IEA Wind TCP & Task 11 Activities

Introduction

ieawind.connectedcommunity.org

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IEA Wind TCP - TEM#102

September 23-24, 2020

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Mission of IEA Wind

"…to stimulate co-operation on wind energy research and development and to provide **high quality information and analysis to member governments** and commercial **sector leaders** by addressing **technology development** and deployment and its **benefits, markets, and policy instruments**."
– IEA Wind Strategic Plan

- International collaborative R&D
- Government, universities, RTOs and industry
- No external funding
- R&D agenda agreed among participant countries
- Leverage of R&D contributions (several M€/Task)

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IEA Wind value for member countries

- Influence the international research agenda on wind energy, including your national interests in the portfolio of IEA Wind research activities.
- Get in contact with key government representatives related to wind energy worldwide.
- Make your country activities in wind energy visible worldwide.
- Partner with world experts to address your national priorities
- Provide national expertise to help other countries
- Influence the creation of new standards through the IEA Wind recommended practices.

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IEA Wind value for industry

- Influence the national and international research agenda on wind energy
- Get market and policy insight globally
- Propose new Research Tasks and Topical Expert Meetings
- Push for new standardization through Recommended Practices
- Show your activities to IEA Wind countries during ExCo meetings (2x/year)
- Industry participation: Research Tasks, Topical Expert Meetings, industry encounters

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International Energy Agency History

The IEA was founded in 1974 to help countries co-ordinate a collective response to major disruptions in the supply of oil.

International Energy Agency
Secure
Sustainable
Together

Cars wait in long lines during the gas shortage.

(Library of Congress Prints and Photographs Division, U.S. News & World Report Magazine Photograph Collection, Warren K. Leffler)

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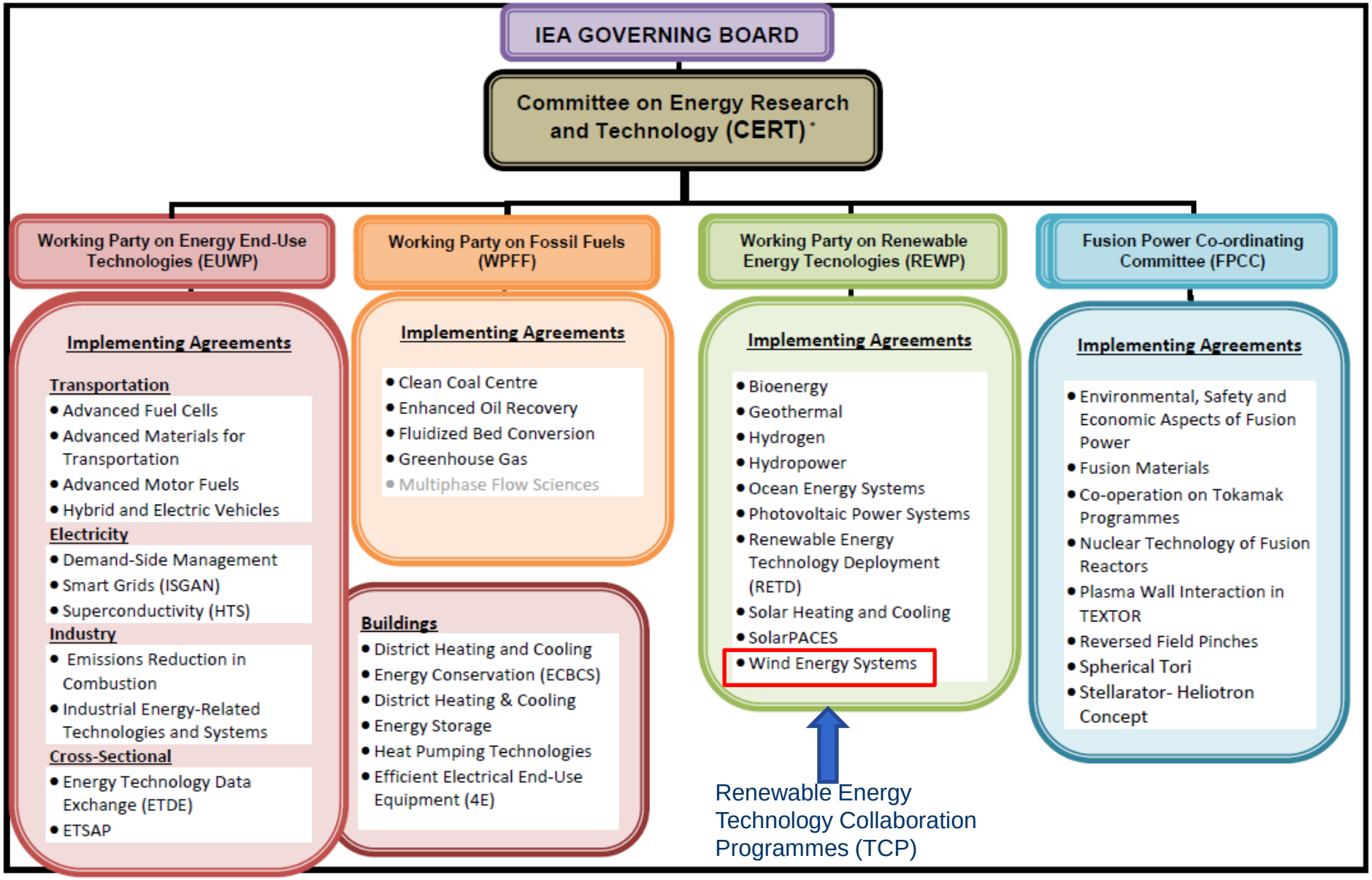
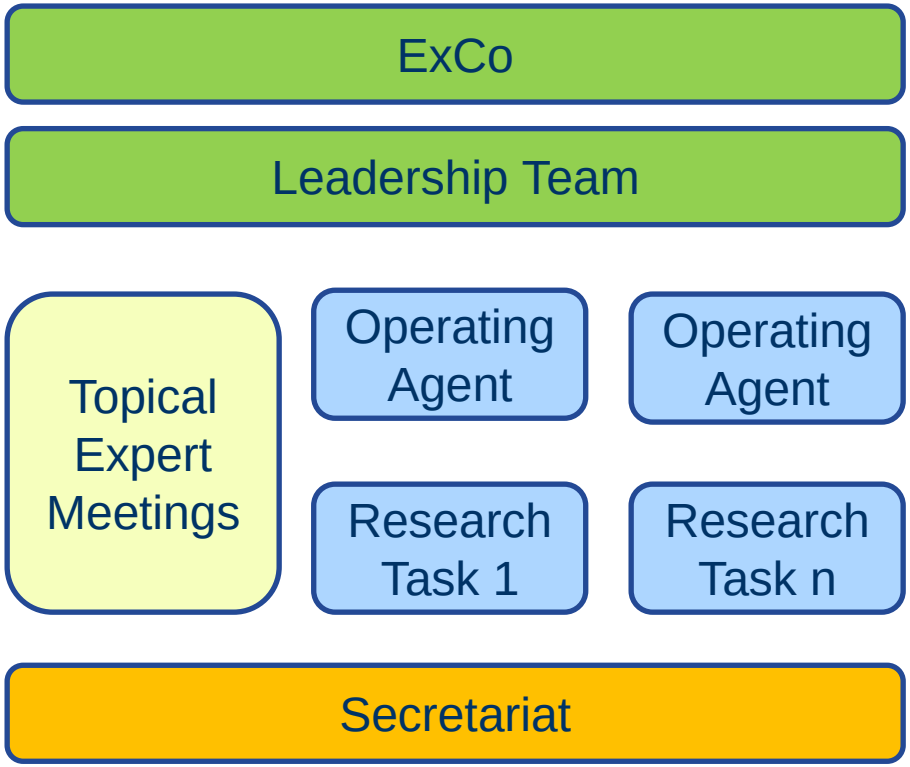
IEA Wind TCP within IEA



* The Implementing Agreement for a Climate Technology Initiative and the ETSAP Implementing Agreement report directly to the CERT.

IEA Wind TCP structure and operation

- IEA Wind ExCo (country members)
- Leadership Team (Chair + Vice Chairs + Secretary)
- Research Tasks coordinated by Operating Agents
- No external funding
- Activities based on sharing information
- Secretariat cost is shared
- Operating Agent cost is shared
- Topical Expert Meetings with world wide experts



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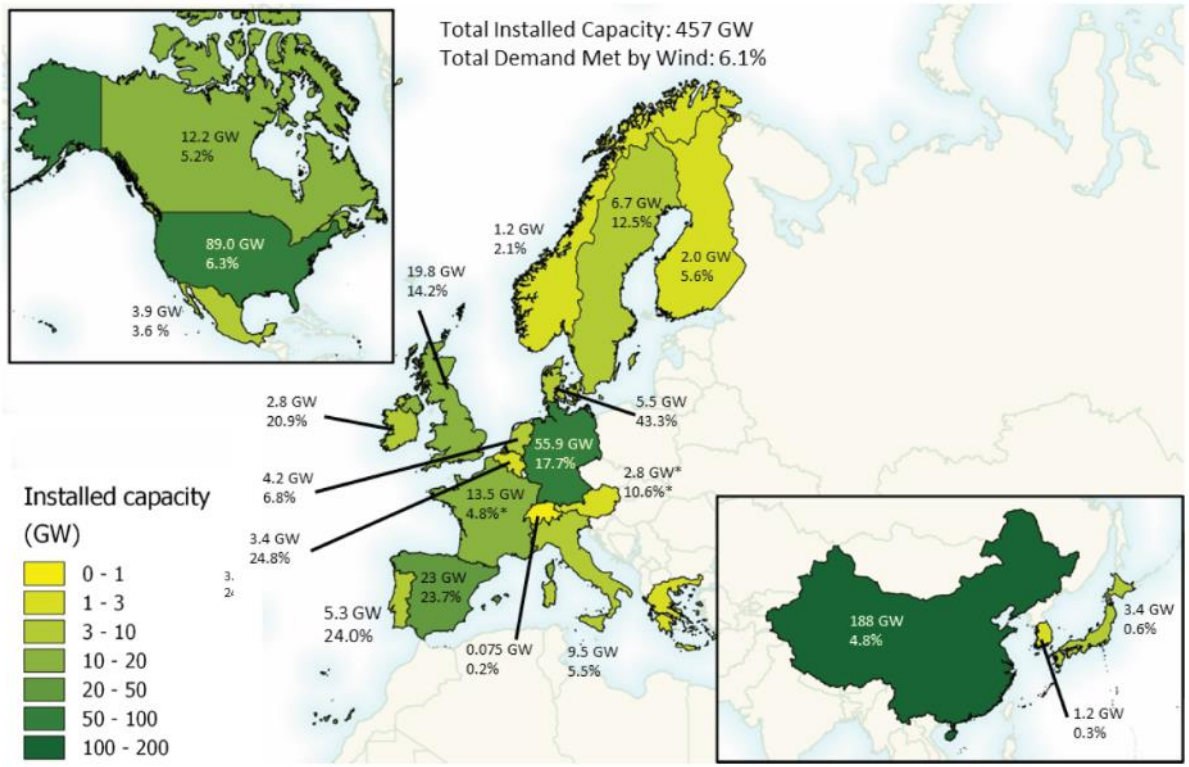
Membership Represents 85% of Global Capacity

- Austria
- Belgium (2015)
- Canada
- Chinese Wind Energy Assoc.
- Denmark
- European Commission
- Finland
- France (2015)
- Germany
- Greece
- Ireland
- Italy
- Japan
- Korea
- Mexico
- Netherlands
- Norway
- Portugal
- Spain
- Sweden
- Switzerland
- United Kingdom
- United States
- WindEurope



More information about participating countries & active Research Tasks in the Annual Report

IEA Wind TCP Task 11

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Base Technology Information Exchange

What? – Objective

- Base Technology Information Exchange

"Serve the IEA Wind TCP **Strategic Plan** & Priority Research Areas"

> "Promote & disseminate knowledge on emerging wind energy topics by **co-operative activities** and international **information exchange** on RD&D topics of common interest."

"Quickly address urgent needs of the wind energy sector and influence policy makers **worldwide**"

What? – Activities

- Four **Topical Expert Meetings** on strategically relevant topics are organised every year, gathering active researchers and experts in workshops

- Provide room for exchanges within the wind energy expert community : manage an **Online Community**

- Develop **Recommended Practices** in collaboration with other Tasks

What? – Role within IEA Wind

- Research Priority Areas (Strategic Plan)

  → **Topical Expert Meetings**

  - State of the art & Roadmap
  - Factsheet for policy makers
  - Task proposal/extension

  → IEA Research Tasks

  → **Recommended Practices**

  → International Standards

Who? – Member countries

Belgium
Directorate General Energy

Canada
Natural Resources Canada

CWEA (Sponsor)
Chinese Wind Energy Association

Denmark
Danish Technical University (DTU)

Finland
Technical Research Centre of Finland (VTT)

Germany
Federal Ministry for Economic Affairs and Energy (BMWi)

Ireland
Sustainable Energy Authority of Ireland (SEAI)

Italy
Ricerca sul Sistema Energetico (RSE S.p.A.)

Japan
New Energy and Industrial Technology Development Organization (NEDO)

Korea
Korea Institute of Energy Technology Evaluation and Planning (KETEP)

Mexico
Instituto Nacional de Electricidad y Energías Limpias (INEEL)

Netherlands
Rijksdienst Voor Ondernemend (RVO)

Norway
The Norwegian Water Resources and Energy Directorate (NVE)

Spain
Centro de Investigaciones Energéticas, Medioambientales y Tecnológicas (CIEMAT)

Sweden
Energimyndigheten (Swedish Energy Agency)

Switzerland
Swiss Federal Office of Energy (SFOE)

United Kingdom
Offshore Renewable Energy Catapult (ORE)

United States
The U.S. Department of Energy (DOE)

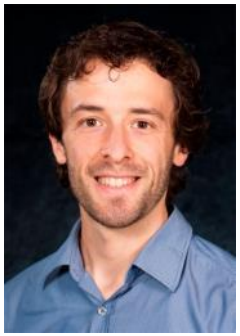
Contact of **Task 11 representatives** for each country through Task 11 OA

Who? – Operating Agent

- Based in Switzerland
  - Consulting engineers in renewable energies, energy efficiency & energy policies
  - Swiss Wind Energy Association
- Second term as Task 11 OA (2019-2020)

PLANAIR
Ingénieurs conseils en énergies et environnement

- Team:
  - Lionel Perret
  - Jodie Roussell
  - Nicolas El Hayek
  - Lucas Mosca



→ e-mail : ieawindtask11@planair.ch

How? – Task 11 activities :

Topical Expert Meetings (TEM)

- TEM selection in alignment with strategic plan and ExCo votes
- 15 TEMs organized since April 2017 (101 TEMs since 1978)
- 575 participants from over 220 different organizations

101	Hybrid Power Plants	2020	Online	Community Page
99	Floating Offshore Wind Arrays	2020	Online	Community Page
98	Erosion of Wind Turbine Blades	2020	Roskilde, Denmark	Community Page
97	Wind Farm Control	2019	Amsterdam, the Netherlands	Community Page
96	Wind Plant Decommissioning, Repowering and Recycling	2019	Rome, Italy	Community Page
95	Reliability/Availability of Electrical Infrastructure	2019	Blythe, England	Community Page
94	Ultra Long Component Testing	2019	Boulder, CO, USA	Community Page

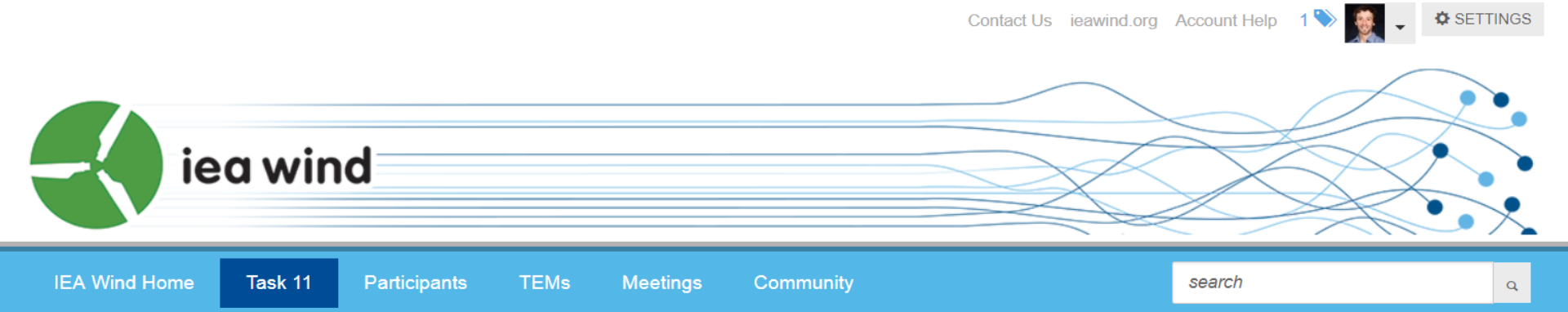
Next TEMs selected by ExCo

- Topics selected for 2020:
  - TEM#100: “Aviation System Cohabitation” from December 8-10, 2020 as an online meeting
- Potential next TEMs:
  - Offshore Consenting and Licensing (Ireland)
  - Internal & External Value of Wind (China)
  - Superconductivity for Wind Turbines (Italy)
  - …

How? – Task 11 activities :

Online Community Platform

- Network experts from IEA Wind TEMs and Tasks
- More than 2000 users uploaded
- More than 30 active communities
  - Communities created for each TEM event → quick overview on who has participated and which presentations were given
  - News Feed from the TEM to inform the IEA Wind TCP community
- More than 25 events organized over the platform



TEM#102 Community Page

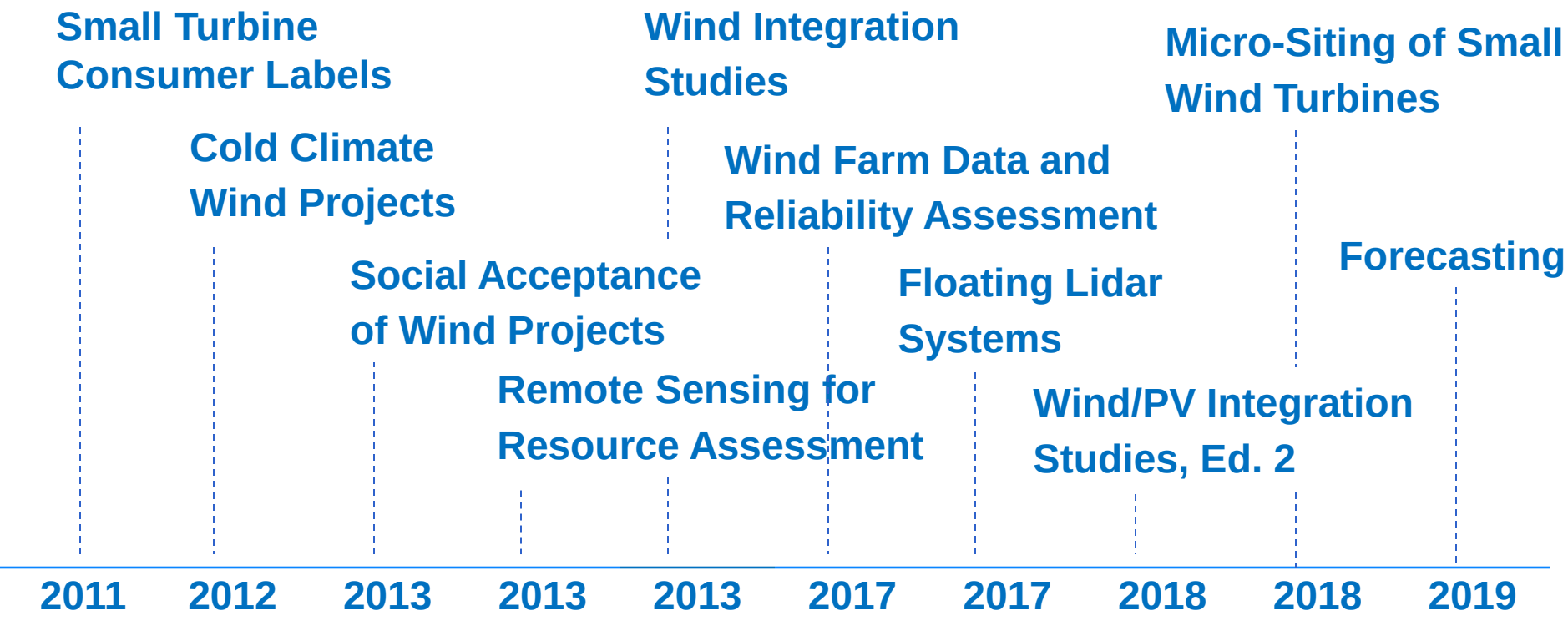
- Expert profile on the IEA Wind platform
  - TEM participants
  - Task participants
  - Operating agents
  - ExCo members
- Centralized space for meeting documentation ("Library")
- Space for post-meeting discussions and updates
- Diffusion of meeting's outcomes:
  - News feed during the meeting
  - Publication of presentations and proceedings soon after the meeting

TEM#102 community

How? – Task 11 activities :

Recommended Practices

- Task 11 assists the Tasks and Secretariat in preparing and approving Recommended Practices
- 19 RPs have been issued so far (available online)



Thank You!

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The IEA Wind TCP agreement, also known as the Implementing Agreement for Co-operation in the Research, Development, and Deployment of Wind Energy Systems, functions within a framework created by the International Energy Agency (IEA). Views, findings, and publications of IEA Wind do not necessarily represent the views or policies of the IEA Secretariat or of all its individual member countries.