On greenwashing in energy production from fossil fuels

The Paris Agreement has set an ambitious goal to keep worldwide temperature rise well below 2°C, and pursuing efforts to limit the temperature increase to 1,5°C, compared to the pre-industrial era. To meet this requirement, the targets of the European Union are to cut greenhouse gas emissions by 20% by 2020, at least 40% by 2030 and 80-95% by 2050. The consumption of renewable energy must increase from 20% by 2020 to 27% by 2030. We criticise the weak ambitions of the EU Governments in terms of European energy transition and reduction of energy consumption. We aim for a renewable European Energy union without fossil and nuclear energy production. Another factor in the global carbon balance - reducing the increase of atmospheric carbon dioxide levels - is binding the carbon in forest stands. In the European Union, the total forest area has grown by 17 million hectares since 1990, constituting 180 million hectares by 2015, as a result of forestation and natural expansion of forests to abandoned lands. However, this shall not lead to any loopholes to decrease carbon emissions in other sectors as foreseen within the current draft of climate action regulation concerning land use, land use change and forestry.

Not all the member countries, however, are currently implementing policies to reduce the carbon emissions. Instead, they enforce energy production from fossil fuels, in an attempt to misuse sustainable energy production support tools to do so. Estonia is a dramatic example of such a policy.

Since 1960s, the locally mined *Kukersite* oil shale is the main fuel for electricity production in Estonia and the raw material to produce a liquid fuel, shale oil, in the retorting process. In the governmental rhetoric of Estonia, the oil shale is often referred as a "national treasure" and the guarantee of energy independence.

Instead of divestment from fossil fuels, the government of Estonia proceeds to invest into oil-shale-based energy production. The recent developments are:

- The annually mined amount of oil shale in this century has continuously increased from 12 million tonnes (2000) to 20 million tonnes (2015);
- In 2016, the environmental levy charged per tonne of carbon dioxide emission was reduced and set dependent on oil prices in the global market, which, however, has no relation to climate effects of emissions from oil-shale-fired power plants;
- The national energy production company Eesti Energia launched a new 300 MW oil-shale-fired power plant in 2015, financed with a governmental guarantee;
- As a side effect of reduced environmental levy, the income of Estonian Evironmental Investment Centre has decreased by 63%. Thus, funding of environmental projects is hindered, including the co-funding of projects funded by the European Union.

The energy value of *Kukersite* oil shale is three times lower than that of coal, thus, much larger quantities have to be mined to produce the equal amount of energy, making respective damage to groundwater and ecosystems due to open-pit mining. The *Kukersite* contains certain carbonaceous minerals, resulting in nearly 20% larger carbon dioxide emission per energy unit produced, compared to coal. Production of 1 MWh electricity by oil-shale fueled power plants emits as average 1.18 tons CO2. More than 70% of the CO2 released into the air in Estonia originates from the oil shale power industry. More than 80% of the waste produced in Estonia is related to oil shale industry. Nearly 80% of the consumption of water in Estonia takes place during the production of oil shale electricity. Because of its reliance on oil shale, Estonia has the most carbon-intense economy among OECD countries.

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On 14 January 2015, the government of Estonia proposed changes to the Electricity Market Act to enable Eesti Energia to receive subsidies for burning biomass in oil shale power plants. A precondition for subsidies is that the Estonian state can sell its surplus share of energy from renewable sources to Member States lagging behind their binding renewable targets by way of statistical transfers as envisaged in article 6 of Directive 2009/28/EC. The expected countries are Luxembourg, Austria and the Netherlands in first order. Estonia has sold AAU-s to Luxembourg and Austria before. The draft Electricity Market Act, which has passed the first reading in the parliament of Estonia, allows annually burning up to 3.4 million cubic metres of wood in the furnaces of power plants, in addition to oil shale, to produce 2.5 TWh of electric energy.

This initiative, in fact, is by no means sustainable, as:

- Adding 3.4 million m^3 to 10.4 m^3 of wood harvested annually (2014) in Estonia exceeds its annual growth, which is estimated 12 million m^3 by the Estonian Environmental Agency.
- Also Germany is no longer frontrunner: Under the Chancellery of Angela Merkel, Germany lost track of its energy transition and climate policy. Instead of accellerating the energy transition, the expansion of renewables was slowed down and the development of a modern grid is constantly sabbotaged. This shows why Greens are so direly needed to shape European policies on energy. Coal and nuclear power are not sustainable and forward looking. We support the energy resources of the future. It is possible to cover our energy demand completely with sun, wind, water, sustained bioenergy and geothermal energy. We want to convert completely to renewable energies, to promote energy efficiency and saving, and to permanently switch off nuclear power.
- No more than 0.5 million m^3 (estimated by the Estonian State Forest Management Centre) for combustion can be extracted from forests of North-East Estonia - distances up to 100 km from oil-shale-fired Narva power plants - without either heavily over-cutting the forest or causing lack of wood for industries, local co-generation plants and boiler houses, and households.
- As co-generation of electric energy and heat is not possible in the main oil-shale-fired power plant (no local demand for excess heat), the conversion efficiency of the process is only 35%; all the residual heat is released to the Narva river.

State aid in form of including the electricity generated by the co-combustion of wood-chips together with oil-shale in the boilers of Narva Power Plants with energetic efficiency below 45% eligible for statistical transfer of renewable energy, as proposed by Estonian Government in recent amendment to the Estonian Electricity Market Act, cannot be considered compatible with the internal market under Article 107(3)(c) of the Treaty on the Functioning of the European Union. Subsidized co-combustion of wood biomass in the inefficient boilers of Narva PP-s, which do not meet the efficiency requirements set for co-generation by Article 2(34) of Directive 2012/27/EU and will adversely affect other biomass fueled co-generation plants with far higher primary energy efficiency at limited domestic market, therefore should not be allowed by the Commission.

President Juncker promised to make Europe number one in renewables. But the Clean Energy package falls short of matching that aim but maintains privileges for existing coal and nuclear. Under these plans, Europe faces a lost decade for energy transition. The only good news is that the mobilisation of progressive forces led to the introduction of emission performance standards which should at least prevent the building of new coal capacity in Europe. The Commission continues to turn a blind eye to the environmental risks of bioenergy, failing to

establish meaningful safeguards. The new sustainability safeguards for biomass fail to address the climate risks of using sources other than waste and residues, or resource efficiency. The European Union has a responsibility to align its policies to what it committed to in Paris last year. Instead, it has presented one big compromise, that will go some way to appeasing the Member States and energy companies that wish to continue with fossil fuels, but do painfully little to meet our international responsibilities or seize the opportunities offered by energy transition. The European Union has a responsibility to align its policies to what it committed to in Paris last year.

Regarding fracking in general, we adopt the "Korbach resolution"[1] demanding from our national governments and the European Union:

- An immediate ban without any exemptions of all types of fracking with regard to the research, exploration and exploitation of fossil energy sources and a general import- and trade-ban on "fracked" fossil energy sources.
- A revision of the mining law. The revision must focus on ensuring the highest environmental standards and the participation rights of the public.
- A consistent implementation of the political decision in favour of a move away from fossil energy sources, a development of renewable energies and an improvement of energy efficiency.

We call all relevant actors to mobilise their forces against the projects that, formally pretending to fulfil the criteria of green energy, undermine the European policies of sustainable energy production and the Paris Agreement:

- We call on the Government of Estonia immediately withdraw the draft Electricity Market Act and to start the process of transition from oil-shale-based energies to an energy production fully based on renewables.
- We call on the European Commission and European Council to use all legal and political means to stop the government-aided greenwashing schemes in energy industries, practiced as such in Estonia.
- We call on the Greens in EU member countries to be aware of the possibility of such schemes and to prevent them by all parliamentary and public means.

We strongly believe that it makes no sense to build further infrastructure for fossil fuels when the EU is legally obliged by the Paris Agreement to have all its energy come from renewable sources by midcentury. Therefore, we oppose carbon lock-in-projects such as Nord Stream II, as it weakens the goal to improve our energy efficiency as well as fosters Europes dependencies on Russian gas.

[1] https://www.resolutionkorbach.org/project/unterst-aus-en.php