ASSESSING THE FEASIBILITY OF CLIMATE POLICIES OF JAPAN, LATVIA AND LITHUANIA TO REACH THE TARGETS OF THE PARIS AGREEMENT

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Abstract – The study compares the most recent developments in energy policies of Japan, Lithuania and Latvia as a way to mitigate climate change. Latvia, Lithuania and Japan have all pledged to reach net zero by 2050 but face significant challenges, namely the dependence on energy imports in the form of fossil fuels, as they keep dominating the final energy supply. All three countries have a goal to sharply reduce this dependence, with Lithuania and Latvia even striving to become net energy exporters by focusing almost entirely on renewable energy. Japan, on the other hand, also aims to boost a renewable energy share, yet focuses more on the diversification of imported energy sources. The study attempts to discuss the differing approaches in climate change mitigation in Japan as compared to Latvia and Lithuania. The ambition of each country is estimated by Intended Nationally Determined Contributions (INDCs), the roadmap to reduce the emissions in different sectors as enshrined in the climate strategy of each country, and the penetration of the renewable energy sector, estimating the scope of the ambition and implementation gaps compared to the goals set by the Paris Agreement. The study also estimates the impact of external impacts, namely the COVID-19 pandemic and the Russian invasion of Ukraine in shaping climate change policies. Therefore, this study offers a comprehensive outlook on what needs to be achieved so that all three countries could be role models to follow in the climate policy. All three countries could collaborate on solar power, off-shore wind power, and hydrogen technologies. There have already been joint projects between Japan and the EU on advanced biofuels and the new generation of concentrator photovoltaics. However, there are significant differences regarding the role of ammonia and hydrogen production in the climate change mitigation in Japan as compared to Latvia and Lithuania. The ambition of each country is estimated by Intended Nationally Determined Contributions (INDCs), the roadmap to reduce the emissions in different sectors as enshrined in the climate strategy of each country, and the penetration of the renewable energy sector, estimating the scope of the ambition and implementation gaps compared to the goals set by the Paris Agreement. The study also estimates the impact of external impacts, namely the COVID-19 pandemic and the Russian invasion of Ukraine in shaping climate change policies. Therefore, this study offers a comprehensive outlook on what needs to be achieved so that all three countries could be role models to follow in the climate policy. All three countries could collaborate on solar power, off-shore wind power, and hydrogen technologies. There have already been joint projects between Japan and the EU on advanced biofuels and the new generation of concentrator photovoltaics. However, there are significant differences regarding the role of ammonia and hydrogen production in the climate change policy strategies of the three countries. Some contributing sectors are left behind and the current climate change strategies, even if properly implemented, may not be 2°C compatible, let alone 1.5°C compatible. The policies look even direr for a fair share target, and the implementation gap generally remains wide for the 2024–2030 period.

Keywords – Climate change policy evaluation; COVID-19 pandemic; decarbonisation; INDC; Paris Agreement; renewable energy; Russian invasion of Ukraine