agriculture Projection Model (APM). For the WEM scenario the APM, developed by the Agricultural Research Centre, provides two alternative scenarios with alternative parameters in case certain measures are not applied starting from 2024. This enables us to compare emissions to the WEM scenario emissions in case the specific measure would not be implemented.
- In the LULUCF sectors impacts of individual WEM scenario measures have not been estimated, as their effect on parameters that affect emissions (e.g. land-use changes, felling volume) has not been quantified in the development strategies/plans. The collective impact of the existing measures can be seen through the sector's projections as 2024 inventory submission data was used as the base for calculations. The WEM scenario generally assumes continuation of current land-use trends and management practices.
- For IPPU and Waste sectors impacts of different policies and measures have not been estimated due to missing base parameters. The collective impact of the existing measures can be seen through the sector's projections as 2024 inventory submission data was used as the basis for calculations.

### *Description of the process for selecting assumptions, methodologies and models for making projections of anthropogenic greenhouse gas emissions*

Before every projection compilation cycle a coordination meeting between the coordinators from EERC, representative from Ministry of Climate and sectoral experts from EERC and EstEA is held, where initial thoughts regarding new methodologies/assumptions and their sources are shared. Suggestions made regarding assumptions/models, are approved or amended by appointed representatives from relevant ministries. In case there is no agreement with the proposed approach, the possibility of suggesting and using alternative methodologies remain. All sectoral assumptions are approved at a meeting with relevant ministries.
Hereinafter approaches by sector are presented:
- Energy: relevant ministries and industries are providing detailed assumptions for energy productions and therefore there is no need for a model.
- Transport: Sybil baseline model is used for the GHG projections in the road transport sector. The model uses a bottom-up approach requiring data about the vehicle fleet, technology (EURO class) and road activity. The biggest strength of the model is that it is compatibility with COPERT model, which is used for the compilation of road transport emission estimates in the national inventory report and kept up to date by EMISIA, the same team as for COPERT. Additionally, impacts of regulations affecting the sector are taken into account.
- Agriculture: the projected numbers of animals, crop productions, the amounts of mineral and lime fertilizers used are based on the results of the Agriculture Projection Model (APM), developed in 2021 by the Centre of Estonian Rural Research and Knowledge. The model projects the data for the next ten years, so for the years 2023–2033. Projected activity data for the period 2033–2055 is interpolated. The APM model considers the characteristics common to Estonia and provides opportunities to analyze different policy scenarios and changing market and macroeconomic conditions.
- IPPU: projections are made based on assumptions received from industries' operators, expert judgements as well as impacts of regulations affecting the sector.
- Waste: emission projections in the Solid waste disposal on land (SWD) subcategory are done using the 2006 IPCC Waste Model, which has been developed by the IPCC for estimating CH4 emissions from solid waste disposal sites, for projections, additional sheets have been interlinked with the

existing Waste model template sheets which are easy to adjust to reflect the country specific needs.
LULUCF: relevant ministries and authorities are providing detailed assumptions for the LULUCF sectors planned activities. For calculating C stock changes in the mineral soils of the Cropland remaining cropland category, the same model that is also applied in the Agriculture sector – Agriculture Projection Model (APM) developed by the Centre of Estonian Rural Research and Knowledge – is used.

The policy and measures evaluations are based on different national development strategies/plans. To report on the estimated impacts of these PaMs also various background documents/papers are used. Estonia is making efforts improve the guantified estimates of PaMs.
Estonia ensures that GHG projections reported (including assumption and methodologies) under the Governance regulation are coherent with the information reported in the Biennial Transparency reports and National Communications to the UNFCCC.

Key assumptions used in the report are publicly available and verified by relevant institutions/companies.

### *Institutional administrative and procedural arrangements for domestic implementation of EU's NDC*

Following §143 of the Atmospheric Air Protection Act (RT I, 11.06.2024, 1) activities to reduce climate change shall be arranged by the Ministry of Climate on the basis of the requirements for limitation of greenhouse gas emissions arising from the Framework Convention on Climate Change, the Kyoto Protocol, the Paris Agreement and the European Union legislation.

Several State institutions are responsible for actions related to climate change and support the activities concerning it.
• Ministry of Climate – The Ministry's area of governance includes comprehensive implementation of the green reform, planning of climate policy, directing business towards cleaner technologies; increasing the international competitiveness of the maritime industry, developing the sectors of the maritime economy and the state-owned watercraft fleet (except for the watercraft in the register of the vessels of the Defense Force and the Defense League); accelerating the development of renewable energy and coordinating the implementation of renewable energy projects; organization of circular economy, including resource efficiency and waste management policy; organization of environmental and nature protection, organization of the use, protection, reproduction and accounting of natural resources (including forest and peatlands), organization of environmental supervision, weather observations, nature and marine research and water protection and use, policy of marine environment protection and use and protection of the air and radiation and nuclear safety, and organization of environmental monitoring ; energy, organizing the use of subsoil resources, geological mapping and ensuring national geological competence; living environment, housing and construction, transport (including transport, international public transport, transit, logistics and transport infrastructure), traffic management (including traffic on railways, roads and streets, waterways and air), transport systems, mobility and mobility services (including investments and procurement of public transport infrastructure and procurement of infrastructure in the field of transport and watercraft belonging to the state, with the exception of procurement related to the operation of watercraft and watercraft in the register of vessels of the Defense Force and Defense League), planning and implementation of plans, increasing traffic safety

and preparing drafts of relevant legislation.
• Ministry of Economic Affairs and Communications – develops and implements national economic policy and prepares economic development plans in fields that have a direct impact on climate change: industry and trade
• Ministry of Regional Affairs and Agriculture – develops and implements national agriculture and rural life policy and prepares development plans in the field.
• Ministry of Finance- responsible for fiscal policy and together with MoC directing the use of EU ETS revenues. Develops measures regarding public sector building reconstruction and support for activities in Ida-Viru County contributing to just transition objectives for climate and energy policy objectives

EERC is responsible for coordinating, compiling and submitting policies and measures and projections report to the European Commission and the Biennial reports to the UNFCCC. EERC coordinates the overall collection of the data and compilation of the reports but has no official role in developing policies and measures, but can be consulted regarding the impact assessments of the planned measures as the EERC team working on GHG projection compilation is also responsible for corresponding sectors GHG inventory compilation.

## Formality

### *Legal arrangements*

Following §143 of the Atmospheric Air Protection Act (RT I, 11.06.2024, 2), activities to reduce climate change shall be arranged by the Ministry of Climate on the basis of the requirements for limitation of greenhouse gas emissions arising from the Framework Convention on Climate Change, the Kyoto Protocol, the Paris Agreement and the European Union legislation.

Following §6 of the Statutes of the MoC (RT I, 29.12.2024, 49), MoC is responsible for climate change-related tasks and according to §22 section 7, the Climate Department's task is to organize, develop and implement climate change mitigation and adaptation policies. Following the Statutes of the Climate Department of the MoC, the department is also responsible for organizing and coordinating GHG emission reporting activities under the UNFCCC, the Kyoto Protocol, the Paris Agreement and the European Union legislation.

Since 2018 MoC (formerly MoE) has appointed the Estonian Environmental Research Centre (EERC) to be the institution to have the overall responsibility of maintaining the national systems for GHG reporting and submitting the final reports to the European Commission (EC) and the UNFCCC on behalf of the MoC.

EERC is a state-owned company established for general interest, all of the shares in which are held by the Republic of Estonia. EERC is subordinate to the Ministry of Climate. Any changes to and the approval of the statutes of the EERC are the responsibility of the Ministry of Climate.

Statutes of the EERC was amended at the beginning of 2018 according to the decision made by the Minister of the Environment as it is the competence of the Minister of the Environment to amend the Statutes of the EERC. According to §1.8 of the Statues of the Estonian Environmental Research Centre, EERC as a state-owned company guarantees the organisation and the timely submissions of the GHG reports to the European Commission and the UNFCCC on behalf of the MoC.

The Estonian Environment Agency (EstEA), institution that is responsible for the LULUCF estimates,

is a state authority administered by MoC. In accordance with §9 section 9 of the Statute of the EstEA, the tasks of the Forest Department include planning, organizing and carrying out statistical forest inventories, monitoring land use, land-use changes and carbon cycle and fulfilling national and international reporting obligations.

## Alignment with other reporting frameworks

### *GHG inventory reporting*

EERC as the responsible entity for GHG reporting in Estonia coordinates the preparation of the GHG inventory as well as the compilation of the policies and measures and projections report (including relevant sections in the National Energy and Climate Plan Progress Report). Both reports are prepared by the same expert teams from EERC and EstEA therefore ensuring the consistency of the data used.

EERC coordinates also reporting of the Biennial Transparency reports and National Communications in Estonia hence consistency in the information reported to the European Commission and the UNFCCC is ensured.

### *Article 17 of the Governance Regulation (EU) 2018/1999 (NECPR)*

EERC as the coordinator for the reporting on policies and measures and projections as well as greenhouse gas inventories is involved in the process of compiling the integrated national energy and climate plan progress report to ensure GHG data and methodical integrity in the two reports. EERC is attending, together with experts from the Ministry of Climate, WG1 and WG2 meetings under the Climate Change Committee, to keep close links between reporting on GHG inventories, projections as well as tracking progress towards targets set under the ESR and LULUCF regulation (together with expert from EstEA).

## Accountability and transparency

### *Quality control activities*

The EERC implements quality assurance and quality control processes (QA/QC) throughout the phases of compiling the policies and measures and projection report. 2 coordinators in EERC are responsible for checking that the QA/QC is carried out in each phase of the process.

- QC for selecting assumptions, methodologies and models: EERC coordinators compare the assumptions, methodologies and models gathered by the relevant sectoral experts with the ones from the previous reporting period and see if any recommendations from the previous reporting cycle have been taken into account.
- QA for selecting assumptions, methodologies and models: selected assumptions, methodologies and models are presented to relevant ministries for quality assurance and comments.
- QC for policies and measures and projections report: EERC coordinators, as well as all experts from EERC and EstEA, are responsible for cross-checking information reported in different chapters of the report as well as checking the coherence of information reported in the textual report and in the tabular format (for both policies and measures as well as for projections.

The QA/QC processes are designed such that the data quality objectives are met. The sensitivity analysis is carried out separately in different sectors in the report. This QA/QC process is iterated until all concerned parties have agreed on the report.

## Public participation

### *Stakeholder engagement*

Sector-specific meetings with relevant stakeholders—including ministries (such as MoC, MoEAC, MoRAA), government agencies (such as EstEA, Transport Administration etc.), associations, sectoral organizations, non-governmental organizations, and universities—are organized to:
1) introduce the projection compilation process, including key parameters as well as list of preliminary national policies and measures that affect the GHG projections;
2) approve the list of policies and measures and parameters used in the projections; and
3) validate the final projection results.
The process begins with a comprehensive introductory meeting for all stakeholders, followed by individual sectoral meetings. The sector-focused meetings aim to ensure targeted and in-depth discussions with relevant stakeholders. These meetings provide stakeholders with the opportunity to provide input and suggestions on the parameters used as well as offer feedback on the final projection results.

## Contact information for entities with overall responsibility for National Systems

The lead entity with overall responsibility for the Estonian greenhouse gas reporting is the Ministry of Climate (MoC).

MoC has appointed Estonian Environmental Research Centre (EERC) to be the institution to have the overall responsibility of maintaining the national systems for GHG reporting (including reporting on policies and measures and projections) and submitting the final reports to the European Commission (EC) and the UNFCCC on behalf of the MoC.

Contact in the Ministry of Climate is:
Ms Karin Radiko
Adviser, Climate Department
Tel. +372 626 4285
Fax +372 626 2801
Karin.radiko@kliimaministeerium.ee
Ministry of Climate
Suur-Ameerika 1
10122 Tallinn
Estonia

Contact in the Estonian Environmental Research Centre is:
Ms Cris-Tiina Pärn
Tel. +372 526 5945
Fax +372 611 2901
cris-tiina.parn@klab.ee
Estonian Environmental Research Centre
Marja 4d
10617 Tallinn
Estonia