

Establishment of National Inventory System Estonian Example

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Contents



- Introduction
- Estonian National GHG inventory system
- Strenghts, weaknesses and possible improvements of the inventory system

Estonia's profile



Area: 45,227 km2

Population: 1,3 million

August 1991: Independence restored from the Soviet Union June 1992: Estonia signed the

UN Framework Convention on

Climate Chanage in Rio

June 1994: Estonia ratiefied the

UNFCCC

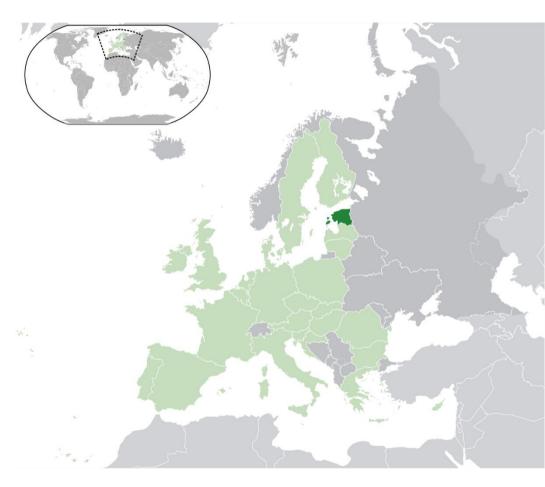
1994: Estonia starts compiling

GHG inventory

2002: Estonia ratiefied the Kyoto

Protocol

2004: Estonia joined EU



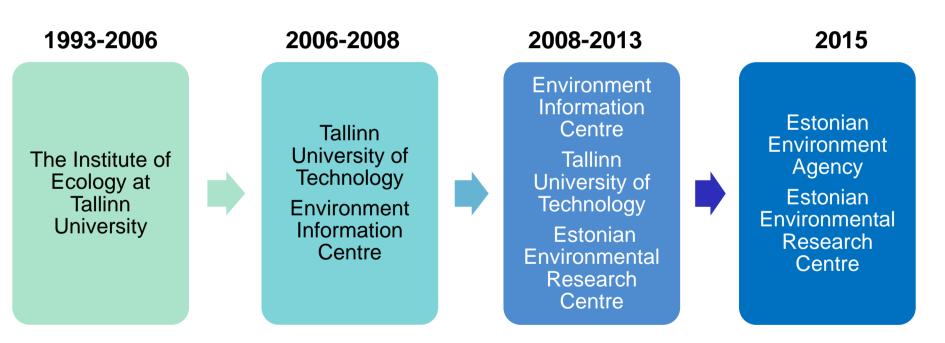
National GHG inventory system



Single national entity with overall responsibility for the Estonian greenhouse gas inventory is the **Estonian Ministry of the Environment.** Practical work is mostly conducted on the basis of contracts.



National System set up REPUBLIC OF ESTONIA MINISTRY OF THE ENVIRONMENT



Initial shortcomings



- Status of legal arrangements
- Basic data availability
- Uncertainty in the continuance of the tasks
- Lack of quality assurance/quality control plan
- Lack of an uncertainty analysis and insufficient archiving processes
- Inventory calculations

Development projects



1993

Estonian Country Study, was initiated within the U.S. Country Studies Program to help Estonian specialists start compiling the GHG inventory

2007-2008

Twinning project 'Enhancing the capacity to reduce the emissions of fluorinated greenhouse gases in Estonia'

2009

Twinning Light project EE06-IB-TWP-ENV-06 'Improving the quality of Estonia's National Greenhouse Gas Inventory' with Finland

Institutional arrangements





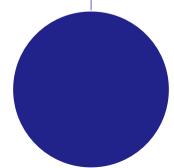
- general coordination
- approving
- submission

Estonian Environmental Research Centre (EERC)

- -inventory process coordination
- QA/QC

EERC Climate Department

- Energy
- IPPU
- Agriculture
- Waste



Estonian Environment Agency (EtEA)

Forest Monitoring Department

- LULUCF

Inventory process



Inventory improvement

 Meetings between inventory compilers to Identify issues that need improvement



Inventory evaluation

- Implementing QA activities (internal audits, expert peer review)
- Verification
- Reviews of International review teams

Planning

- Elaborate an inventory QA/QC plan
- Specifying necessary processes and resources
- Selecting methods and emissioon factors



Preparation

- Collecting data
- Estimating GHG emissions and removals
- Implementing QC checks
- Implementing uncertainty assessment
- Recalculatons
- Archiving inventory material
- Reporting

Quality Assurance/ Quality Control



Estonia's QA/QC plan consist of seven parts:

- (1) Production;
- (2) Annual meetings;
- (3) QA/QC checks;
- (4) QA results documentation form;
- (5) Archiving structure;
- (6) Response tables to the review process; and
- (7) A list of planned activities and improvements.



- To discuss problems that have come up during the last inventory preparation
- To improve the overall system
- Methodologies and possible changes in the future
- QA/QC plan, available resources and possible improvements
- Data collection/new institutions involved

-...

Data collecting



Energy

Statistics Estonia/Estoni an Environmental Agency

Plantspecific production data

Estonian Environmental Agency Industrial processes and product use

Statistics Estonia

Estonian companies

Agricultur e

> Estonian Animal Recording Centre

Statistics Estonia Waste

Estonian Environmental Agency

> Statistics Estonia

Estonian companies

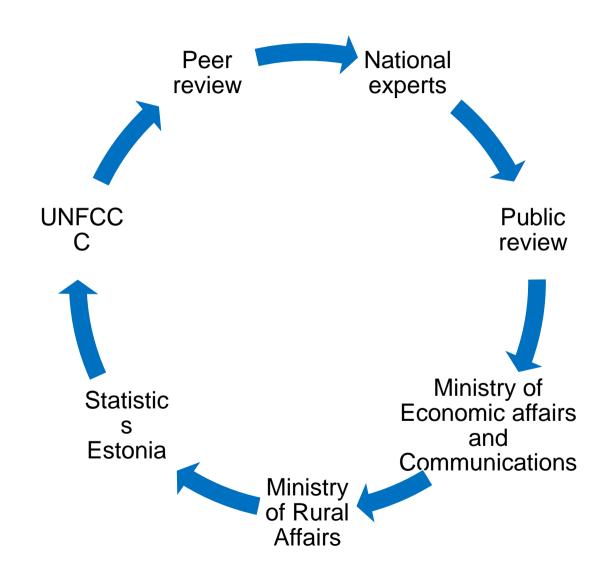
LULUC

National Forest Inventory

Statistics Estonia Estonian Rescue Service

Review process





Strenghts and weaknesses

STRENGTHS

- Clear inventory production plan
- Multiannual contracts ensure continuous improvement of the inventory
- Fixed system, strong legal basis (MoE, EtEA)
- Generally well established data collection and accessibility

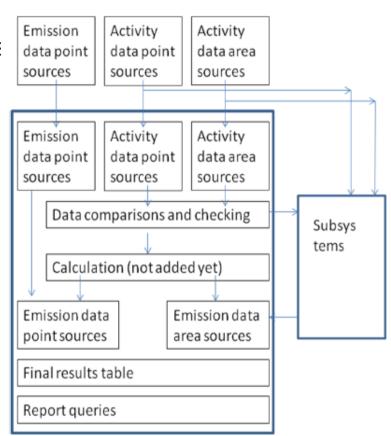
WEAKNESS ES

- Late data flow in some departments interrupts reaching deadlines
- Past data record quality and accessibility
- Unified data often difficult to disaggregate
- Each sector has maximum 2 experts

Improvement possibilities



- Cooperation with Baltic States GHG experts
- Implementation of an integrated IT system
- Checking existing data and reports
- Peer review
- **-**



Structure of a proposed integrated IT system

GHG inventory in policy making



Reduction commitments

- Kyoto Protocol CP2 binding commitment for EU, its MS and Iceland 2013-2020 -20% compared to base year level.
- National emission target for Estonia under the Effort Sharing Decision is the limit of 11% increase in greenhouse gas emissions in 2020 compared to 2005 level.

National policy

Currently a development document for climate change
 Estonian Low Carbon Road Map up to 2050 is prepared.



Thank you for your attention!

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