

# IEA Wind TCP & Task 11 Activities

## Introduction

[ieawind.connectedcommunity.org](https://ieawind.connectedcommunity.org)

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IEA Wind TCP - TEM#101

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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)



# 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.



# 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

# 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.

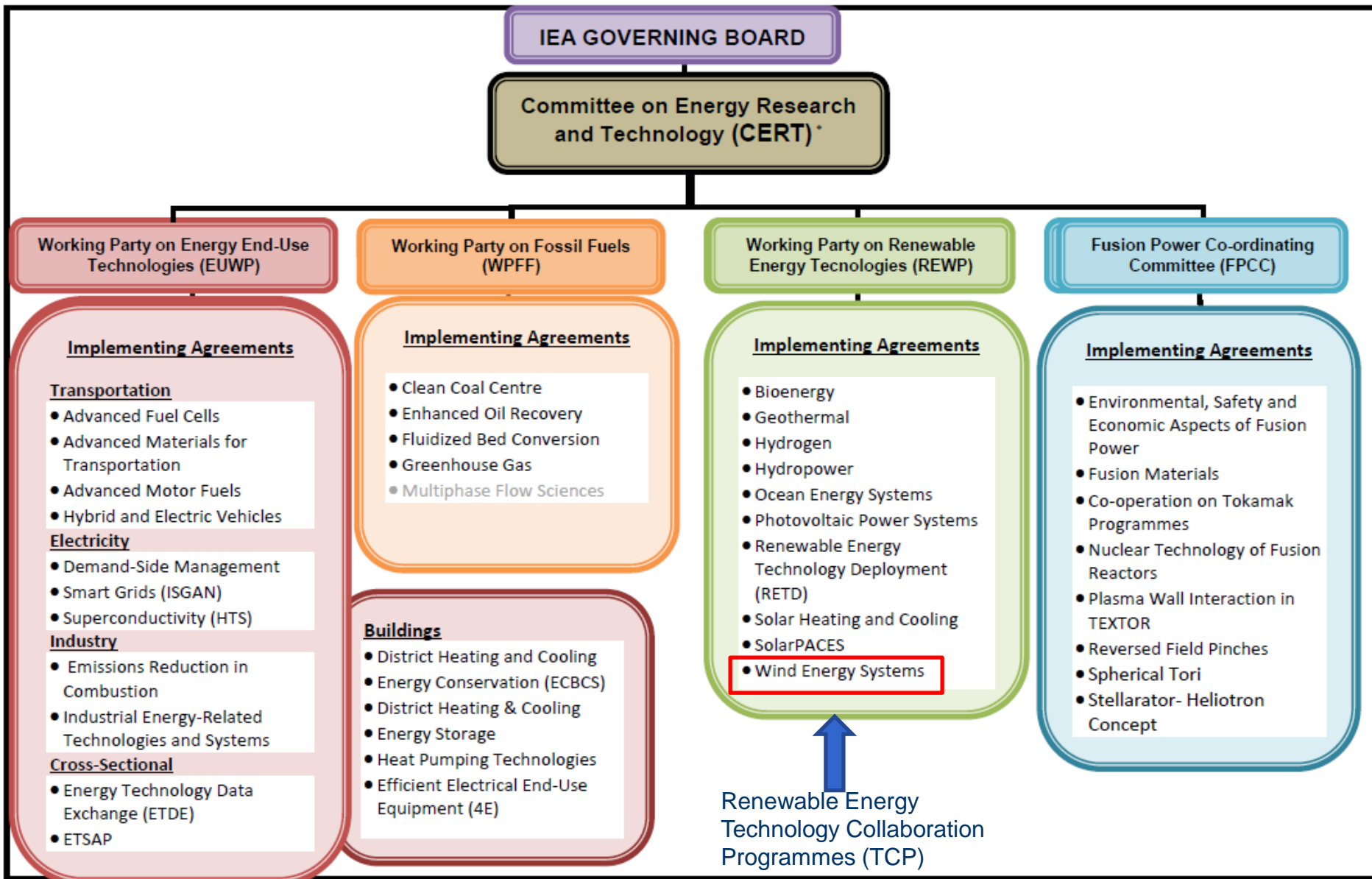


**Cars wait in long lines during the gas shortage.**

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



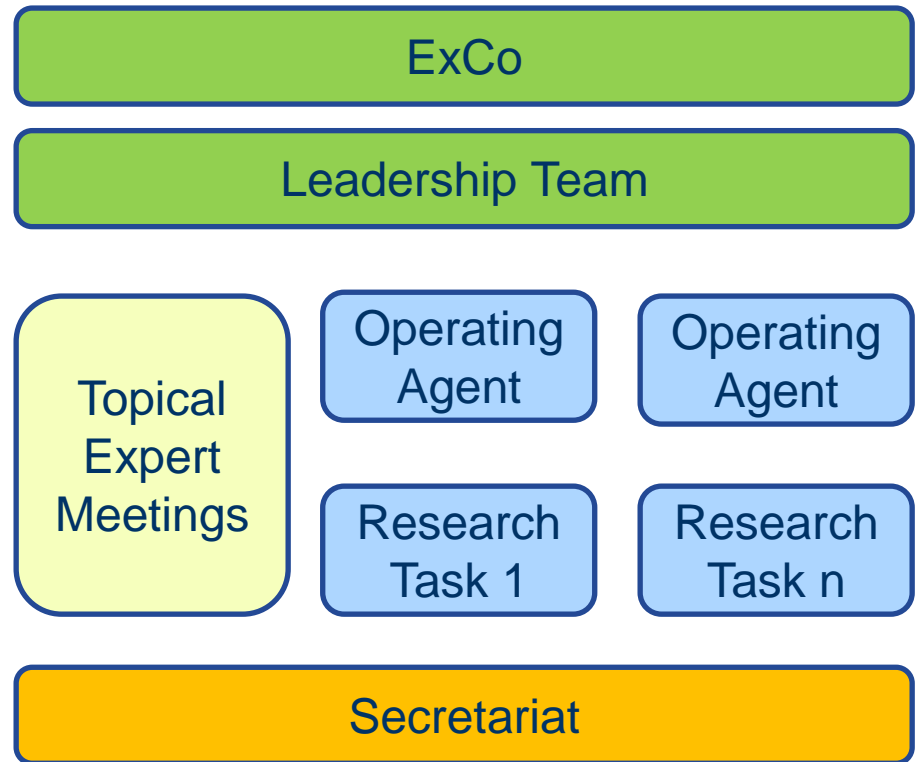
# IEA Wind TCP within IEA



\* 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

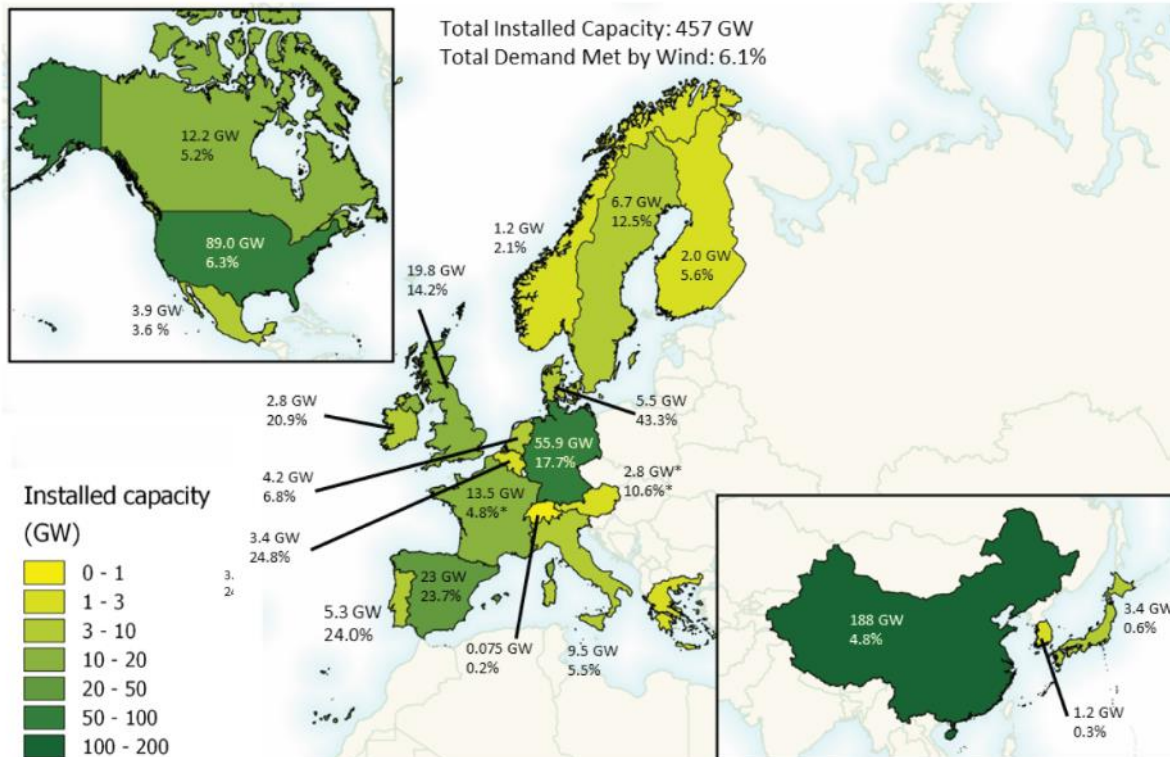




# Membership Represents 85% of Global Capacity



- 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



## Base Technology Information Exchange



# What? – Objective

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- 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

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- 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

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- 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

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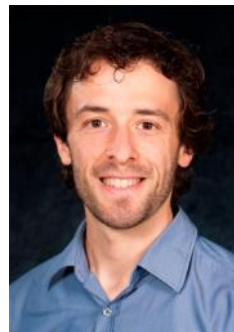


- Based in Switzerland
  - Consulting engineers in renewable energies, energy efficiency & energy policies
  - Swiss Wind Energy Association
- Second term as Task 11 OA (2019-2020)

**PLANAIR**  
Ingénieurs conseils en énergies et environnement

- Team:

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



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## How? – Task 11 activities :

# Topical Expert Meetings (TEM)



- TEM selection in alignment with strategic plan and ExCo votes
- 14 TEMs organized since April 2017 (100 TEMs since 1978)
- 500 participants from over 200 different organizations

99	Floating Offshore Wind Arrays	2020	Online	<a href="#"><u>Community Page</u></a>
98	Erosion of Wind Turbine Blades	2020	Roskilde, Denmark	<a href="#"><u>Community Page</u></a>
97	Wind Farm Control	2019	Amsterdam, the Netherlands	<a href="#"><u>Community Page</u></a>
96	Wind Plant Decommissioning, Repowering and Recycling	2019	Rome, Italy	<a href="#"><u>Community Page</u></a>
95	Reliability/Availability of Electrical Infrastructure	2019	Blythe, England	<a href="#"><u>Community Page</u></a>
94	Ultra Long Component Testing	2019	Boulder, CO, USA	<a href="#"><u>Community Page</u></a>
93	Lifetime extension	2018	Copenhagen, Denmark	<a href="#"><u>Community Page</u></a>



# Next TEMs selected by ExCo

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- Topics selected for 2020:
  - TEM#102: “Airborne Wind Energy” on September 23-24, online
  - TEM#100: “Aviation System Cohabitation” on November 30 & December 1, 2020 in Zurich, Switzerland
- 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

[Contact Us](#) [ieawind.org](#) [Account Help](#) 1  [SETTINGS](#)



**iea wind**

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[Task 11](#)

[Participants](#)

[TEMs](#)

[Meetings](#)

[Community](#)





# TEM#99 Community Page

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- 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#101 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](#))

### Small Turbine Consumer Labels

Cold Climate  
Wind Projects

Social Acceptance  
of Wind Projects

Remote Sensing for  
Resource Assessment

### Wind Integration Studies

Wind Farm Data and  
Reliability Assessment

Floating Lidar  
Systems

Wind/PV Integration  
Studies, Ed. 2

### Micro-Siting of Small Wind Turbines

Forecasting

2011    2012    2013    2013    2013    2017    2017    2018    2018    2019

# 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.