AN OVERVIEW OF THE WORLD PEAT INDUSTRY AND ITS CLIMATE IMPACT

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Peat is a carbon-rich material used as a component of horticultural growing media and as fuel. The extraction and the use of peat is a source of greenhouse gases, mostly through the metabolism and combustion of peat itself (off-site emissions). Driven by global climate debates, the extraction and the use of peat increasingly trigger political questions, for example in Germany. In this context, a common information base on peat amounts is needed for all political and economic actors. The Thünen Institute is involved in a project aiming to provide scientific information on the possibilities and consequences of the peat reduction plan in the horticulture sector and the end of peat extraction on the long run in Germany. An important step of the project is to provide reliable data on the peat flows in Germany, in Europe and in the world. This global perspective is justified by the importance of trade of peat and growing media. Based on an extensive data collection and the help of experts, a material flow analysis is carried out to build a model on the European level. Results show that fuel peat represents most of the extracted amounts and is limited to specific countries, mainly Finland, Ireland and Belarus. On the other hand, peat for horticulture is massively traded within Europe. Germany plays an important role as producer, trader and consumer of peat and growing media. A global analysis shows that Europe is by far the biggest producer and consumer of peat products in the world, Canada being the only other significant extracting country. Based on the flow model, the present quantitative importance of peat for growing media and energy as well as the emissions caused by its extraction and use will be evaluated more precisely.

Keywords: Peat, Horticulture, Energy, Material-flow, GHG emissions