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EPE: The Role of Peat in EU Energy Policy

Intense price competition between fossil fuels, peat and prioritized renewable energy

Energy peat has an important role to play in the European energy mix. The EU aims to combat climate change by increasing the use of renewable energy. Even though heat and power production should use as much renewable (e.g. wood based) biomass fuels as possible, many of the peat producing Member States still rely on large quantities of imported fossil fuels. Energy peat can contribute to decreasing the dependence on imported fuels.

Considering all the benefits of energy peat usage (energy production, economy, social, climate etc.) the present situation should be regarded as poor resource management. State of art techniques and political instruments have minimized the negative environmental impact caused by peat production. Therefore, it is important to guarantee the competitiveness and availability of energy peat in the EU.

In some of the peat producing Member States the benefits of locally produced energy peat are recognized through support schemes (such as Ireland and Sweden) or lower heat taxation for peat compared with imported fossil fuels (Finland) performing the same function. Nevertheless, competitiveness of locally produced energy peat is compromised in many EU countries due to intense price competition from imported fossil fuels and the priority status given to renewable energy sources.

Taking into account the EU target to increase the market price of emission allowances around 2020, peat competitiveness will decrease even more due to the high specific emission factor of energy peat. However, using peat for energy should be compared to letting it decompose naturally in millions of hectares of drained peatlands causing high carbon dioxide emissions without any benefit.

Peat's competitiveness could be ensured by:

- Recognising that peat can contribute to increasing energy security and independence in some Member States;
- Recognising the economic benefits of energy peat usage;
- Recognising technical benefits of peat usage supporting the usage of biomass;
- Recognising technical benefits and energy efficiency increase due to peat usage;
- Recognising environmental and climate impact of drained peatlands and the benefit of rewetting in order to promote alternative use of peat;
- Introducing modern nature protection principles assuring the protection of all valuable peatlands.

Electricity and heat from energy peat

Peat is used both for energy and as growing media in horticulture. Energy peat has been used as fuel for electricity and heat generation. There are over one hundred energy plants in Europe that are using energy peat or a combination of energy peat and wood-based fuels. Energy peat is also used in hundreds of small local and regional heating plants. Energy peat can be used as an efficient co-fuel to wood based fuels. Burning peat together with wood contributes to the control of the combustion process, reduces corrosion and increases total efficiency of the boiler.

Peat is an important indigenous energy source that provides household heating to almost 2 million European citizens. Therefore, energy peat has a key role to play ensuring security of supply and supporting trade balances by decreasing the dependence on imported fuels and electricity. Moreover, energy peat creates jobs for 12,000 – 15,000, on an annual basis, including direct and indirect employment. This energy production capability should be maintained within the EU to address possible future interruptions to energy imports from outside of the EU.
The social benefits of peat production are mostly visible in rural and remote areas.

Drained peatlands used for peat production
Peat is decomposed plant material that has accumulated in anaerobic water-saturated environments. An area with peat is called peatland. Peatlands cover an estimated area of 400 million hectares being equivalent to 3% of the Earth's land surface. The share of undisturbed peatlands is 86 %. Peatlands are mainly used in agriculture (7%) and forestry (4%). Peatlands are drained also in the tropics (3%). Peat extraction for horticulture and energy concerns 0,1 % of peatlands.

Energy Peat Europe supports the 'Statement on the wise use of peatlands' of the International Peatland Society (IPS) and the International Mire Conservation Group according to which: "*Wise use of peatlands is essential in order to ensure that sufficient areas of peatlands remain on this planet to carry out their vital natural resource functions while satisfying the essential requirements of present and future human generations."*

In addition, Energy Peat Europe follows the 'Strategy for Responsible Peatland Management' developed by the IPS with aims to manage peatlands according to principles of 'Wise Use of Mires and Peatlands' while taking into account environmental, social and economic aspects. The primary target is to conserve high value peatlands and manage drained peatlands in a responsible way.

The IPCC (Intergovernmental Panel on Climate Change) classified peat as peat in 2006 but at the same time defined that: "*Although peat is not strictly speaking a fossil fuel, its greenhouse gas emission characteristics have been shown in life cycle studies to be comparable to that of fossil fuels. Therefore, the CO2 emissions from combustion of peat are included in the national emissions as for fossil fuels."* On the other hand, the EU addresses energy peat together with wood fuels in the Industrial Emissions Directive's Large Combustion Plants BAT-document.

In Europe peat accumulation has already come to an end in over 50% of the peatland area and those peatlands leak carbon into the air by oxidation of peat. Only such drained peatlands are used for peat production.

Smart peat production to minimize climate effect
Peat extraction is operated under strict environmental licenses issued by national environmental authorities. Only drained peatlands are used for peat production. Peat in ditched peatlands gradually oxidizes, releasing greenhouse gas carbon dioxide into the atmosphere. When used for energy, the same carbon dioxide is released in boilers. The land area underneath peatland is typically reforested, used for agriculture or rewetted. New vegetation absorbs carbon dioxide and forms a carbon sink on the former peatland site.