Final report

1.1 Project details

Project title	Maximise the Impact of IEA Wind in Denmark - 2019
Project identification (program abbrev. and file)	IEAwindDK -Journalnr.: 64018-0626
Name of the programme which has funded the project	EUDP
Project managing compa- ny/institution (name and ad- dress)	DTU Wind Energy, Frederiksborgvej 399, 4000 Roskilde
Project partners	DTU Wind Energy
CVR (central business register)	30060946
Date for submission	12-03-2020

1.2 Short description of project objective and results

January - April

ExCo83 meeting in Bilbao. Review of documents. Preparation and presentation of Danish host proposal for ExCo84.

May - July

DK-Country report to IEA Wind Annual report. Preparation and approval from Danish Energy Agency.

April - September

Preparation of ExCo84 in Copenhagen, September 17-19, 2019

September 17 - 19

Participation in ExCo84 in Copenhagen

October - December

Follow-up from ExCo84 meeting. New tasks with Danish participation Task 41, 42 and 43. Official letters to IEA.

A year-end meeting between Danish Members and Alternates to IEA Wind ExCo and IEA Secretariat (Karina Remler, Mette Jessen Schultz, Peter Hauge Madsen, Ignacio Martí and Klaus Rosenfeldt Jakobsen) in December 2019 was postponed to January 9 2020. At that meeting the coordinating activities in 2019 was reviewed and the activities in the new grant for 2020 was agreed.

1.3 Executive summary

The project supports in 2019 the Danish Energy Agency's participation in the International Energy Agency (IEA) Wind TCP Executive Committee (ExCo) and strengthens communication and network activities in Denmark related to IEA Wind. The work is done through active participation in IEA Wind ExCo meetings and in the IEA Wind Research Tasks with Danish participation.

1.4 Project objectives

The IEA WindDK aims to increase the impact of IEA Wind EUDP funded activities, through increased visibility and dissemination within the Danish industry and research community. The project supports the DEA participation in the IEA Wind TCP Executive Committee, as well as the dissemination and networking activities related to IEA Wind. A key objective is to increase industry and research organizations participation and benefits from IEA Wind research activities. The project will help Danish companies accelerate time to market of innovative products and secure strategies of Danish research institutions to be in line with international trends as well as to bring Danish priorities into the IEA Wind agenda. The project aims to collect Danish research needs for DEA to propose new Research Tasks and Topical Expert Meetings within IEA Wind. The work will build on active engagement at the IEA Wind ExCo and in active IEA Wind Research Tasks with Danish participation during the project.

1.5 Project results and dissemination of results

The project results are related to the two meetings in the IEA TCP Executive Committee Ex-Co83 in Bilbao, Spain in March 2019 and ExCO84 in Copenhagen in September 2019 and to the IEA TCP Annual Report 2018 especially to the Danish Country report.

The IEA Wind TCP 2018 Annual Report highlights the activities and accomplishments of the International Energy Agency Wind Technology Collaboration Programme (IEA Wind TCP). This global network of researchers and policy experts shares the latest technology research and best practices to advance wind energy deployment.

Participants include 24 member countries and sponsor organizations across Europe, North America, and Asia. This report provides a summary of how member countries benefit from wind energy, how much wind power generation each country has deployed, and how policies and research programs will increase wind power's contribution to the world energy supply.

The project has ended by December 31, 2019 and a new similar project as Danish Alternate for the year 2020 has been granted from EUDP with EUDP file no. 64019-0547.EUDP has accepted from April 1st, 2019 to replace Ignacio Martí as project leader or Danish Alternate in IEA TCP Wind Executive Committee with Peter Hauge Madsen. Peter has continued, as Danish Alternate to ExCo in the granted project in 2020.It was needed to replace Ignacio Marti because he became Secretary to IEA TCP Wind ExCo from April 1st 2019 and DTU Wind Energy became Secretariat for the IEA TCP Wind.

In the first three months Ignacio Marti as Danish alternate prepared and reviewed the documents for the ExC083 meeting in March in Bilbao together with the Danish Member of ExCo Hanne Thomassen (milestone M1). The work also comprised a proposal for Danish hostage of ExCo84 meeting in Copenhagen in September 2019. The proposal was accepted by the ExCo and the new alternate Peter Hauge Madsen with the IEA TCP Secretariat at DTU Wind Energy were planning and working with the ExCo85 meeting in September in Copenhagen together with Hanne Thomassen and the new Danish member of ExCo Karina Remler and alternate Mette Schultz Jessen from August.

The ExCo 84 meeting (milestone M2) on September in Copenhagen was successful with Technical Tour at Risø Campus. Karina Remler, Mette Schultz Jessen and Peter Hauge Madsen participated. The Chair of EUDP Thea Larsen made the welcome presentation as Danish host. Karina Remler made the Danish Country representation and Peter Hauge Madsen particupated in a panel debate. Vestas sponsored the official dinner and Lise Bacher, Vestas made a indiustry presentation.

This project also includes the Danish country part of the Annual Report 2018. The Danish Country part was prepared by Peter Hauge Madsen and DTU representatives from the IEA Wind Secretariat. The draft was delayed a month, but was approved during summer by the Danish Energy Agency/EUDP. The Danish country part (4 pages) is now a part of the IEA Annual Report 2018 and is a deliverable in the EUDP project.

1.6 Utilization of project results

The project activities and results contribute to realize energy policy objectives by supporting the Danish activities in research and development in wind energy technology and the aim of wind energy deployment as one of the most important tools in the green transition.

The results have been transferred to other Danish companies, stakeholder and institutions through Danish participation in IEA Wind Tasks and dissemination in the IEA reports.

Commercialisation is not direct relevant for this kind of project. However, it is still relevant to work on overview and involvement of the Danish wind industry partners. It is a deliverable in the following project for 2020.

1.7 Project conclusion and perspective

The deliverables (participation in two ExCo meetings and preparation of the Danish Country report) are achieved as well as the milestone about the Danish Country Report. Denmark as host of the ExCo84 meeting in September is successfully accomplished. The continued Danish work in IEA TCP Wind will be continued in a new EUDP grant for 2020 granted in December 2019.

DTU Wind Energy is one of the founding country representatives of the Wind Technology Coordination Programme (TCP) of the International Energy Agency (IEA), which shares information and research activities to advance wind energy research, development and deployment in member countries. As of 2019, the Department was chosen to lead the secretariat of IEA Wind TCP. The Department thereby supports the Danish Energy Agency's participation in the IEA Wind TCP Executive Committee (ExCo), as well as the dissemination and networking activities related to IEA Wind TCP, including new Research Tasks and Topical Expert Meetings within IEA Wind TCP. Denmark is participating in 15 of the 18 active tasks. There are currently 26 contracting parties from 21 member countries, including the Chinese Wind Energy Association (CWEA), the European Commission and WindEurope.

DTU Wind Energy is also chairing an informal IEA Experts Group on R&D Priority-setting and Evaluation (EGRD) that gives advice to the IEA Committee on Research and Technology (CERT) on how governments effectively and efficiently accelerate clean energy technologies.

Annex

Relevant links

https://community.ieawind.org/home

https://www.vindenergi.dtu.dk/samarbejde/strategiske_alliancer

https://ens.dk/ansvarsomraader/forskning-udvikling/internationalt-samarbejde

Energistyrelsens webpage needs update.

https://www.iea.org/

https://www.iea.org/fuels-and-technologies/wind

https://www.iea.org/areas-of-work/technology-collaboration/renewable-energy

https://iea.blob.core.windows.net/assets/9d314089-d6a1-4323-8b9d-

<u>c410d3a7d1cb/WindTCP-Brochure.pdf</u> - IEA Wind TCP Brochure

The IEA TCP Wind Annual Report 2018 is available on the IEA web page https://community.ieawind.org/home together with earlier annual reports.

https://higherlogicdownload.s3.amazonaws.com/IEAWIND/UploadedImages/3c944dea-579d-4156-8dc1-10e49a3fe95e/2018 IEAWind Annual Report Exec Summ - web.pdf

The Danish IEA Wind Country Report 2018 attached as separate file.