



Memo

To The NEF Group under NMR

From Christian Poll

Summary report on the NorPEF-LCA workshop on Nordic cooperation on topics of life cycle assessment (LCA) in relation to the EU Environmental Footprint (EF) development process

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Introduction

This memo builds on the report of the workshop¹ held online on 26 April 2021 regarding Nordic cooperation on topics of life cycle assessment (LCA) in relation to the EU Environmental Footprint (EF) development process and elaborates on the further cooperation in the NorPEF-LCA network.

After Imola Bedo from the European Commission gave a progress report on the EF initiative, the workshop was divided into seven sessions with seven topics for debating by the participants. The topics were:

- Session A1 on Biodiversity and land-use
- Session A2 on Environmental claims, eco-labelling and green procurement
- Session A3 on End-of-Life, waste, recycling and circular footprint formula
- Session B1 on Allocation between co-products
- Session B2 on Harmonisation EPD-PEF
- Session B3 on Electricity modelling, supplier specific vs grid mix
- Session B4 on Biomass, biochemical and biomaterials

The sessions did not conclude on the topics, as the purpose of the workshop was the dialog itself. Go to the session sections of the workshop report to see further details on sub-topics.

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¹ NorPEF-LCA – April 2021 Workshop Report. Workshop on 26 April 2021 on Nordic Dialog on life cycle assessment aspects of the EU Environmental Footprint methodology, ISBN:978-87-93458-02-4

Discussion

Based on the impression of the debates during the day, reflections may fall into the following issues:

1. How is the basic quality of the methodology behind PEF?
2. Which aspects are still missing in the methodology?
3. Which aspects of implementing PEF in legislation are challenging?

Methodology

Regarding the methodology itself, discussions from some of the sessions pointed out that e.g. the balance between energy recovery and recycling is distorted, giving full credit to energy recovery, but only partly credit to recycling. Also, avoided disposal is not accounted for. Improved Nordic cooperation on the LCA aspects may lead to a PEF methodology that is more circular economy friendly, as the waste hierarchy need to be better implemented into the PEF via the circular footprint formula (CFF).

On land use, the positive effects of for example forestry (carbon sequestration) is not accounted for. The Nordic experts have much knowledge on this issue and on the balance between this on one side, and on the impacts of forestry on biodiversity on the other side.

On the relation between EPDs and PEF-CR, there is a need for better coordination between the allocation approaches. Nordic experts have great knowledge of both systems and could contribute on this point. Furthermore, there seem to be some kind of general need for organization and harmonization of program operators, e.g. license to operate. The Nordic countries could set up a system for that, based on the extensive experience with running EPD schemes and eco-labelling schemes, involving all stakeholders, based on scientific data and decades of methodology development.

On energy modelling, there is a crucial issue around the balance between generic data and specific data. For some technologies, generic data are sufficient, but for some other technologies there are big differences among specific sites. The Nordic countries may have some of the best data on this, including system integration into the energy system, e.g. transmission, distribution, storage etc. of energy.

Eventually, on biomass, there are important aspects about impacts on biodiversity and land use from procuring and using biomass. Nordic experts may have great insight into this topic, and uncertainty, which is not the practice in PEF, should be included in future.

Missing aspects

Regarding missing aspects, especially biodiversity and land use are regarded important missing aspects of PEF. Some development is going on in the PEF agriculture working group, but there was a bit of scepticism on how thorough the drafting will be. So far the

work on biodiversity is based on the methodology of Chaudhary and Brooks (2018)², but that is not feasible for comparing conventional and organic farming nor giving special weight to untouched nature. Also land use is quite rigidly handled, not giving room for e.g. differences in land use types among European countries.

The debate suggested close collaboration with key research disciplines like ecology and biology and to define like the “global pressure of LU and BD in a Nordic perspective”. There is a need to define the short term and long term (future) development goals of PEF, where should the methodology go?

Uncertainty is not the practice, thus should be implemented in future in PEF.

Implementation challenges

The EC is working on a gradually increasing introduction of the PEF methodology as mandatory behind measures like green public procurement (GPP), eco-labelling, environmental product declarations (EPDs) and green claims. In principle, this approach implies many advantages. Having one common methodology accommodates the dream of having only one way of calculating environmental impact, thus closing down discussions on goal, scope, data and inventory aspects, impact assessment and interpretation. Also, if one methodology and one open set of data is behind all product policy measures, they will by default be in sync and related, thus like outlined in the figure on page 139 in (Poll, Vogt-Nielsen, Rubik, Jørgensen, & Jensen, 2005), see workshop report on page 13.

It was, however, clear from the discussions in the workshop, that there are many obstacles to overcome before this scenario is fulfilled, apart from the principle ones related to the degree of freedom in the standards for LCA.

One obstacle is the availability and quality of data present in the PEF system. Much data is weakly documented and origins from questionable sources, like a single company. Thus, we are still far from having representative and reliable data behind the PEF system. Another obstacle is the problem of green claims being single parameter, thus not life cycle based. A third obstacle being the right of companies to run private labels, that confuse consumers to think they are third party controlled, criteria based labels. Private labels are often issued by large companies, putting much more marketing power into it than public type I schemes is prioritised to have.

Thus, further Nordic cooperation may show the way by raising the quality and representability of data in an open format. A Nordic showcase of open data with acceptable documentation will lead the way for a thorough European system of accessible data. And the Nordic countries have a record of transparency and sector integration.

² Chaudhary, A. and T. M. Brooks (2018). "Land Use Intensity-Specific Global Characterization Factors to Assess Product Biodiversity Footprints." *Environmental Science & Technology* 52(9): 5094-5104



Furthermore, a close cooperation between the Nordic Forbrugerombudsmen and the scientific society behind LCA and footprint methodology has the potential to streamlining the marketing activities with the level of data and methodology quality.