



REPUBLIC OF ESTONIA  
MINISTRY OF ECONOMIC AFFAIRS  
AND COMMUNICATIONS

# Future of energy peat in Estonia & EU

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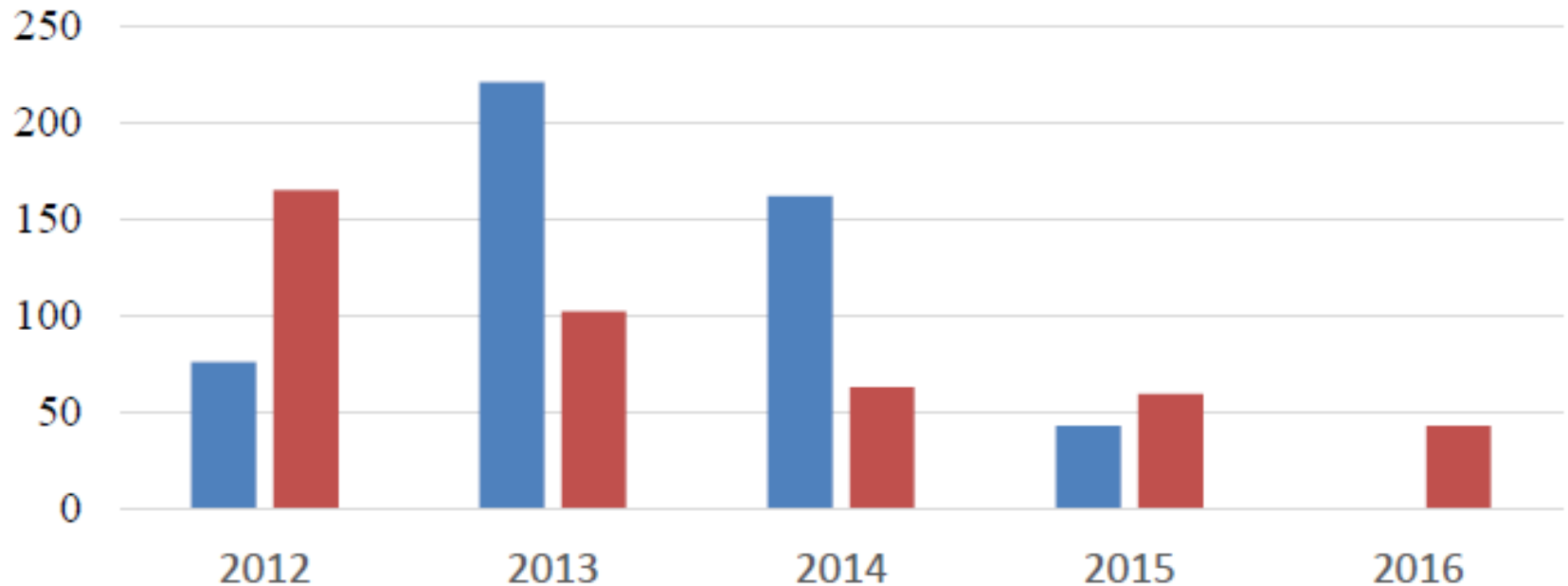
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# Situation in Estonia

1. EU Climate targets including renewable energy targets. Leading to support on cogeneration with renewable biomass of 53,7€/MWh effectively crowding out peat.
2. Since 2012 fairly low wood prices (below 14€/MWh)
3. CO<sub>2</sub> prices very low (5-8€/t)
4. Increase of peat mining fee from 0,73 €/t in 2006 to 1,4 €/t in 2016.

# Production and sales of energy peat by leading Estonian energy peat producer



# Developing situation

1. Continuous increase of export of wood chips/ pellets from Estonia and demand from W Europe.
2. Start of „statistics trade“ in end of 2017. Potentially large scale renewable electricity production in Narva power plants to sell renewable energy statistics to member states below EU 2020 renewable energy targets.
3. Concern among wood processing industry about significant wood price increases.

# Consideration points

1. Annual peat loss due to mineralisation in drained bogs ca 4 million t without any value added.
2. State receives no revenue for high fee if there is no mining of peat.
3. Revenue to state and society 2-4 times higher from economic production cycle than from mining fee.
4. It is possible to export wood, but there is no import market for energy peat.

# Change in district heating law

Changes to enhance utilization of cheaper energy sources

1. Bonus on Weighted Average Cost of Capital – investment directed into decreased heating price will have higher WACC level, thus producer can reap benefits of such investment (currently not). For example if heating price would decrease 15% as result of investment, this investment can have WACC of +1,5%.
2. Reference price – if heating price is below reference price, it is not required to receive approval of Competition Board. Reference price would be around 54-57€/MWh (all peat using districts below that level)

Ministry on Economy and Communications published large boiler refurbishing support decree to help adopt cheaper fuels in district heating. Support rate up to 50%.

Until 2020 support volume 43 mln €.

# Changes for consideration

New support level from 2018 for partially renewable biomass in cogeneration at 42€/MWh would increase competitiveness of peat vs wood if wood prices increase above over 16€/MWh.

Potential demand ca 200 000- 300 000 t.

**If** CO<sub>2</sub> prices blow 8€/t.

# Peat needs to be treated other than coal

- Large quantity of drained bogs in Baltics, Sweden, Finland, Ireland emitting millions of tons of CO<sub>2</sub> without any added value.
- Commission Regulation (EU) No 601/2012 of 21 June 2012 on the monitoring and reporting of greenhouse gas emissions pursuant to Directive 2003/87/EC includes ANNEX VI table „**1.Fuel emission factors related to net calorific values**“ where **Emission factor (t CO<sub>2</sub>/TJ) for peat is 106,0**. For Wood/Wood waste it is „ - “
- There should be **Emission factor for „Peat from drained bogs“ with recognition that emissions are taking irrespective of burning/human use. Thus Emission factor should be 53 t CO<sub>2</sub>/TJ.**
- Baltics, Sweden, Finland, Ireland should make formal proposal to EC for energy peat to be viable at CO<sub>2</sub> prices above 8-10€/t.





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# Thank you!

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