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UNDERSTANDING THE BIOMASS FLOWS AT THE LOCAL LEVEL

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Abstract – While bioeconomy provides the opportunities for sustainable development, reducing fossil fuel dependence and improving local socio-economic conditions, previous assessments of the bioeconomy share of the whole economy in various countries is on average lower than 10 % (but also varying by the used methodology and sectors included in the assessment). Bioeconomy development is limited due to numerous factors, including, bioresource availability, knowledge and infrastructure for high added value biotechnology production and even local social acceptance of new bioeconomy business models and changing of the accepted practices. Local level assessment is important for understanding of biomass flows, supply and demand tendencies. To enhance bioeconomy development, better knowledge of biomass production and use on the resource supply side, as well as of the demand for bioproducts, must be obtained. To enhance bioeconomy development, better knowledge of the production and use of biomass at the resource supply side, as well as the demand of bioproducts must be obtained. The aim of this research is to gain better understanding of the biomass flows (including forestry, agriculture, aquaculture and industrial by-products) at the local municipality level. Although there are methodologies for biomass flow analysis and bioeconomy assessment at the national level, the transferring of those methodologies to the local level are commonly hindered by lack of data in the necessary level of detail. This study includes identifying the location dependent information sources on biomass availability and bioproduct production tendencies and elaborating a data sourcing methodology for biomass flow accounting. Considering the nature of sustainable development (SD) concept, all three dimensions of SD are analysed – environmental, economic and social aspects. The results of this analysis are being further used to elaborate a local level bioeconomy ecosystem model to further promote bioeconomy development.

Keywords – Bioeconomy; biomass availability; bioresource potential; sustainable development

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