

# EU R&I policy to support wind energy



## ETIPWind Workshop

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# Energy Union: 5 Pillars



- 1. Energy security, solidarity and trust**
  - 2. A fully integrated European energy market**
  - 3. Energy efficiency contributing to moderation of demand**
  - 4. Decarbonising the economy**
  - 5. Research, Innovation and Competitiveness**
- ⇒ the Strategic Energy Technology Plan (SET Plan) as a key implementing pillar



# SET Plan – Sept 2015

## Energy Union Priorities

## SET Plan Ten Key Actions

### 4 Core priorities

#### No1 in Renewables

1. Performant renewable technologies integrated in the system
2. Reduce costs of technologies

#### Smart EU energy system, with consumer at the centre

3. New technologies & services for consumers
4. Resilience & security of energy system

#### Efficient energy systems

5. New materials & technologies for buildings
6. Energy efficiency for industry

#### Sustainable transport

7. Competitive in global battery sector (e-mobility)
8. Renewable fuels



## For each of the 10 Key Actions

1. A few targets proposed by the EC using the Integrated Roadmap
2. Large consultation among the stakeholders and 32 SET-Plan countries
3. A meeting between all to decide on the final targets

➔ 'Declaration of Intent'





# Declaration of Intent

## For Global leadership in offshore wind

- 1. Reduce the levelised cost of energy\* (LCoE) at final investment decision for fixed offshore wind by improvement of the performances of the entire value chain to**
  - ➔ Less than 10 ct€/kWh by 2020 and to
  - ➔ Less than 7ct€/kWh by 2030
- 2. Develop cost competitive integrated wind energy systems including substructures which can be used in deeper waters (>50m) at a maximum distance of 50 km from shore with LCoE\* of**
  - ➔ Less than 12 ct€/kWh by 2025 and to
  - ➔ Less than 9 ct€/kWh by 2030

*\*the costs for delivering the electricity to onshore substations are taken into account within the LCoE*



## Common backbone of ETIPs

### Overview

- Key governance structures to implement the SET Plan
- Independent and self-financing stakeholder fora
- Industry-led and innovation driven covering the whole innovation chain

### Role

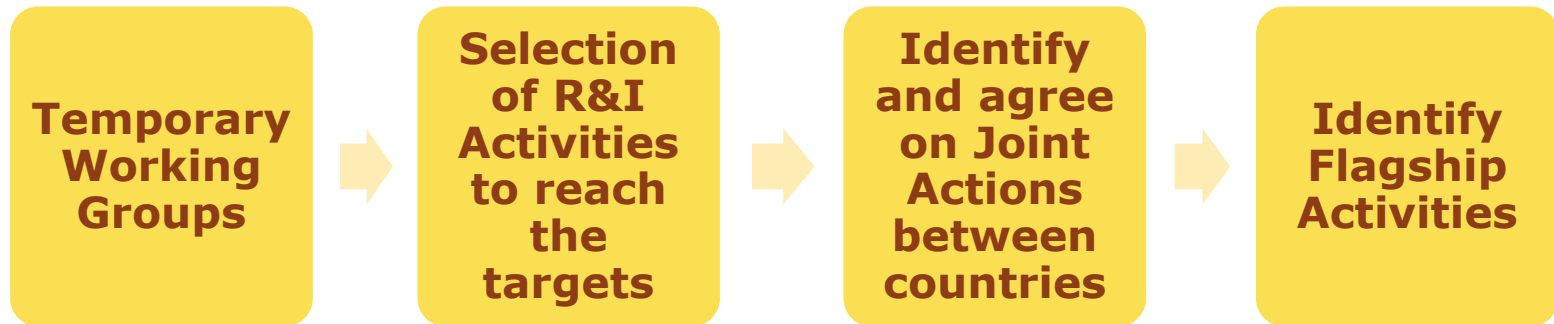
- Develop and implement R&I Agendas
- Provide strategic insights into market opportunities and needs
- Support the selection and monitoring of priority SET Plan R&I Activities
- Cover technological and non-technological aspects
- Address the need for system integration
- Systematically identify pathways to exploit research results
- Identify and communicate the SET Plan results and success stories
- Mobilize stakeholders to implement the R&I Activities

### Cooperation with countries and the EC

- Confined to precise tasks and goals



## Implementation Plans



- **Mainly at national level**
- **On occasion at EU level**

Off-Shore wind is already an example: MoU to be signed by 10 European countries around the North Sea

## EU funds for wind energy

- **Horizon 2020** (focus on ↘ cost, ↗ performance of off-shore wind)



- **NER300**



- **EFSI – *European Fund for Strategic Investment***  
**EUR 315 billion**
- **ESIF – *European Structural and Investment Funds***
  - **EUR 46 billion Research & Innovation**
  - **EUR 45 billion low cost economy**



## EU funds for wind energy

### Innovative Financial Instrument for First-of-A-Kind Energy Project

➔ "Valley of Death" from demonstration to commercialisation

**InnovFin**  
EU Finance for Innovators



### A first response: InnovFin Energy Demo Projects (EDP)

Launched on 15 June 2015 by EC (RTD) and EIB, **Energy Demo Projects (EDP)** has been designed to address a higher level of risk than that currently covered under InnovFin, **allowing projects which are initially non-bankable but are close to generating cash flows** to benefit from the risk finance envelope.

**InnovFin**  
Energy Demo Projects



**European countries: DE, DK, FR, IT, NO, SE, UK**  
**2 June: European Commission joined - 21st partner**  
**NL expected for COP22**

- 📌 **Double Governmental Investment in Clean Energy R&D over 5 years ~ \$ 30 billion per year by 2021**
- 📌 **Link with Breakthrough Energy Coalition, i.e. Private investors**