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Dep. of Earth Sciences

Campus Gotland  
WIND ENERGY

STandUP  
*for*  
WIND

EERA  
European Energy Research Alliance

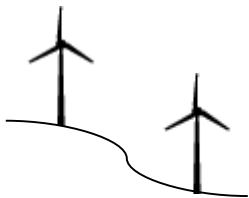
# EERA European Energy Research Alliance

## EERA Joint Programme on Wind

Vindkraftsforskning i Fokus 2017



Associate Professor Stefan Ivanell  
Enhetschef, Wind Energy UU Campus Gotland  
Föreståndare, STandUP for Wind  
Svensk koordinator EERA & EAWE





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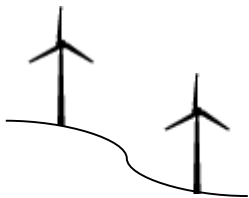
# EERA - Coordinating energy research for a low carbon Europe

## The **European Energy Research Alliance**

(EERA) contributes to coordinate a massive public research effort to develop more efficient and cheaper low carbon energy technologies. Wind turbines and solar panels, building a “smart” electricity grid, harnessing energy from the oceans and underground heat sources, as well as finding new ways to store and use energy instead of wasting it.

EERA is the public research pillar of the EU Strategic Energy Technology Plan (**SET-Plan**). This tightly focused strategy aims at accelerating the development and market uptake of key low carbon technologies.

Through our **Joint Programmes** EERA contributes to make sure that the billions of euros invested in low carbon technologies each year are spent on the best possible solutions available.



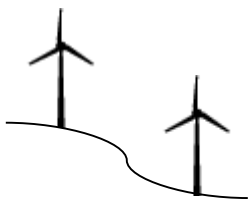


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# EERA - Coordinating energy research for a low carbon Europe

A public research alliance

A cornerstone of the Strategic Energy Technology Plan (SET-Plan)

Bringing together 175+ research organisations

Working together in 17 Joint Programmes

Collaborating with European Industry

With global outreach

And aligning national research

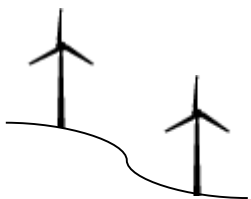




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# What is EERA JP WIND?

The **EERA joint programme on wind energy**, established in 2010 accelerates the SET-plan goals, provides the strategic leadership for the scientific–technical medium to long term research to support the Technology Roadmap’s activities on wind energy and provides added value through:

- Strategic leadership of the underpinning research
- Joint prioritisation of research tasks and infrastructure
- Alignment of European and national research efforts
- Execution of coordinated and structured research in medium to long-term programmes
- Coordination with industry, and
- Sharing of knowledge and research infrastructure.

**Joint planning is paramount for JP WIND and coordinated European projects are the vehicle for much of our work.**



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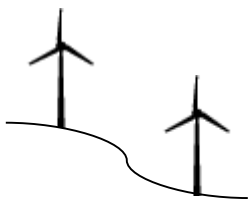


# What are ETIPs



European Technology and Innovation Platform's

“...European Technology Platforms are industry-led stakeholder fora recognised by the European Commission as key actors in driving innovation, knowledge transfer and European competitiveness. These platforms develop research and innovation agendas and supported stakeholders”





# The Objectives of ETIPWind

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Reduce costs



Facilitate system  
integration

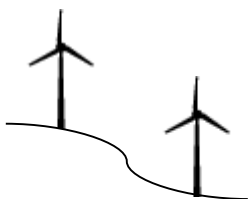


Reinforce European  
technological  
leadership



Ensure first-class  
human resources

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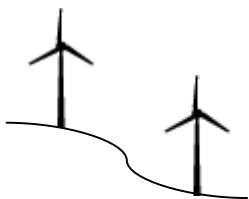


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# EERA JP WIND structure and sub-programmes

- **Wind Conditions**  
Coordinated by DTU, Denmark
- **Aerodynamics**  
Coordinated by ECN, the Netherlands
- **Offshore Wind Energy**  
Coordinated by SINTEF, Norway
- **Grid Integration**  
Coordinated by Fraunhofer IWES, Germany
- **Research Facilities**  
Coordinated by CENER, Spain
- **Structures and Materials**  
Coordinated by CRES, Greece
- **Wind Integration – economic and social aspects**  
Coordinated by DTU, Denmark

## Application areas

### Enabling research areas

Wind conditions

Aerodynamics

Structures and materials

Wind integration

Research infrastructures

Economic and social aspects

New pilot programme on cold climate (coordinated by VTT)

Offshore Wind Farms



# The EERA JP Wind project portfolio (with IRPWIND)

SP: Wind Energy integration

SP: Wind conditions

SP: Offshore Wind Energy

SP: Aerodynamics

SP: Structures & materials

SP Research Infrastructures

SP: Economic and social aspects

INNWIND.eu

EERA-DTOC

New European Wind Atlas (ERANET+)

LIFES50+ (H2020)

AVATAR

WindScanner.eu

National projects...

**IRP CSA: WP5 Mobility scheme**

IRP CP:

"European-wide measures for large-scale integration"

IRP CP:

"Design of offshore windfarms"

IRP CP:

"Structural reliability of WT sub-components"

IRP CSA: WP3





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# EERA JP WIND Members

## Full participants

DTU Wind Energy  
ECN  
SINTEF  
  
CRES  
CENER  
  
Fraunhofer IWES  
Forwind - University of Oldenburg  
  
LNEG  
VTT  
TUBITAK  
University of Strachclyde  
CNR  
Belgian Energy Research Alliance  
EPFL

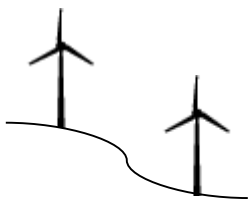
**Uppsala University**

## Associated Participants

DK	DHI, University of Aalborg, Dublin(IR)	DK
NL	TU Delft, WMC	NL
NO	NTNU, IFE, UoB, CMR MARINTEK, Sintef MC	NO
GR	NKUA	GR
ES	CIEMAT, IREC, CTC, CIRCE, Tecnalia, IK4 Alliance	ES
GER	IEN (PO), DLR, TU München	GER
GER	Forwind Hannover, Uni. of Stuttgart, RWTH Aachen	GER
POR	University of Porto	POR
FI		
TU	METUWIND	
UK	NAREC, Loughborough Uni.	UK
IT	POLIMI, RSE	IT
BE		
CH		

**SE** **New Participants???**  
**KTH+Chalmers...???**

**15 full participants & 30 associated participants from 11 countries.**

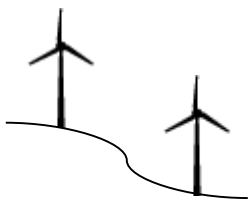




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# Översikt och sammanfattning

Strategisk fokus  
Fo fokus

Akademi

Industri

