



PISM

POLSKI INSTYTUT SPRAW MIĘDZYNARODOWYCH
THE POLISH INSTITUTE OF INTERNATIONAL AFFAIRS

BULLETIN

No. 167 (1413), 28 November 2019 © PISM

Editors: Sławomir Dębski • Patrycja Sasnal • Rafał Tarnogórski

Sebastian Płóciennik • Justyna Szczudlik • Daniel Szeligowski • Jolanta Szymańska
Marcin Terlikowski • Karol Wasilewski • Szymon Zaręba • Tomasz Żornaczuk

Changes in Estonia's Climate Policy

Kinga Raś

Although in June, Estonia along with Poland, the Czech Republic, and Hungary blocked a political consensus statement in the European Council regarding the EU's goal to achieve climate neutrality by 2050, in October, the country accepted the deadline. Estonia, despite relying on burning oil shale, has decided to embark on a difficult energy transition. This means that, among the EU Member States, support for ambitious EU climate policy is growing.

The Specificity of the Estonian Energy Sector. Estonia is one of the most energy independent EU countries and a net exporter of energy. The main raw material used in the energy sector is carbon-intensive oil shale (sedimentary rock infused with oil and gas). In 2018, oil shale accounted for 72% of the country's total energy supply and as much as 76% of its electricity production. Estonia also has large domestic biomass resources, the second-largest primary energy source. In turn, renewable energy sources (RES) in 2018 provided 1,665 GWh of electricity or 17% of final consumption (compared to 11% in Poland). However, due to the dominant share of oil shale in the production segment, the energy sector is the largest source of greenhouse gas emissions (GHG) in Estonia. In 2016, this totalled as much as 89.3% of the country's total GHG emissions, with just heating and electricity, covered by the EU Emissions Trading System (EU ETS), accounting for 76.7% of total GHG emissions.

At the same time, the oil shale industry generates around 4–5% of GDP in Estonia and provides around 15,000 jobs. In addition, the shale industry has the potential for further development. Under a 2018 contract, the Estonian company Eesti Energia will deliver about 1 million tonnes of raw shale within three years to processor and power generator Viru Keemia Grupp (VKG). Eesti Energia earns profits, among others, from the extraction of shale while the state gains revenues from ecological fees and increased exports. In turn, the government supports the use of modern technology to obtain energy from shale and encourages Estonian companies to apply solutions that are the least harmful to the environment.

Estonia's Energy Strategy. The EU sets the direction for Member States' energy policies and focuses on energy efficiency and combating climate change. Estonia implements these assumptions primarily as part of its "National Energy Sector Development Plan for 2030" and based on its "General principles of Estonia's climate policy until 2050 (Climate policy until 2050)", strategies adopted by its parliament, the Riigikogu, in 2017. According to the guidelines, Estonia strives to create a competitive low-carbon economy and to reduce GHG emissions in energy, transport, and industry, as well as in its agricultural, forestry, and waste-management sectors, by 80% by 2050, compared to 1990 levels.

Estonia assumes a transition to a low-carbon economy, which will require the reorganisation of its energy system. This is presented in the country's "National Energy and Climate Plan 2030" (NECP), which the European Commission (EC) obliged the Member States to create. Estonia estimates the share of renewable energy in gross final energy consumption to be 42% by 2030; and, by sector, it is expected to be 30% in electricity (compared to an estimated 17.6% in 2020), 14% in transport (10% in 2020) and in heating, where

a significant increase is forecasted, up to 80% (38.4% in 2020). Achieving these goals is associated with a radical reduction in the share of oil shale in the Estonian energy sector. This change will also be determined by the growing cost of CO₂ emissions in the EU-ETS, which is why the production of electricity from oil shale will become less and less financially attractive.

Estonia and the EU's Climate Ambitions. Despite its earlier veto, the Estonian government in October supported the European long-term vision of a “Clean Planet for All”, according to which the EU aims to achieve climate neutrality by 2050. However, Environment Minister Rene Kokk emphasized that, while pursuing this goal, the specificities of individual regions of the Union should be considered, and he warned against further restrictions before 2030. In addition, the government pointed out that achieving climate neutrality should be supported by transitional measures. Therefore, the Member States should be allowed to choose which solutions are appropriate for them, for example, in the field of taxation. At the same time, the pursuit of climate neutrality has high public support in Estonia. According to surveys, 70% of its inhabitants think this is the right course of action, although only 30% think that the ambitious EU indicators can be achieved in the set time. However, 19% are against such a policy.

The Estonian government adopted the goal of climate neutrality based in part on its “Analysis of the possibility of increasing Estonian climate ambitions”, developed by, among others, the prestigious Stockholm Environment Institute Tallinn (SEI Tallinn). The report indicates that achieving climate neutrality in Estonia by 2050 is technically possible if all sectors (private, public, non-profit) cooperate effectively. Achieving this goal, however, requires much faster and more widespread investment, primarily in energy efficiency and the use of renewable energy. Public and private investment would have to amount to €17.3 billion in the period 2021–2050 if Estonia wants to produce electricity on its own. In turn, assuming energy imports, the investment demand decreases by around 30–50%. At the same time, according to estimates by VKG, limiting the use of oil shale increases the risk not only of increases in electricity prices but also lower revenues to the state budget from, for example, taxes and income from exports.

However, even alternative solutions primarily assume the use of oil shale in the energy sector using a liquefaction method instead of burning, which would still allow for the use of the raw material in the economy while reducing emissions. In addition, the Japanese concern Hitachi has proposed building a nuclear power plant in Estonia (a BWRX 300 modular reactor). It would be built in Ida-Viru, where most of the Estonian oil shale is mined, to compensate for the economic and other losses to the local population. However, the main problem of this potential project is its high-capital requirements.

Conclusions and Perspectives. In Estonia, the major challenge to the energy transformation is the significant dependence on high-carbon oil shale. Despite this, the goal of climate neutrality is the result of the current relative political consensus and it enjoys public support. Therefore, presumably the Estonian authorities will strive to limit the share of oil shale in the energy mix, especially in electricity production. This does not mean, however, that it will be easy to achieve the assumed goals, which even the EC estimates as ambitious and underestimated. The country's efforts will be supported by the new Commission, in which Estonian Kadri Simson will be responsible for the energy brief. This will prompt the country to set an example and show determination in implementing the EU assumptions while empowering it to alleviate energy disputes in the EU. This is indicated by the government's request to consider the specificities of individual regions.

Estonia wants to use the climate change transition to develop its high-tech industry and increase green investments to make these another important sector of its own economy. On the one hand, a significant reduction in the shale industry will increase turbulence in society, which mainly applies to the residents of the northeast employed in this industry, and reduce state revenue. On the other hand, by adopting ambitious goals consistent with EU policy, the country will probably be able to count on financial support from the Union, all the more so as spending on climate goals in the EU budget proposal for 2021–2027 has already been increased from 20% to 25%.

Until now, both the specificity of Estonia's energy sector—strongly based on high-carbon sources—as well as its objection to the European Council statement resulted in the country being perceived as Poland's ally on climate issues. The change in the Estonian position, [with Hungary also signalling the possibility of such a step](#), means that the vast majority of EU countries agree on prioritising the goal of climate neutrality. It can be assumed that Member States moving away from fossil fuels will more easily receive EU financial support for their energy transformations, and undertaking such a challenge will prove beneficial in the long run.