Assessment of the Long-term strategies of the Baltic State countries – strengths, weaknesses, and recommendations for improvement

Peter Walke, 13.09.2022

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What are the national long-term strategies?

The EU regulation 2018/1999 obliged each country to produce two documents:

- A national energy and climate plan (NECP)
- A national long-term strategy (LTS)

	NECP	LTS
Time horizon	10 years	30 years (until 2050)
Coverage	Five dimensions of energy union	Whole economy
EU guidance	Strict template, EU assessment	Vague template, no EU assessment

Annex IV: guidelines for the LTS

1. Overview and process for developing the strategies
2. Content
    1. Total GHG reductions and sink enhancements for 2030 and beyond
    2. Renewable energy – Estimated share by 2050
    3. Energy efficiency – Estimated consumption by 2050
    4. Sector content:
        1. Energy
        2. Industry
        3. Transport
        4. Agriculture and LULUCF
3. Financing
4. Socioeconomic impact assessment
5. Annexes
    1. Modelling details

Submission

- Deadline for submission was 2020
- So far, only 22 countries have submitted
- Lengths vary from 8 – 190 pages
- Some already updated their submission (including Lithuania)
- But EU climate neutrality ambitions, ‘Fit for 55’, and ‘REPowerEU’ mean further updates likely

Context

Clean planet for all: EU-wide climate neutrality by 2050

Fit for 55: Upgraded climate ambition – reduce emissions by 55 % (2005) by 2030

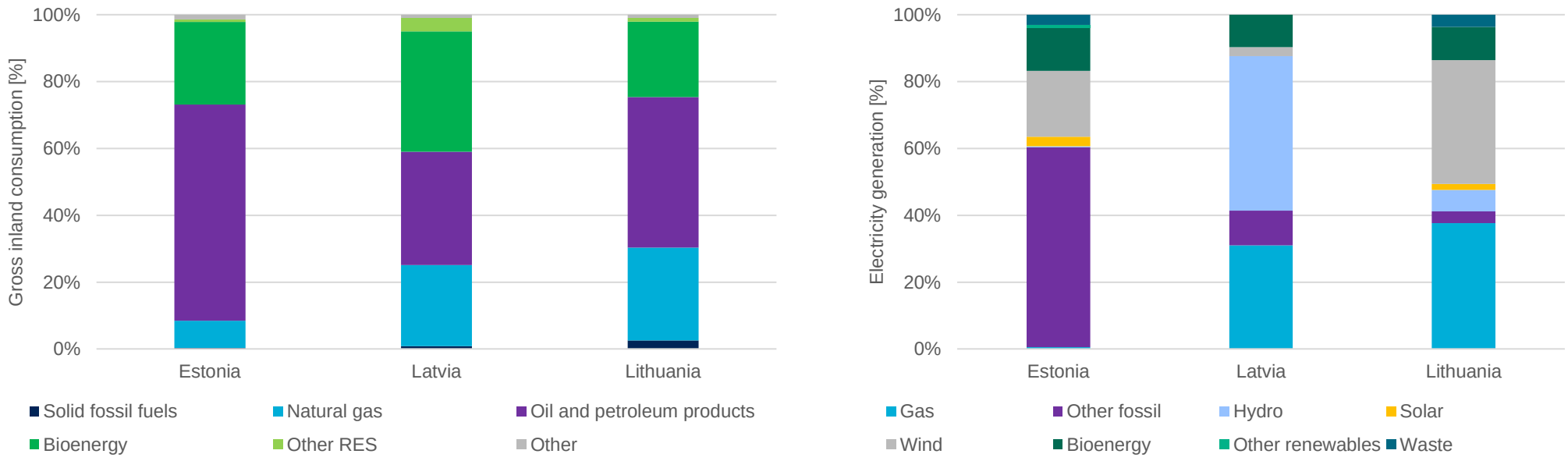
REPowerEU: Limiting energy dependence on Russia by renewables and energy saving measures

Areas covered
The process
National long-term strategies
EU long-term strategy
Documents
Related links

Long-term strategies received (as of 18 May 2022)

	Original version	English version	National website	Summary tables**
Austria	DE			EN
Belgium	FR - NL		Belgium	EN
Bulgaria				
Croatia	HR			EN
Cyprus				
Czechia	CS	EN		EN
Denmark		EN	Denmark	EN
Estonia	ET	EN	Estonia	EN
Finland	FI			EN
France	FR Summary: FR			EN

Background: Energy



All countries have similar (and high) dependency on fossil fuels

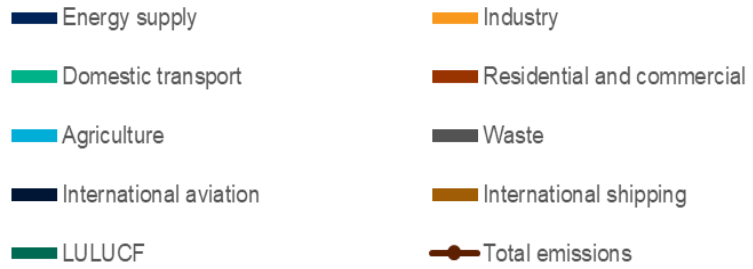
Oil and petroleum products high in Estonia due to oil shale, partially compensated by lower natural gas use

Bioenergy is important in all countries

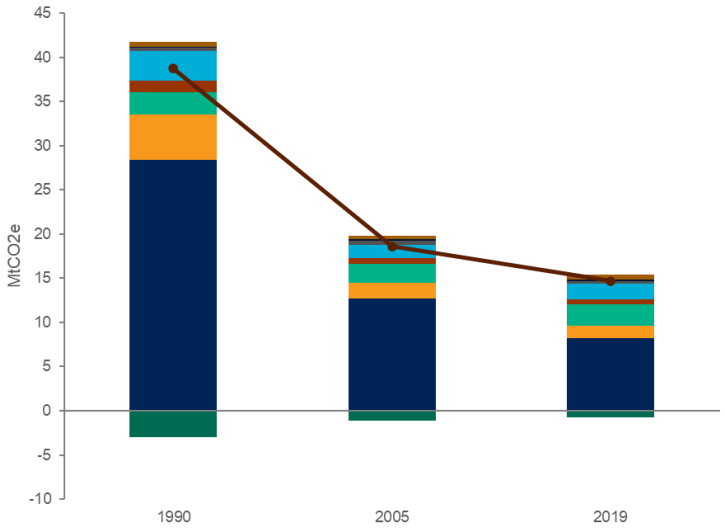
Latvia has significant hydro power, while Lithuania and Estonia have greater wind capacity

But…all countries are net energy importers

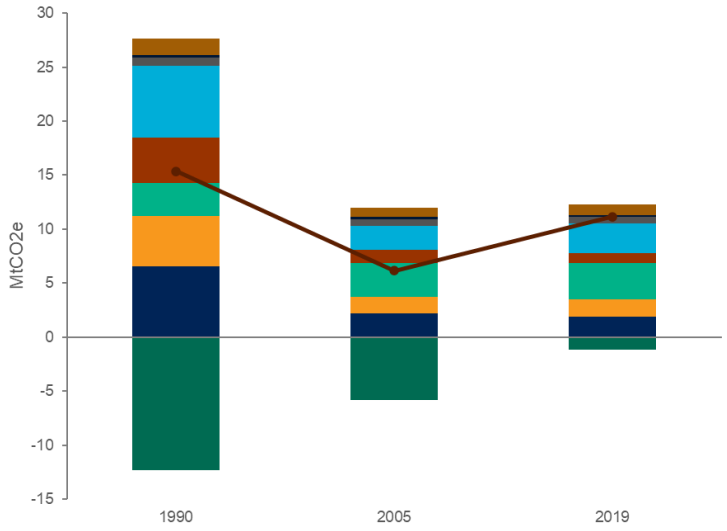
Background: Emissions



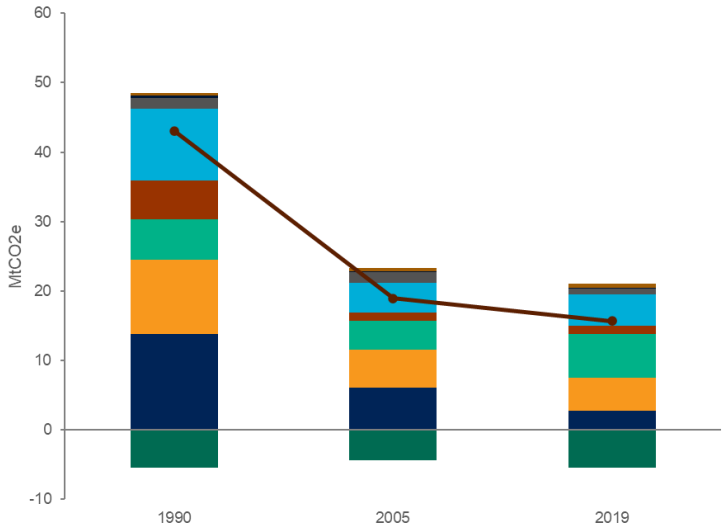
Estonia



Latvia



Lithuania



- Emissions have been decreasing in Estonia and Lithuania, but increasing in Latva
- The decrease in Latvia was driven by loss of LULUCF sink (now also positive in Estonia)
- All countries have seen large reductions in emissions from energy supply
- But transport and agriculture emissions are increasing throughout the region

General overview

Country	Date of adoption	Responsible administration unit	Length	Details
Lithuania	July 2021	Ministry of Environment	35 pages	Extensive list of targets (including beyond NECP) SWOT analysis of mitigation and adaptation No evident modelling or sectoral sub-structure
Latvia	December 2019	Ministry for Environment and Regional Development	55 pages	Breakdown of targets and sectoral descriptions Modelling of BAU but not climate neutrality
Estonia	April 2017 / April 2021 *	Ministry of Economic Affairs and Communications / Government Office	8 / 31 pages	Short document with general descriptions of each sector Lack of quantitative detail EE2035 upgrades target to climate neutrality by 2050 – but is not based on Governance Regulation

*The Estonian LTS was supplemented by information found in the Estonia 2035 plan

Assessment: Our criteria

- Follows the general guidelines of the Governance Regulation
- Scoring on a 3-point scale
  - 3 points if section could be a point of reference for other countries
  - 2 points if most elements included, but not comprehensive
  - 1 point if section only briefly or partially referenced or missing

		Example
Sectoral details	Energy	1 - the document provides no or limited sectoral detail, 2 - the document presents partial sectoral detail. It outlines historical and future trajectories of GHG emissions and discuss current state and policies and measures for decarbonisation, 3 - the document presents comprehensive overview of the sector and its contribution to long-term decarbonisation. It provides quantitative and qualitative analysis beyond criteria for score 2.
	Buildings	
	Transport	
	Industry	
	Agriculture	
	LULUCF	
	Carbon removal technologies	
Financing and enabling policies and measures	Investment needs assessment	1 - no assessment of investment needs, 2 - partial assessment of investment needs (e.g. only energy sector), 3 - full assessment of investment needs (all sectors).
	Financing	1 - no overview of financing instruments, 2 – partial or/and descriptive review of financing instruments, 3 - prescriptive provisions, linking investment needs with the necessary evolution of financing instruments.
	R&D	1 - no overview of R&D state and role in decarbonisation, 2 - descriptive review of R&D state and role, 3 - prescriptive provisions, policies and measures for R&D sector.

General information and targets

- All documents are recent (if using EE2035) and include net zero target for 2050
- Adherence to regulation is incomplete
- Detail varies greatly between strategies
- Some emphasis on adaptation as well as mitigation

Subcategory	Lithuania	Latvia	Estonia
Adherence to Governance Regulation	2	2	2
Up-to-date document	3	3	3*
Net-zero target	3	3	3
GHG emissions reduction	3	3	3
Renewable energy share	3	2	2
Energy efficiency	3	2	1

Targets

	Targets 2050			Targets 2030			
	GHG emission reduction	RES share	Energy efficiency	GHG emission reduction	RES share	Energy efficiency / Mtoe	
						Primary energy consumption	Final energy consumption
Lithuania	Climate neutrality	90 %	2.4 x reduction in primary and final energy consumption compared to 2017	70 %	45 %	5.4*	4.5
Latvia	Climate neutrality	-	-	65 %	50 %	3.9 – 4.1*	3.46 – 3.56*
Estonia	Climate neutrality	-	-	80 % (in 2035)	55 % (in 2035)	5.1*	3*

Sectoral pathways and measures

- Background detail often missing
- Policies and projections are missing in most cases
- Hence, more aspirational than strategic

Subcategory	Lithuania	Latvia	Estonia
Energy	2	2	2
Buildings	2	2	1
Transport	2	2	2
Industry	2	2	1
Agriculture	2	2	1
LULUCF	2	2	1
Carbon removal technologies	3	2	1

Financing and enabling policies / measures

- Financing and investment needs hardly included (except Latvia)
- Sources and estimates of funding are missing
- R&D is important for all three countries

Subcategory	Lithuania	Latvia	Estonia
Investment needs assessment	1	3	1
Financing	2	2	1
R&D	3	2	2

Economic assessment

- Little detail on the effects of the transition beyond NECPs
- All highlight energy security, but lack further detail
- Distributive impacts are not discussed; cost burdens are unclear

Subcategory	Lithuania	Latvia	Estonia
Socio-economics impacts	2	2	1
Distributive impacts	1	1	1

What is included?

Economic issue	Lithuania	Latvia	Estonia
Gross Domestic Product	X		X
Employment	X	X	X
Salaries	X	X	X
Government revenues	X	X	X
International trade	X	X	X
Energy security			
Impact on households	X	X	X
Energy poverty			X

Preparation and implementation

Analytical tools

- Lack of system-wide modelling
- What is included is not always described (e.g. the Estonian projection in original LTS)
- Lithuania states modelling capabilities must be strengthened

Subcategory	Lithuania	Latvia	Estonia
Analytical tools	1	2	2
Governance	3	2	3
Public consultation	1	2	2

Preparation and implementation

Governance and consultation

- Governance is included in all documents
- Online Estonian tool for accountability
- Public consultation is included, but difficult to assess

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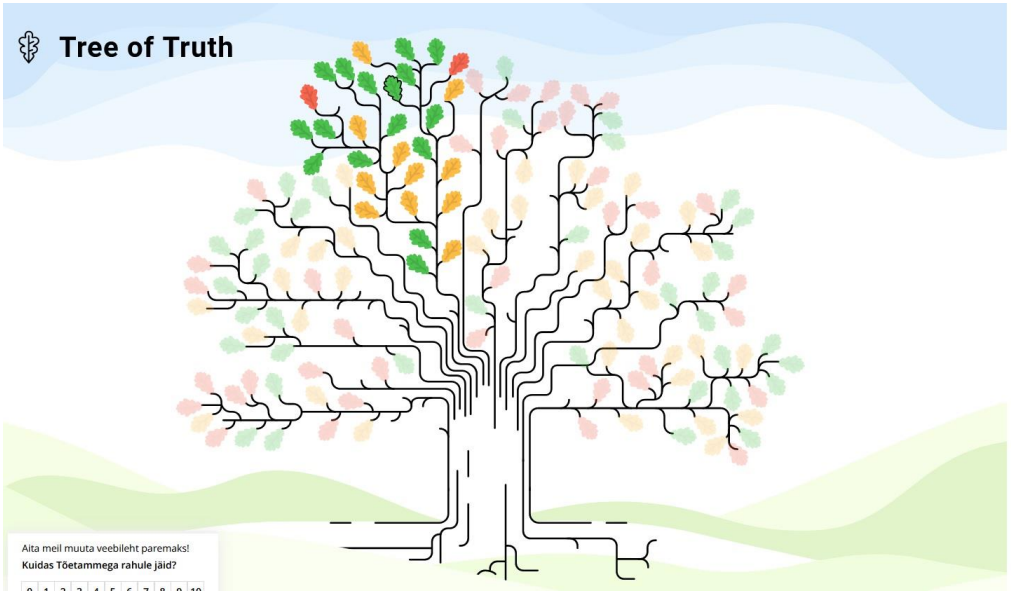

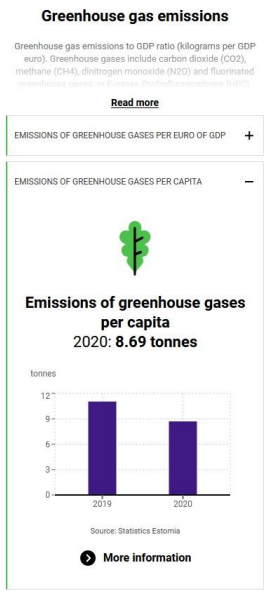

[Tree of Truth]

General conclusions

Heterogeneity

Each country has applied a unique strategy, hindering comparisons.

Targets

All adopt climate neutrality by 2050 … but discrepancies beyond this

Sectoral detail

No country has provided sufficient detail…. but some have done more than others

Modelling weaknesses

No sectoral modelling for climate neutrality

What is included is not fully described

(Socio-)Economic aspects

Poorly integrated

Aspects of just transition not considered in detail

General Conclusions

Limited specificity

- Lack of specifics in measures makes documents read as aspirational
- Directions post-2030 remain opaque

R&D

- All highlight strengthening and highlight some priorities
- Funding sources and research programmes not specified

Collaboration

- Regional collaboration is not included

Governance and consultation

- Governance is generally included
- Impacts of consultation not specified

Recommendations

Structural harmonisation (EU recommendation)

- More rigorous template
- More active European commission

Coverage

- Sectoral details on current situation and past trends
- readability

Comprehensive modelling

- Sectoral level
- Different scenarios (including one reaching climate neutrality)
- Greater care on data presentation

Recommendations

Socioeconomics

- Expected costs against BAU
- Cost-burden on households

Collaboration and energy dependence

- Comment on viability in energy security, research, ….

Accountability

- Greater elaboration of interactions with stakeholders / public
- Efforts to ensure monitoring of targets should be made (like with Estonia)

Thank you for your time!