Memo regarding process and organization of the work with the Danish Technology catalogue

This memo briefly describes the general process of how technology data in the Technology catalogue is updated, and how the work with the Technology catalogue is organized.

The processes and organization of the work intends to support the overall purpose of the Technology catalogue, which is to ensure a broadly accepted foundation of high quality technology data for the use of analytics of the Danish energy system.

The process of updating technologies

The general processes of preparation and updating the Technology catalogue is illustrated in Figure 1.

The methodology applied when preparing Technology Data is described in a set of technology specific guidelines. The purpose of the guidelines is to ensure a consistent method across different technologies, and that data is comparable. The guidelines describe how qualitative technology descriptions are written and how data for the data sheets is gathered and analyzed. There are currently five unique guidelines. The guidelines describe the following categories of technologies:

- Electricity and District Heating
- Energy Storage
- Renewable Fuels
- Individual Heating Plants
- Energy infrastructure (grids for electricity, gas and district heating)

The guidelines are updated regularly if inexpediencies or errors are found, e.g. in preparation of technology descriptions.

The technology descriptions are prepared by external consultants to ensure an independent assessment of the technologies. Furthermore, objectivity and involvement from multiple perspectives is requested when preparing technology descriptions. This is ensured through deep dive workshops with participation from stakeholders and experts within the field of the specific technology. At the workshop, the draft text for the technology description is discussed in detail. The draft text is then sent to a bigger audience of stakeholders and experts for written comments. In this process, anyone with an interest of the field is invited to comment the draft.
Inputs from the deep dive workshop and the external comments are evaluated and incorporated in the technology description by the consultant in collaboration with Danish Energy Agency (DEA) and Energinet (ENDK). After these final adjustments the new technology description is published on the DEA website.

Figure 1: Generic process when updating the Technology Data

Organization of the work with the Technology catalogue

The distribution of roles, when updating existing or adding new technologies to the Technology catalogue, is as follows:

- A steering committee consisting of management employees from DEA and ENDK. The general decisions regarding prioritizing of allocating resources to the Technology catalogue are made by the steering committee.
- A reference group consisting of representatives from industrial associations, companies, universities and users of the Technology catalogue. The group helps to ensure that the technology descriptions remain relevant for the target audience.
- A working group consisting of employees from both DEA and ENDK. The working group is responsible for the project management including the maintenance and development of the Technology catalogue, and updates of the latest developments of the pertinent technologies.

The working group is responsible for ensuring that all technology descriptions are compiled consistently and in a way that is transparent to the reader. It is the
responsibility of the working group to develop and maintain a consistent method (guideline) for the preparation of qualitative (technology description) and quantitative (datasheets) technology descriptions across different technologies. This helps to ensure a consistent and objective description of all technologies. Furthermore the working group serves the role of secretariat for the steering committee and the reference group. The working group is responsible for conducting meetings, recording the proceedings, etc.

The reference group provides recommendations and suggestions to the steering group about development of methods (guidelines), about which technologies to describe or update next and about the technology descriptions in process. Furthermore the reference group supports the working group and contributes to the discussion on ad hoc basis.

In the working group the responsibilities for different technologies are shared between ENDK and DEA. If DEA has the responsibility for updating a specific technology ENDK will follow the process closely and vice versa.

The structure of working with the Technology catalogue is sketched in Figure 2.

**Figure 2: Organizing of the Technology Data**