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# COMMISSION STAFF WORKING DOCUMENT

## Assessment of the draft national energy and climate plan of Estonia

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# 1. SUMMARY

## Main elements of the final NECP

Estonia's final integrated national energy and climate plan (NECP) sets a 2030 target for **greenhouse gas emissions** of -70% compared to 1990 and in sectors not covered by the EU Emissions Trading System (non-ETS) a target of -13 % compared to 2005, in line with the Effort Sharing Regulation (ESR)[1]. The country's NECP indicates that under the scenario with additional policies Estonia will meet its ESR target. The plan does not include information on whether any use of flexibilities between the effort sharing and land use sectors is planned. The national long term greenhouse gas objective is a reduction of 80 % on 1990 emission levels by the year 2050.

Estonia's **renewable energy** contribution to the 2030 EU level target is 42 % of gross final energy consumption in 2030 which is considered as sufficiently ambitious as it is above the 37 % resulting from the formula in Annex II of the Governance Regulation[2].

For **energy efficiency**, Estonia's contributions to the 2030 EU target are of modest ambition[3] for primary energy consumption, amounting to 5.4 Mtoe, and of very low ambition for final energy consumption, amounting to 2.9 Mtoe. The plan does not indicate how the energy efficiency first principle has been taken into account. Estonia did not submit the long-term renovation strategy as part of the final NECP, but the plan provides some elements on energy efficiency of buildings[4].

In its plan, Estonia sets objectives for **energy security** on keeping the rate of dependency on imported energy as low as possible by using local fuels and exploiting the potential of biomethane.

Regarding the **internal energy market**, synchronisation of the Baltic States with the EU electricity grids around 2025 is one of the most important priorities for Estonia. The current level of **electricity interconnections** is 63 %.

National objectives and funding targets related to **research, innovation and competitiveness** are not set specifically for the energy sector. Specific objectives and funding targets for achieving the targets of the NECP will be set in the context of preparing and updating Estonia's sectoral development plans.

The estimated amount of **investment** for meeting Estonia's energy and climate goals between 2021 and 2030 amounts to public expenditure of around €347 million in the energy sector, €589 million in transport, €1,046 million in the renovation of the building stock and €278.5 million in agriculture. This represents €226 million per year on average. Further investments from the private and non-profit sectors are expected.

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1 Regulation (EU) 2018/842 of the European Parliament and of the Council of 30 May 2018 on binding annual greenhouse gas emission reductions by Member States from 2021 to 2030 contributing to climate action to meet commitments under the Paris Agreement and amending Regulation (EU) No 525/2013.

2 The Commission's recommendations with regard to the Member States' renewable ambitions is based on a formula set out in this Regulation which is based on objective criteria.

3 In accordance with the methodology as illustrated in the SWD(2019) 212 final.

4 Estonia submitted its Long Term Renovation Strategy, as requested by Article 2 of the EPBD Directive, on 13/07/2020.

The plan includes a list of **energy subsidies**, which appears to reflect the figures identified in recent Commission analyses on energy subsidies. The existing subsidies for renewable electricity will continue until the end of their lifetime (12 years).

The plan provides information on the interactions with **air quality and air emissions policy** by presenting the projected emissions of the five air pollutants regulated by the EU National Emission Ceilings Directive in the main emitting sectors.

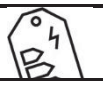
The final plan does not sufficiently consider the **just and fair transition aspects**, and more information would be needed on the social, employment and skills impacts of the transition to a carbon neutral economy.

On **energy poverty**, Estonia reports the number of households affected, recognising the relation between energy poverty and energy efficiency in buildings, and refers to ongoing preparatory work to better define objectives and corresponding policies and measures.

There are **several examples of good practices** in the Estonian final NECP, in particular the NECP mentions specific initiatives to boost start-ups and bring to market new products, services and technologies that reduce greenhouse gas emissions. The NECP also acknowledges the potential of **circular economy** in GHG emissions reduction.

## Overview of the key objectives, targets and contributions

The following table presents an overview of Estonia's objectives, targets and contributions under the Governance Regulation[5]:

| | National targets and contributions | Latest available data | 2020 | 2030 | Assessment of 2030 ambition level |
|---|---|---|---|---|---|
|   | Binding target for greenhouse gas emissions compared to 2005 under the Effort Sharing Regulation (ESR) (%) | +17 | +11 | -13 | As in ESR |
|  | National target/contribution for renewable energy: Share of energy from renewable sources in gross final consumption of energy (%) | 30 | 25 | 42 | Sufficiently ambitious (37 % is the result of RES formula) |
|  | National contribution for energy efficiency: | | | | |

[5] Regulation (EU) 2018/1999 of the European Parliament and of the Council of 11 December 2018 on the Governance of the Energy Union and Climate Action, amending Regulations (EC) No 663/2009 and (EC) No 715/2009 of the European Parliament and of the Council, Directives 94/22/EC, 98/70/EC, 2009/31/EC, 2009/73/EC, 2010/31/EU, 2012/27/EU and 2013/30/EU of the European Parliament and of the Council, Council Directives 2009/119/EC and (EU) 2015/652 and repealing Regulation (EU) No 525/2013 of the European Parliament and of the Council.

| | | | | | |
|---|---|---|---|---|---|
| | Primary energy consumption (Mtoe) | 6.2 | 6.5 | 5.4 | Modest |
| | Final energy consumption (Mtoe) | 3.0 | 2.8 | 2.9 | Very low |
|  | Level of electricity interconnectivity (%) | 63 | >60 | >60 | N/A |

*Sources: EU Commission, ENERGY STATISTICS, Energy datasheets: EU countries; European Semester by country; Estonia NECP.*

## 2. FINALISATION OF THE NECP AND CONSIDERATION OF COMMISSION RECOMMENDATIONS ON THE FINAL PLAN

### Preparation and submission of the final plan

Estonia **notified** its final national energy and climate plan (NECP) to the European Commission on 20 December 2019.

The draft NECP was available for **public consultation**. Estonia has submitted, along with the final NECP, a summary of the comments received from organisations, companies and other interested parties and how they were taken into account in the final plan. It remains unclear, however, to what extent the general public participated in the consultation. Following a screening process, Estonia has concluded that a strategic environmental assessment (SEA) was not needed under Directive 2001/42/EC. Estonia indicates that this need will be reassessed with future updates of the NECP.

In the second half of 2019 Estonia had meeting and exchanges with neighbouring countries in respect of NECP objectives, policies and measures

### Consideration of Commission recommendations

In June 2019 Commission issued eleven recommendations to Estonia's final plan. Annex 1 to this Staff Working Document offers a detailed account on how the different elements of Commission Recommendations have been reflected in the final NECP. Overall, the final NECP **partially addresses** most of the Commission Recommendations. The main changes introduced in the final plan are the following:

On **greenhouse gas emission reduction**, Estonia **largely addressed** the recommendation to clarify how it plans to reach its target for emissions not covered by the EU emissions trading system. The NECP covers a scenario that projects compliance with the target. However, more clarification is needed on how each sector will decarbonise sufficiently rapidly.

On **renewables**, Estonia **partially addressed** the recommendations to support its contributions to the overall and sectoral renewables targets, as well as the enabling frameworks for renewable self-consumption and renewable energy communities with detailed and quantified policies and measures. There is very limited additional information on policies and measures in the final plan, compared to the draft plan.

On **energy efficiency**, Estonia **partially addressed** the recommendation to increase the level of ambition and to come up with additional measures and to provide expected savings. While its contribution to primary energy consumption remains the same, the contribution to final energy

consumption is rather modest. A few new measures have been identified, but in general almost all of them are a continuation of existing ones. The description of measures is better structured than in the draft plan but still missing quantitative objectives and impacts. On buildings, the long-term renovation strategy has not been submitted as part of the NECP,[6] but the plan provides additional information.

On **energy security**, Estonia **partially addressed** the recommendation to specify measures to ensure electricity generation adequacy, in light of the increasing shares of renewables and the potential withdrawal of some of the oil shale generation capacity. The plan specifies that the National Regulatory Authority may impose an obligation on the system operator to invite tenders for the creation of new production capacities, without detailing it further. The plan could benefit from further elaboration on the potential evolution of the Estonian generation mix and ensuring the electricity system adequacy related to it.

Related to the **internal energy market**, Estonia has **partially addressed** the recommendation to define forward-looking objectives and targets concerning market integration.There are measures introduced to develop more competitive retail markets and to increase the level of consumer engagement in the retail market. Estonia has liberalised its electricity and gas markets and conducted a full roll-out of smart meters in electricity and gas. The consumption data can be accessed by all consumers online and the system of switching suppliers is well developed. The goal of integrating the gas markets of Baltic States and Finland has been presented. The final NECP could have benefitted from describing in more detail the objectives and policy measures for enhancing retail market competition, consumer protection, and flexibility.

On **research, innovation and competitiveness**, Estonia **partially addressed** the recommendation to clarify the national objectives and funding targets, and underpin them with specific and adequate policies and measures. The plan presents general goals, but since the Estonian development plan for research, development, innovation and entrepreneurship 2021-2035 is currently being developed, more detailed funding and timeframes remain unclear.

Estonia **largely addressed** the recommendation to reinforce **regional cooperation**. The plan details ongoing regional cooperation with the Baltic States and Nordic countries, and recognises the potential for further cooperation in areas highlighted in the recommendation. However, concrete deliverables illustrated in the final NECP remain limited.

Estonia **partially addressed** the recommendation on **investment needs** and mechanisms and funding sources to lever those. In particular, the final plan includes a general overview of the public investments needed to reach 2030 targets in the energy, transport, buildings and agriculture sectors. However, the plan does not provide a full picture concerning the overall investment needs to modernise Estonia's economy by reaching its energy and climate objectives. The plan notes that investments from the private and non-profit sectors will be needed. However, further details are not provided.

Estonia **partially addressed** the recommendation to list actions undertaken and plans to **phase-out energy subsidies, in particular for fossil fuels**. The Estonian NECP provides a quantitative overview

[6] Estonia submitted its Long Term Renovation Strategy, as requested by Article 2 of the EPBD Directive, on 13/07/2020.

of (fossil) energy subsidies 'for legal entities' along with a qualitative description of fossil fuel subsidies for 'natural persons'. However, no plans to phase these out have been mentioned.

Estonia **largely addressed** the recommendation to complement **analysis on air quality.** The NECP includes projected emissions of the five air pollutants regulated by the EU National Emission Ceilings Directive in the main emitting sectors.

Finally, Estonia **partially addressed** the recommendation to better integrate **just and fair transition and energy poverty aspects**. The NECP mentions the Estonian oil shale sector but does not assess the impact of the measures presented in the plan on employment in the sector. The approach to address energy poverty issues has not been further developed compared to the draft NECP.

*Links with the European Semester*

In the context of the European Semester process, in 2019 Estonia received one country-specific recommendation[7] in relation to climate and energy, in particular to "focus investment-related economic policy on sustainable transport and energy infrastructure, including interconnections, on fostering research and innovation, and on resource and energy efficiency, taking into account regional disparities". In the 2020 country report[8] adopted on 20 February 2020, the Commission assessed that on this recommendation, Estonia achieved limited progress.

Due to the COVID-19 crisis, the European Semester country-specific recommendations for 2020 addressed Member States' responses to the pandemic and made recommendations to foster economic recovery. In particular, they focused on the need to front-load mature public investment projects and promote private investment, including through relevant reforms, notably in the digital and green sectors. In this context, Estonia received a country-specific recommendation[9] stressing the importance of focusing investment on "the green and digital transition, in particular on digitalisation of companies, research and innovation, clean and efficient production and use of energy, resource efficiency, and sustainable transport, contributing to a progressive decarbonisation of the economy".

The Governance Regulation provides that Member States should ensure that their national energy and climate plans take into consideration the latest country-specific recommendations issued in the context of the European Semester. Estonia's national energy and climate plan can support the implementation of the recommendations formulated in the context of the European Semester, in particular through its identification of necessary investments needs and financial sources to deliver them.

[7] Recommendation for a Council Recommendation on the 2019 National Reform Programme of Estonia and delivering a Council opinion on the 2019 Stability Programme of Estonia, COM(2019) 506 final.

[8] Commission Staff Working Document Country Report Estonia 2020, SWD/2020/505 Final.

[9] Recommendation for a Council Recommendation on the 2020 National Reform Programme of Estonia and delivering a Council opinion on the 2020Stability Programme of Estonia, COM(2020) 506 final.

# 3. ASSESSMENT OF THE AMBITION OF OBJECTIVES, TARGETS AND CONTRIBUTIONS AND IMPACT OF SUPPORTING POLICIES AND MEASURES

## Decarbonisation

### Greenhouse gas emissions and removals

Estonia's binding 2030 **non-ETS greenhouse gas (GHG) emission target** is -13 % compared to 2005. Estonia aims at achieving this target domestically. With existing policies, the final Estonian NECP notes that Estonia's ESR target will not be reached. However, the NECP notes that it will likely be reached in a scenario with additional measures, projecting 20 % emission reductions by 2030. Only emissions for 2020 and for 2030 are given, and the plan does not estimate annual binding emission limits for other years. No cumulative analysis of ESR emissions for the full period 2021-2030 is therefore possible.

Estonia does not indicate whether it intends to use the flexibility from the Land Use, Land Use Change and Forestry (LULUCF) to the effort sharing sectors.

Estonia's current 2050 objective is to achieve an 80 % reduction of greenhouse gas emissions compared to 1990 levels, the objective for 2030 is 70%.

Estonia has a target for emission reductions in the **transport** sector (by 30 % by 2030 compared to 2005), and the final plan identifies several measures in this sector, including e.g. increasing the share of biofuels in the transport sector and time-based road charge for heavy duty vehicles. The estimated reductions from the individual measures are not specified. Estonia intends to support **electromobility** and the underpinning charging infrastructure by yet to be confirmed measures such as support for purchase of electric vehicles and electrification of ferries, public transport and railways. The contribution of biofuels in the reduction of emissions is estimated to require 855 GWh of biofuels (without multipliers) in 2020, most of which 1$^{st}$ generation, and 395 GWh in 2030, all of which would be 2$^{nd}$ generation.

Estonia does not have a quantitative target for further emission reductions in the **building** sector.

The plan includes contributions and some possible measures also in the product use and **fluorinated gas** sector (EU level policies) and in the **waste** sector (for example for the production of biomethane from wastewater).

The plan outlines a vision for **LULUCF and agriculture** in Estonia. It include policies and measures for the two sectors, with 22 measures for agriculture and 8 for forestry; despite these measures, the plan projects that both sectors will see an emissions increase by 2030 (+14 % increase in GHG emissions from agriculture, and a six-fold decrease of the LULUCF sink). The plan refers to the Common Agricultural Policy as an important instrument to support climate action both in the agriculture and in the LULUCF sector. For **forestry**, the plan addresses synergies between mitigation and adaptation objectives and policies.

The plan recognises the country's vulnerability to climate change and the relevance of climate resilience for the achievement of mitigation objectives, and sets **adaptation** goals in Estonia's Climate Change Adaptation Development Plan until 2030', which aims at reducing the vulnerability of Estonia to climate change.

Estonia notified its long-term strategy to the Commission on 30 December 2019. Estonia aims to reduce the emission of greenhouse gases by 2050 by about 80% in comparison with the emission

levels of 1990 and by 2030 by 70%. This objective, enshrined into law, covers all sectors of the economy but excludes the natural sinks as well as emission from international navigation and aviation. The long-term strategy addresses most of the elements required by Article 15 of the Governance Regulation.

## Energy efficiency

Estonia's **national contribution for energy efficiency** in 2030 is 5.4 Mtoe for primary energy and 2.9 Mtoe for final energy consumption. Estonia has the second highest energy intensity of economy (after Finland) in the EU.[10]

The plan provides descriptive information on **policies and measures** beyond 2020 targeting transport, buildings, "thermal transmission "(district heating), "public sector" and "other" sectors. The energy savings contribution of these measures towards the 2030 target is not reported and it is not possible to assess which policies and measures are expected to have the largest impact or to asses if they are sufficient to reach the contribution.

Estonia presents the **cumulative savings** to be achieved under Article 7 of Energy Efficiency Directive[11] with a cumulative amount of 1.26 Mtoe and (52.8 TJ). This will be achieved by alternative measures targeting reconstruction of private residences, apartment buildings, public sector and business buildings, increasing the fuel efficiency of the transport sector; promoting sustainable driving; spatial and land use measures in cities to increase the fuel-efficiency of transport and enhancement of the transportation system, developing a convenient and modern public transport, establishing road charges for heavy duty vehicles and planning the development of a railway infrastructure (including the construction of Rail Baltic). The contribution of the individual measures under the energy efficiency savings obligation is not quantified and therefore it is not clear if the proposed portfolio of measures will be sufficient to meet the Article 7 target.

Regarding energy efficiency in **buildings** Estonia sets a clear objective to renovate 3 %/year of the floor area of public buildings owned by the national government. This represents 170 000 $m^2$ by 2030. Estonia also sets a clear objective to bring significant percentages of the building stock up to more modern standards: 40-50 % of small residential buildings up to C or D level, 50 % of small apartment buildings up to C level and 20% of non-residential buildings (offices) up to C level. However, the level of energy savings, CO2 emission reduction, investments required or, importantly, the specific measures to achieve these objectives have not been provided in the NECP. Estonia submitted its Long Term Renovation Strategy, as requested by Article 2 of the EPBD Directive on 13/07/2020.

## Energy security

Maintaining a high level of security of supply is a priority in the ongoing transformation of the energy system, with an objective of 40 % renewable **electricity** and increasing shares of domestic renewable energy. When considering risks, the plan takes into account the **plans of the other connected Member States.**

The plan acknowledges that the key objective for Estonia in the **electricity** sector is desynchronisation from the BRELL (Belarus, Russia, Estonia, Latvia and Lithuania) system and synchronisation with the Continental Europe synchronous area. The plan highlights that the successful completion of this

[10] https://www.eea.europa.eu/data-and-maps/indicators/total-primary-energy-intensity-4/assessment-1.

[11] Directive 2012/27/EU of the European Parliament and of the Council of 25 October 2012 on energy efficiency as amended by Directive (EU) 2018/2002.

project will contribute to individual targets related to energy security and enable further market integration.

The plan indicates that the main instrument to achieve energy security in **gas** is the Balticconnector pipeline which has been commissioned at the end of 2019. Additionally, Estonia indicates that it has set the target to increase the biomethane production volumes.

The plan includes general considerations on **cybersecurity**, however it does not go into specifics of the energy sector. The planned policies and measures are considered credible in relation to the achievement of the objectives.

## Internal energy market

The plan states that Estonia's current **interconnectivity level** is 63 %, which is above the target set at EU level. The plan mentions the Baltic interconnection project, which will strengthen the interconnections between the Baltic States.

Given the electricity sector target of 40 % renewable electricity in 2030 an overview of the development of the different sources of **flexibility** that is necessary to integrate the rising share of renewable energy into the electricity system is not provided.

The plan provides a sufficient overview of current **market conditions** for electricity, in particular regarding market concentration and liquidity as well as high level of wholesale price convergence with neighbouring countries. The final plan refers to a single gas market in the Baltic States established in 2017 through a regional cooperation of transmission system operators.

The final plan does not include further policy objectives and measures related to the **competitiveness** and **flexibility** of retail markets or to **consumer engagement** and **protection**. The plan provides a general description of the current situation as regards flexibility but without providing quantitative or qualitative objectives, nor mentioning planned policies and measures up to 2030.

Regarding **energy poverty**, Estonia reports the number of households affected, recognises the relation between energy poverty and energy efficiency in buildings, and refers to ongoing preparatory work to better define objectives and corrsponding policies and measures. Information provided in the plan is insufficient to properly assess the robustness and credibility of ongoing preparatory work as regards energy poverty.

## Research, innovation and competitiveness

The plan presents general objectives for **research and innovation** for the 2014-2020 period, such as reaching a level of R&D corresponding to at least 3% of the GDP, and private sector R&D expenditure amounting to 2 % of the GDP.

The development plan for Estonian **research, development, innovation and entrepreneurship 2021-2035** is currently being developed. As Estonia is facing difficulties in making its economy more knowledge-intensive it is not able to consider the funding and other targets of the research and innovation of the new decade in setting energy and climate targets until 2030. A more detailed view of the funding and timeframes of the research necessary for implementing the targets and measures presented in the NECP will be developed when preparing and updating the Estonian sectoral development plans.

The NECP notably plans to address hydrogen potential the transport, building, electricity generation and gas networks sectors, investing in the entire value chain from generation, over storage, transport and distribution to end use.

As regards **competitiveness**, Estonia has established a number of indicators to evaluate the contribution of the energy sector to the general objective of competitiveness, and the indicative target levels to evaluate against for 2030. No specific measures are foreseen to improve the competitiveness of the economy, as this is seen to be a consequence of implementing Estonia's development plan for the energy sector, as well as the measures outlined in the NECP.

When it comes to the **low-carbon technologies sector**, a "Green Technology Investment Programme" is planned to boost start-ups and scale-ups who develop and bring to market new products, services and technologies that reduce greenhouse gas emissions. The aim is to mobilise additional private capital through public equity investments.

The NECP does not mention the **Strategic Energy Technology (SET) Plan**, even though Estonia is actively participating in three implementation working groups on photovoltaics, offshore wind and carbon capture utilisation and storage. Estonia does not explain its activities and funds allocated under each implementation plan or how the SET Plan contributes to achieving its national energy and climate objectives.

## Renewable energy

The national contribution to the 2030 EU renewable energy target is specified in the plan and the **renewable share** is set at 42 % in gross final consumption of energy in 2030. This is still considered sufficiently ambitious as it is above the share of 37 % by 2030 that results from the formula in Annex II of the Governance Regulation. The indicative trajectory reaches all reference points as required by the Governance Regulation[12].

Estonia provides little additional information in its final NECP compared to the draft plan that could demonstrate that the Commission's recommendations have been addressed. The limited information on **policies and measures** makes it difficult to assess whether or not the overall or specific shares of renewables will be reached. Estonia is therefore encouraged to provide further details on the policies and measures allowing the achievement of the foreseen contributions and on other relevant sectorial measures.

On the **electricity** sector, Estonia aims to cover a 40 % share of its electricity consumption from renewable energy sources by 2030. This will be achieved by new co-generation plants, power plants fuelled by biomass, micro and distributed generation capacities and the development of wind power, in particular the offshore wind potentials in Baltic Sea.

For **heating and cooling**, Estonia expects that renewable energy in 2030 will represent 63 % of the gross final consumption of heat when compared to the 55.3 % projected for 2020. As the expected renewable share in heating is above 50 % and waste heat and cold is not counted, Estonia is above the required annual renewable share increase of 0.55 % applicable to it, foreseeing increases of 0.74 % point and 0.8 % point, respectively for the periods 2021-2025 and 2026-2030. The main contribution comes from biomass and new heat pump installations. Estonia plans to have 80 % share of renewables in district heating by 2030. The key policies and measures in the heating and cooling sector are economic and policy support for renewable energy production and the utilisation of the potential of co-generation, support to transition from oil to renewables, the renovation of district heating networks and boilers and promotion of the use of local renewables.

[12] Pursuant to Article 4(a)(2) of Regulation 2018/1999.

For **transport**, Estonia aims to meet the 14 % target by 35 % 'second generation' biofuels and 65 % electricity with the applicable multipliers in line with the Renewable Energy Directive, however without a clear split between the multipliers and caps. Estonia does not provide clarifications on what is understood by first and second generation biofuels, as these terms are not used in the Directive. The key policies and measures to achieve this are listed under additional possible measures, and they are considered insufficiently detailed to be able to assess their impact on the achievement of the target.

## 4. COHERENCE, POLICY INTERACTIONS AND INVESTMENTS

The Estonian NECP is generally coherent in the sense that the decarbonisation and energy efficiency dimensions are interlinked, and the measures regarding renewable energy and market integration contribute to ensuring energy security. The impact of climate change risks on energy supply is also considered. The coherence of the plan could be improved by considering the implications of the **energy efficiency first principle,** which is only indirectly mentioned in the Energy Security Dimension section, and demonstrating how objectives under the research, innovation and competitiveness dimension support efforts in the other Energy Union dimensions. The plan also does not mention the **Clean Energy for EU Islands initiative**.

The NECP sufficiently addresses Recital 14 of the Commission's Recommendation by providing an assessment of where the low-carbon technologies sector is currently positioned in the global market. However the plan lacks objectives for overcoming potential challenges for the future deployment of low carbon technologies.

The NECP acknowledges the potential of **circular economy** in GHG emissions reduction. Estonia aims to accelerate the transition to circularity by preparing a circular economy development document and action plan by the end of 2021.

The plan provides information and analysis on **air quality and air emissions policy** by presenting the projected emissions of the five air pollutants regulated by the EU National Emission Ceilings Directive in the main emitting sectors.

While measures to address climate risks to energy security and supply are listed under climate change adaptation, they are not mentioned in the section discussing measures on energy security.

Regarding the **just and fair transition** aspects, the NECP refers to the Estonian oil shale sector but does not include an assessment of the impact of the policies and measures presented in the NECP on employment in the sector.

The NECP includes a general overview of **investment needs** by sector. A methodology for estimating the investment needs is not provided. The reported additional public investment need seems major (about 1 % of GDP per year until 2030) and broadly in line with EU estimates for the EU as a whole. Information on the sources of financing is scarce, unquantified and not presented in a systematic, sector specific manner. The NECP also does not include any details on either national financing measures, or Union funds apart from general references to the Connecting Europe Facility grants. The current level of public finance is not analysed. The NECP seems to suggest that Estonia is planning to finance the public investment needed using EU budget funds; there are no references to other public or private financing tools. To allow for a more meaningful assessment or quantification of the investment needs, more information would be needed, including on the links and synergies between sectoral and fiscal policies.

The description of existing **energy subsidies,** particularly fossil fuels is included, and it appears to be aligned with international definitions of energy subsidies (OECD). The timeline to phase out energy subsidies, in particular fossil fuel subsidies, is not mentioned in the final plan.

The final version of the plan largely complies with **data transparency** requirements and with the use of European statistics.

# 5. GUIDANCE ON THE IMPLEMENTATION OF THE NATIONAL ENERGY AND CLIMATE PLAN AND THE LINK TO THE RECOVERY FROM THE COVID-19 CRISIS

Estonia needs to swiftly proceed with implementing its final integrated national energy and climate plan, notified to the Commission on 20 December 2019. This section provides some guidance to Estonia for the implementation phase.

It also addresses the link between the final plan and the recovery efforts from the COVID-19 crisis, by pointing at possible priority climate and energy actions Estonia could consider when developing its national recovery and resilience plan in the context of the Recovery and Resilience Facility[13] [14].

## Guidance on the implementation of the national energy and climate plan

In the plan, Estonia confirms that it will meet its greenhouse gas emissions reductions target of -13 % by 2030, compared to 2005, for the sectors not covered in the EU Emissions Trading System. This overall reduction would be reached with additional measures.

The Estonian contribution to the EU 2030 renewables target is sufficiently ambitious when compared to the share resulting from the formula in Annex II of the Governance Regulation, whereas the Estonian contribution to the 2030 energy efficiency target is of very low ambition for primary and final energy consumption respectively. Estonian's plan therefore leaves still scope to further develop and reinforce policies and measures on both renewables and energy efficiency as to contribute more to the EU climate and energy targets and strengthen the green transition.

On **renewables**, Estonia committed to achieve 42 % share of renewable energy in final energy consumption in 2030. The additional measures shall be based on a more specific and detailed planning of the renewable energy generation sources. Furthermore, Estonia could implement initiatives to overcome administrative burden. Active engagement in cooperation mechanisms and joint projects would be a great strength for Estonia and would help renewable developments domestically, as well as in the Baltic Sea region and Europe. Focus on implementing the planned measures in transport would especially be beneficial for Estonia in order to fill the gap between the

[13] The development of draft recovery and resilience plans is underway in many EU Member States. This staff working document has taken the setting of energy and climate priorities in this context up until 15 September into account.

[14] On 17 September 2020, the Commission has put forward guidance intended to help Member States prepare and present their recovery and resilience plans in a coherent way, without prejudice to the negotiations on the proposal for a Regulation on the Recovery and Resilience Facility in the European Parliament and the Council (Commission Staff Working Document. Guidance to Member States – Recovery and resilience plans, SWD (2020) 205 final).

current situation and the national and EU objectives in this sector. The sustainable use of biomass would require continued vigilance due to the high share of biomass in the energy sector.

On **energy efficiency** Estonia would benefit from adopting and implementing additional policies and measures that would deliver additional energy savings by 2030. To ensure effectiveness of those policies it is important to underpin them with a detailed assessment of impacts and investment needs. Estonia is invited to ensure that the Energy Efficiency First principle is properly implemented across all areas of the energy system, in particular when planning investments in new oil shale extraction and processing facilities to avoid lock-in in this highly energy intensive industry generating significant CO2 emissions.

The improvement of energy efficiency in buildings has much potential for speeding up energy savings and contributing to the recovery of the economy after the COVID-19 pandemic. Building on the momentum of the **Renovation Wave** initiative[15], there is scope for Estonia to intensify efforts to improve the energy performance of the existing building stock with concrete measures, targets and actions with due attention to energy poverty. Further support to the renovation of public and private buildings could be provided with increased public funding and by leveraging EU and national budgets with private money, combining grants, lending, guarantees and loan subsidies. Estonia should underpin the substantial energy saving potential of the existing building stock by implementing the long-term renovation strategy, in accordance with Article 2a of the Energy Performance of Buildings Directive[16].

Regarding **energy security**, Estonia is expected to concentrate on the swift implementation of all investments and measures required for the synchronisation, together with Lithuania and Latvia, with the European continental grid.

Concerning the **internal energy market**, Estonia could reinforce the monitoring and analysis of retail market competitiveness aspects, notably by introducing concrete objectives as well as corresponding implementation targets/timelines and indicators to assess related progress on retail market competition, demand-side flexibility and consumer empowerment.

On **research, innovation and competitiveness,** Estonia would benefit from further developing national energy-specific policies and measures, specifically supporting the achievement of national objectives and targets in the other Energy Union dimensions and those of the European Green Deal. Estonia is invited to better explore the synergies with the undertaken SET Plan activities. Finally Estonia could further strengthen the link between the competitiveness objective and the policies and measures to put in place for the different sectors by 2030.

Concerning **investment**, Estonia estimates average expenses of €226 million per year between 2021 and 2030. Just shy of half of these investments concern the renovation of buildings, while 26 % would fall to transport, 15% to the energy system, and 12 % to agriculture. Estonia would benefit from further clarifying the full investment needs of decarbonising its power and transport sectors, including investments needed for the electricity grid, for energy storage, and for transport infrastructure. Estonia

[15] Communication 'A Renovation Wave for Europe – greening our buildings, creating jobs, improving lives', COM(2020)662 and SWD(2020)550.

[16] Estonia submitted the long-term renovation strategy in accordance with Article 2a of Directive 2010/31/EU on the Energy Performance of buildings on 13.07.2020.

is invited to provide these investment at the sectoral level so as to ensure interest from the private sector.

On **regional cooperation**, Estonia has been rather pro-active, notably in the context of the Baltic Energy Market Interconnection Plan (BEMIP) High Level Group and in the context of the regional cooperation between the Nordic countries. Estonia is invited to continue ongoing efforts in view of intensifying exchanges and initiatives facilitating the implementation of its national energy and climate plan, in particular as regards relevant cross-border issues. Estonia is also invited to better exploit the potential of the **multilevel climate and energy dialogues** to actively engage and discuss with regional and local authorities, civil society organisations, business community, investors and other relevant stakeholders the different scenarios envisaged for its energy and climate policies.

Estonia would benefit from reinforcing the analysis **of just and fair transition aspects**, notably by providing a more comprehensive assessment of the social, employment, skills and training impacts of the planned objectives, policies and measures, especially related to the future of oil shale in the Ida-Viru county.

Estonia would also benefit from a plan defining objectives and measures to address **energy poverty** in the country.

Estonia is invited to intensify action to phase out **energy subsidies**, in particular for fossil fuels. A rapid phase out of the fossil fuel subsidies identified in the NECP and recent Commission analyses, through the further development and implementation of concrete plans with associated timelines (coupled with measures to mitigate the risk of households' energy poverty), would further boost the green transition.

In implementing its plan, Estonia is invited to make the **best possible use of the various funding sources available**, combining scaled-up public financing at all levels (national and local, as well as EU funding) and leveraging and crowding in private financing. An overview of EU funding sources which should be available to Estonia during the forthcoming multiannual financing period (2021-2027), and of the open calls for project proposals for EU funding addressed to all Member States and companies, is provided in tables 1 and 2 of annex I. For the forthcoming period, the European Council has committed to the mainstreaming of climate action into all EU programmes and instruments and to an overall target of at least 30 % of EU funding to support climate objectives. At the same time, EU expenditure should be consistent with the Paris Agreement and the 'do no harm' principle of the European Green Deal. At the EU level, funding will be available for Estonia from the Innovation Fund and the Modernisation Fund too, based on revenues from the auctioning of allowances under the EU Emissions Trading System, as well.

## Link to the recovery from the COVID-19 crisis

The implementation of Estonia's final integrated national energy and climate plan will need to fully take into account the context of the post-COVID-19 recovery.

In the context of the Recovery and Resilience Facility, that is expected to be operational on 1 January 2021, **the final plan constitutes a strong basis for Estonia to design climate and energy-related aspects of its national recovery and resilience plan**, and deliver on broader European Green Deal objectives. In particular, mature investment projects outlined in the plan, as well as key enabling reforms, should be frontloaded as much as possible.

In turn, the Recovery and Resilience Facility will provide opportunities to accelerate Estonia's green transition while contributing to economic recovery – to follow the commitment of the European Council to achieve a climate mainstreaming target of 30% for both the multiannual framework and Next Generation EU, **Estonia's recovery and resilience plan will have to include a minimum of 37% expenditure related to climate**.

Based on Estonia's final national energy and climate plan, and on the investment and reform priorities identified for Estonia in the European Semester, **the Commission services invite Estonia to consider, while developing its national recovery and resilience plan, the following investment and reform priorities in the climate and energy domain in particular**:

- Measures for reforms and investment into the expansion of renewable sources of energy in view of supporting the phase-out of oil shale from electricity production, including accompanying investments into the electricity grid and into storage solutions;
- Measures supporting the renovation of buildings, including integration of renewables, and continue the phase-out of carbon-intensive heating technologies;
- Measures for reforms and investment into sustainable transport modes, including the completion of Rail Baltica and increased rail electrification.

# ANNEX I: POTENTIAL FUNDING FROM EU SOURCES TO ESTONIA, 2021-2027

## Table 1: EU funds available, 2021-2027: commitments, € billion

| Programme | Amount | Comments |
|---|---|---|
| Structural funds (ERDF, ESF+, Cohesion Fund) | 2.9 | In current prices. |
| Common Agricultural Policy – European Agricultural Fund for Regional Development (both MFF and NGEU components) | 0.7 | In current prices. |
| Recovery and Resilience Facility | 1.0 | Pre-allocated grants envelope, sum of 2021-2022 and 2023 commitments, in prices of 2018. Indicative –based on the Commission's summer 2020 GDP forecasts. |
| Just Transition Fund | 0.3 | In 2018 prices. Commitments both under the multi-annual financial framework (MFF) and Next Generation EU. |
| Modernisation Fund | 0.1 | Approximation: 7/10 of the allocations of ETS allowances to provide revenue to the Modernisation Fund allocated to Member States for 2021-2030 and assuming a carbon price of 20 €. |
| ETS auction revenue | 0.1 | Indicative: average of actual auction revenues 2018 and 2019. The amounts in 2021 to 2027 will depend on the quantity and price of auctioned allowances. |

## Table 2: EU funds available for open calls to all Member States, 2021-2027, € billion

| Programme | Amount | Comments |
|---|---|---|
| Horizon Europe | 91.0 | In current prices. |
| InvestEU | 9.1 | Commitments both under MFF and Next Generation EU. Includes the InvestEU fund (budgetary guarantee to public and private investment) and the advisory hub (technical advice), in current prices. |
| Connecting Europe Facility<br>• Transport<br>• Energy | <br>24.1<br>5.8 | In current prices. The commitment for transport includes the contribution transferred from the Cohesion Fund. |
| Recovery and Resilience Facility (incl. Technical Support Instrument) | 724.7 | Non-allocated commitments both under MFF and Next Generation EU, in prices of 2018. Loans for each Member State will not exceed 6.8% of its gross national income. |
| Programme for Environment and Climate Action (LIFE) | 5.4 | In current prices. |
| Innovation Fund | 140.0 | Approximation: 7/10 of the allocations of ETS allowances to provide revenue to the Innovation Fund for 2021-2030 and assuming a carbon price of 20 €. |

*Note to both tables*

The figures provided by programmes under the EU budget include both the proposals under the forthcoming multiannual financial framework, and the reinforcement of these under the Next Generation EU instrument outside the EU budget.

The figures quoted in this document are based on the conclusions of the European Council of 17-21 July 2020. They however do not prejudge the outcome of the ongoing discussions between the European Parliament and the Council on the elements of the recovery package, such as the Multiannual Financial Framework, the sectoral programmes, their structure and budgetary envelopes, which will be concluded in accordance with their respective adoption procedure.

For most of the above funds, support to the climate and energy transition is one objective among others. However, for the forthcoming period, the European Council has committed to the mainstreaming of climate action into all EU programmes and instruments and to an overall target of at least 30% of EU funding to support climate objectives. EU expenditure should also be consistent with the Paris Agreement and the 'do no harm' principle of the European Green Deal.

Some of the programmes listed in Table 2 provide funding through open calls to companies, not public administrations.

## ANNEX II – DETAILED ASSESSMENT OF HOW COMMISION RECOMMENDATIONS HAVE BEEN ADDRESSED

| Recommendations | | Assessment | |
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| **Decarbonisation – GHG** | Clarify how it plans to reach its greenhouse gas target for emissions not covered by the EU emissions trading system of -13 % below 2005, including the role of the land use, land use change and forestry sector. This requires notably to analyse further the combined impact of the planned policies and applying the accounting rules under Regulation (EU) 2018/841. | Largely addressed | The plan contains a large number of measures for the individual sectors. Taken together, the plan projects that these measures will be used to reach the country's 2030 greenhouse gas emission target under the Effort Sharing obligations. The plan could offer more detailed quantitative assessment in a number of places. |
| **Decarbonisation - Renewables** | Underpin the welcomed level of ambition of a 42 % renewable energy share for 2030 as Estonia's contribution to the Union's 2030 target for renewable energy by detailed and quantified policies and measures that are in line with the obligations requested in Directive (EU) 2018/2001 of the European Parliament and Council to enable a timely and cost-effective achievement of this contribution. | Partially addressed | The policies and measures section of the final NECP refers to the National Development Plan of the Energy Sector until 2030 ("ENMAK 2030") which describes the various measures to be taken to achieve the renewable energy targets. The measures which will contribute most directly to the growth of renewable energy use include the development of electricity generation, effective heat production, and increasing the uptake of alternative fuels in transport.<br><br>Regarding electricity generation, the list of corresponding actions includes the construction of new co-generation plants, power plants fuelled by biomass, micro and distributed generation capacities and wind farms. However no further details are given regarding this measure.<br><br>Regarding effective heat production, measures are presented which together will aim at wider utilisation of the potential of co-generation and residual heat and promoting the utilisation of local fuels. In terms of the share of renewables in heat production, the plan provides a target share of renewable energy in district heat production of more than 80 %. It then details a number of actions of relevance to that target, but none which target specifically |

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| | | | renewable energies.<br><br>The measure aimed at increasing the uptake of alternative fuels in transport, aims among other things at achieving the renewable energy target for the transport sector. However, it mentions no other targets for 2030 but a 10 % share of methane fuels in the energy consumption of road vehicles, which seems to not be a specifically renewable target.<br><br>This recommendation has not been fully addressed, since the NECP does not deliver detailed and quantified policies and measures. |
| | Provide additional details on measures to meet the indicative target in the heating and cooling sector pursuant to Article 23 of Directive (EU) 2018/2001. | Partially addressed | As stated in the Estonian final NECP, in 2030 11 TWh of total heat demand will be covered by biomass, including 80 % district heating from renewable sources. In addition, Estonia states that given the scale of the renovation of the building stock (to be specified in the long-term strategy for the renovation of the building stock under construction) and the sector's updated projections for the development of renewable fuels in the district heating sector, renewable fuels (11 TWh) in 2030 will represent at least 63 % of the gross final consumption of heat (17.4 TWh in 2030). The NECP explains that the split by 2030 between district heating, transformed heat and heat pumps in terms of overall renewable energy consumption in heat will be, respectively, 44 %, 44 % and 12 %.<br>The final NECP does not provide any further information regarding measures to meet the renewable heating target by 2030 and the role of waste heat and cold. |
| | Ensure that adequate measures are in place for the increase of renewables to meet the transport target set out in the draft plan and in line with Article 25 of Directive (EU) 2018/2001. | Partially addressed | In the final NECP, Estonia states that by 2025, it aims to have stopped consumption of first generation biofuels. Estonia explains that the 14 % target by 2030 is to be met by 35 % 'second generation' biofuels and 65 % electricity, with the applicable multipliers in line with the Renewable Energy Directive, however with no clear split between the multipliers and caps.<br>Estonia explains in addition that it wants to cover the consumption of second generation fuels as much as possible with domestically produced fuels, and that the biggest potential is for domestic bio- |

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| | | | methane production and use in transport, with the aim to produce up to 340 GWh of bio-methane (physical energy terms, not using multipliers) in order to meet the target.<br>On electricity consumption in the transport sector, Estonia explains that it will increase sharply after 2025, as a result of the combination of changes brought about by the Clean Vehicles Directive, the depreciation of electric cars and the resulting increase in popularity, as well as the electrification of railways and the completion of Rail Baltic. No additional details on measures are provided in the final NECP.<br><br>This level of information does not address in sufficient detail the various elements to be implemented from the transport-specific provisions of the Directive. Estonia does not provide clarifications on what is understood by first and second generation biofuels, as these terms are not used in the Directive. There are also no details related to whether or not the advanced biofuel sub-target will be implemented in national legislation.<br><br>Estonia provides little additional information in its final NECP compared to its draft NECP. More detailed measures regarding renewables in transport are to be expected from the Transport development plan 2021-2031, which is currently being prepared. |
| | Provide additional details on the specific measures planned to ensure the long-term sustainability of the use of biomass in the energy sector, given the important contribution of biomass across the Estonian energy mix. | Partially addressed | In its final NECP, Estonia states that its use of biomass "takes into account the aspects of environmental sustainability and biodiversity conservation, as well as the sustainability criteria for biomass stemming from the Renewable Energy Directive (EU) 2018/2001 and the fulfilment of the criteria has been demonstrated (e.g. through relevant certificates demonstrating sustainable forest management and production of woody fuels)."<br>In addition, it specifies that "the use of wood for energy purposes is at a level corresponding to the sustainable harvesting capacity of the current Estonian Forestry Plan".<br>The NECP should state clearly that this is also relevant to future uses of biomass to 2030. |

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| | Provide measures on the enabling frameworks for renewable self-consumption and renewable energy communities, in line with Articles 21 and 22 of Directive (EU) 2018/2001 including simplification of administrative procedures. | Partially addressed | In its final NECP, Estonia explains that it allows for the convenient and easy creation of renewable energy communities and the production of renewable energy for self-consumption. It adds that today's Commercial Code allows renewable energy communities to operate both as a private limited company and as a public limited company, and that the only restriction is that a renewable energy community cannot be a partnership or a limited partnership within the meaning of the Commercial Code, since the members of the two legal bodies cannot be local authorities. It then explains that instead, local authorities can form a renewable energy community "in the light of the new Renewable Energy Directive". In addition it states that today's electricity market law allows consumers to play both the role of producer and consumer and that "self-generated electricity can be consumed by itself and passed on to others and, under certain conditions, may also be the subject of a subsidy".<br>In ENMAK 2030, Estonia states that "regulations should be amended to create the necessary conditions for production, transmission and sale of heat and electricity generated by energy communities". |
| **Energy Efficiency** | Increase the level of ambition towards decreasing both final and primary energy consumption in 2030 in view of the need to increase the level of efforts necessary to reach the Union's 2030 energy efficiency target. | Partially addressed | Estonia's contribution for primary energy consumption is the same as in the draft plan and for final energy consumption is of rather modest ambition. As a result both contributions are assessed as of modest ambition compared to the EU efforts needed to achieve the target. |

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| | Support it with policies and measures that would deliver additional energy savings by 2030. In the final plan include all the policies and measures planned to achieve the cumulative savings goal with a realistic schedule of implementation and a clear assessment of their investment needs. | Partially addressed | The final NECP provides descriptive information on policies and measures beyond 2020 targeting transport, buildings, "thermal transmission "(district heating), "public sector" and "other" sectors. The energy savings contribution of these measures towards the 2030 target is not reported and it is not possible to assess which policies and measures are expected to have the largest impact or to assess if they are sufficient to reach the contribution.<br>With regards to buildings, the plan provides useful elements, while more information has been provided on the renovation of the building in long-term renovation strategy that Estonia submitted on 13/07/2020.<br>Estonia presents the cumulative savings to be achieved under Article 7 of Energy Efficiency Directive[17] with a cumulative amount of 1.26 Mtoe and (52.8 TJ). This will be achieved by alternative measures targeting reconstruction of private residences, apartment buildings, public sector and business buildings, increasing the fuel efficiency of the transport sector; promoting sustainable driving; spatial and land use measures in cities to increase the fuel-efficiency of transport and enhancement of the transportation system, developing a convenient and modern public transport, establishing road charges for heavy duty vehicles and planning the development of a railway infrastructure (including the construction of Rail Baltic). The contribution of the individual measures under the energy efficiency savings obligation is not quantified and therefore it is not clear if the proposed portfolio of measures will be sufficient to meet the Article 7 target. |

[17] Directive 2012/27/EU of the European Parliament and of the Council of 25 October 2012 on energy efficiency as amended by Directive (EU) 2018/2002.

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| **Energy Security** | Specify measures to ensure the electricity generation adequacy in light of the ambitious renewables target, including measures on demand response and storage. | Partially addressed | The final plan specifies that the National Regulatory Authority may impose an obligation on the system operator to invite tenders for the creation of new production capacities, without detailing it further. The plan could benefit from further elaboration on the potential evolution of the Estonian generation mix and ensuring the electricity system adequacy related to it. |
| **Internal Energy Market** | Define forward-looking objectives and targets concerning market integration, in particular measures to develop more competitive retail markets and to increase the level of consumer engagement in the retail market. | Partially addressed | The plan identified measures to develop competitive retail markets and increase the level of consumer engagement such easy access to consumption data online made possible by full roll-out of smart meters. The final NECP could describe in more detail the objectives and policy measures for enhancing retail market competition, consumer protection, and flexibility. |
| **Research Innovation and Competitiveness** | Further clarify the national objectives and funding targets in research, innovation and competitiveness, specifically related to the Energy Union, to be achieved between now and 2030, so that they are readily measurable and fit for purpose to support the implementation of targets in the other dimensions of the integrated national energy and climate plan. | Partially addressed | The plan identifies relevant areas where R&I efforts are modest. The development plan for Estonian research, development, innovation and entrepreneurship 2021-2035 is currently being developed but no targets are indicated, therefore efforts are still insufficient.<br><br>As regards competitiveness, the emphasis is put on a set of quantified objectives by 2030, aimed at ensuring affordable energy supply and contributing to improving Estonia's overall macroeconomic competitiveness. The low-carbon technologies sector is developed especially in energy storage technologies, and measurable objectives are provided until 2030. |
| | Underpin such objectives with specific and adequate policies and measures, including those to be developed in cooperation with other Member States, such as the Strategic Energy Technology Plan. | Partially addressed | The cooperation with the SET Plan is mentioned but priorities are not translated to the national context. |
| **Investments and funding sources** | Provide a general overview on the investment needed to modernise its economy by reaching its energy and climate objectives, and a general assessment of the sources of that investment, including appropriate financing at national, regional and Union level. | Partially addressed | The final plan provides an indication of potential sources of investment, stating that the more specific distribution, schedule of measures and state budget funds planned for their implementation will be decided in the process of preparing the medium-term state budget strategy (annually updated in spring). The plan notes that all existing resources of the public sector will be used to achieve the 2030 targets (including tax revenues, EU funds, trading income of |

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| | | | the GHG emission allowances and financial instruments). Regarding cohesion policy, the plan notes that Estonia intends to continue combining different investment sources by gradually increasing the share of financial instruments. |
| **Regional Cooperation** | Intensify the already good regional cooperation arrangements between Baltic countries (Estonia, Latvia and Lithuania); extend them to new areas and broaden the geographic reach to include the Nordic countries (Denmark, Finland, Iceland, Norway and Sweden). | Fully addressed | In the final NECP, Estonia indicates that in the regional consultations with the other Baltic states opportunities have been identified for regional co-operation in renewable energy and related technologies. Regional cooperation with the Baltic partners is also already happening in areas of GHG emissions projections reporting, LULUCF, agriculture and land use sectors. Estonia is also participating in the Baltic-Nordic energy research cooperation program. At the end of 2018, at the initiative of Norway, the Nordic Cooperation Group on Carbon Capture, Use and Storage (CCUS) and GHG Reduction (NGCCUS) was established. Estonia acknowledges the potential of further widening the cooperation to cover forestry and agriculture, fisheries, GHG emissions reductions and energy efficiency. |
| | The focus of the regional exchanges should be on internal energy market and energy security areas, in view to the changes in the electricity systems accommodating higher shares of renewable electricity, which will increase electricity import/export and enhance the need for system flexibility, as well as on the decarbonisation of the transport sector and research. | Largely addressed | Estonia recognises the potential for further cooperation in areas highlighted in the Commission recommendation and points out that cooperation with Baltic countries concerns such areas as the gas market, the synchronisation of the power systems and cross-border electricity and gas projects. It points to the projects included in the PCI list, which contribute to the security of supply of electricity and gas in the Baltic region and to ensuring effective market functioning. The Baltic synchronisation project underlines the focus in this area. Cooperation in the transport sector is already planned through the implementation of the Rail Baltic project. |
| **Energy Subsidies** | List actions undertaken and plans to phase-out energy subsidies, in particular for fossil fuels. | Partially addressed | The final NECP represents a partial upgrade of the draft plan on energy subsidies. Estonia has included a) a list of energy subsidies for 'legal entities' that entails primarily excise duty exemptions and b) a qualitative description of subsidies for 'natural persons' that describes excise duty exceptions of fossil fuels used in households. The plan states that the most important energy subsidies concern the consumption of fossil fuels.<br><br>As regard to the specific recommendation made by the Commission |

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| | | | on energy subsidies, Estonia has not provided plans to phase these out. However, the plan states Estonia has gradually reduced energy subsidies for legal entities. The NECP specifically states that there are no plans to amend two particular measures: smaller excise duty rate for diesel fuel use in agriculture and the support given for electricity production from peat or oil shale processing retort gas on the efficient cogeneration mode. According to the plan, the lower excise duty rate of diesel fuels supports competitiveness of the agricultural sector. |
| **Air Quality** | Complement the analysis of the interactions with air quality and air emissions policy, presenting the impacts on air pollution for the various scenarios, providing underpinning air pollutant projections, and considering synergies and trade-off effects. | Largely addressed | The NECP presents the projected emissions of the five air pollutants regulated by the EU National Emission Ceilings Directive under the planned climate-energy measures in the main emitting sectors (all are projected to decrease except NH3). The NECP also refers to the study underpinning the results and provides qualitative explanations of the impacts of measures. |
| **Just transition and energy poverty** | Integrate just and fair transition aspects better, notably by providing more details on social, employment and skills impacts of planned objectives, policies and measures. | Partially addressed | The final NECP includes a section covering just transition aspects although it is brief and lacks detail. Oil shale mining in Ida-Viru County is identified as a relevant issue but Estonia states that it will remain the largest economic sector in the county. Some potential fair transition measures in the county are outlined, such as moving workers made redundant in the oil shale industry to forestry and renewable energy technologies but there are no concrete planned objectives, policies and measures. Estonia states that the transition should take into account the planning of shale oil production, global shipping plans, including the use of carbon-neutral fuels by 2050, and the possible impact on employment in the oil shale sector. The NECP does not address issues related to reduction of oil shale electricity production.<br><br>The final NECP includes some details on probable impacts of different measures on employment in different sectors, such as precision fertilisation, vehicle tyres and aerodynamics, development of railway infrastructure, and additional renovation of public and commercial buildings. Social impact is mentioned in case of maritime planning. The impact on skills has not been analysed. |

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| | Further develop the approach to addressing energy poverty issues, including by highlighting the use of energy efficiency measures to alleviate energy poverty as required by the Regulation (EU) 2018/1999 | Partially addressed | In the final NECP Estonia reports the number of households affected, recognising the relationship between energy poverty and energy efficiency in buildings.<br><br>Policies and measures specifically targeting energy poverty remain unchanged compared to the draft NECP, and the approach to address energy poverty issues has not been further developed. The final NECP only includes a reference to ongoing preparatory work to better define objectives and corresponding policies and measures. |