



# UPWIND Workshop EWEC 2008 - Brussels

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# Wind energy research support

- û **Research projects  
(Sustainable Energy  
Systems, DG Research)**
- û **Demonstration projects  
(Sustainable Energy  
Systems, DG Energy and  
Transport)**
- û **Support to overcoming  
non-technical barriers  
(Intelligent Energy Europe  
Programme)**



ENERGY, ENVIRONMENT  
AND SUSTAINABLE DEVELOPMENT



Intelligent Energy  Europe

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# FP6 projects – DG TREN

## Examples

• **EWIS** – Impact of introducing large scale wind power in the electric grid in the EU + Recommendations to avoid problems

SSA - Funding 4.0 Mio€

Start: 15/6/2007

Duration: 28 months

• **ANEMOS.PLUS** – Integration of the forecasts of wind farms power output and their uncertainty into the management and decision support tools.

STREP - Funding 2.6 Mio€

Start: 1/2/2008

Duration: 36 months

• **DOWNVIInD** – Distant Offshore Windfarms with no Visual Impact in Deepwater

IP – Funding 6.0 Mio€

Start: 14/9/2004

Duration: 60 months

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# FP6 projects – DG Research

## • **POW'WOW** – Prediction Of Waves, Wakes and Offshore Wind

CA – Funding 1,0 Mio€

Start: 1/10/2005

Duration: 36 months

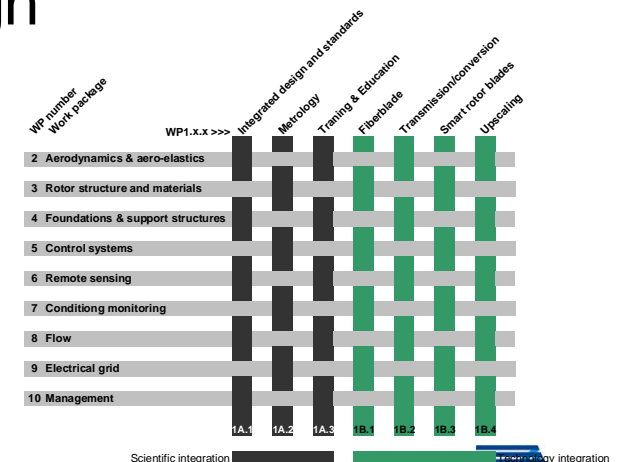


## • **UPWIND** – Integrated Wind turbine Design

IP – Funding 14,6 Mio€

Start: 1/3/2006

Duration: 60 months



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# Wind energy in FP7

**Wind Energy  
On-Shore + Off-Shore**

**Cost of electricity  
driven down**

**Increased conversion efficiency  
Enhanced reliability  
Reduced environmental impact**

**supported in the Energy FP7 “Thematic Priority” under  
Renewable Electricity Generation**

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# FP7 – DG Research

## New projects from the 1st Call

- **RELIAWIND** – Reliability focused research on optimizing Wind Energy systems design, operation and maintenance: Tools, proof of concepts, guidelines & methodologies for a new generation.

CP – Funding 5.2 Mio €

Start: 15/3/2008

Duration: 36 months

- **PROTEST** – Procedures for testing and measuring wind energy systems

CP – Funding 1.9 Mio €

Start: 1/3/2008

Duration: 30 months

- **SAFEWIND** - Multi-scale data assimilation, advanced wind modeling and forecasting with emphasis to extreme weather situations for a secure large-scale wind power integration

CP – Funding 4 Mio €

Start: under negotiation

Duration: 48 months

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# FP7 – DG TREN

## New projects from the 1st Call

•**7-MW-WEC-by-11** – demonstrating the development of a cost-effective large scale high capacity wind park using new state-of-the-art multi megawatt turbines coupled with innovative technology used to stabilize the grid.

CP – Funding 3.3 Mio €

Start: under negotiation

•**NORSEWinD** – a wind resource map covering the Baltic, Irish and North Sea areas

CP – Funding 3.9 Mio €

Start: under negotiation

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## FP7 Status

- **2008 – no wind topic**
- **2009 – off-shore and grid integration**
- **2010 – your suggestions welcomed:**
  - Small WT
  - New generators
  - More off-shore topics
  - Input from TPWind SRA

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## Why a SET-Plan

- u Harnessing technology is vital to achieve the EU Energy and Climate Change policy objectives
- u The energy sector is different – low carbon technology is hampered by the incumbents
- u Accumulated underinvestment due to cheap oil
- u Today we are falling short – the cost of achieving the 2020 targets will be extremely high, or we risk missing them altogether.
- u Others are already accelerating their efforts. Their capacities currently exceed ours

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# SET-Plan – What has to happen?

- u To meet the 2020 targets (3×20%) - reduce costs and bring about a step change in market take-up
- u To reduce our greenhouse gas emissions by 60-80% by 2050 - new generations of technologies must come from research
- u We need to pool resources, both public and private, to improve innovation performance and strengthen research capacities
- u Industry has to lead the process, but it will not happen without pro-active and coherent public policy
- u Act European, impact globally

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# SET-Plan – How to implement it?

- u Joint strategic planning
- u Effective implementation:
  - | **European Industrial Initiatives**
  - | **Strengthening European Energy Research Capacities**
  - | **Trans-European Energy Networks and Systems of the Future**
- u Increase in resources, **both financial and human.**
- u **Reinforce** international cooperation

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# European Wind Initiative

- u Identified specifically in the SET-Plan
  - | Great potential for a long-term R&D wind action plan
- u Public/Private partnership
  - | See example of Fuel Cell/H2 JTI
- u TPWind SRA à discussion document
  - | Selection necessary for the EWI
- u What Industry wants to do at EU level?
  - | Identify R&D topics where commitment is possible
- u Need to work together Ind/Nat/R&D/EU soon
  - | Concrete proposal to be done before the end of 2008

# Energy - Staying informed

## Energy Research web site and Energy Helpdesk

[http://ec.europa.eu/comm/research/energy/index\\_en.html](http://ec.europa.eu/comm/research/energy/index_en.html)

[rtd-energy@ec.europa.eu](mailto:rtd-energy@ec.europa.eu)



## Energy Policy

[http://ec.europa.eu/comm/energy/index\\_en.html](http://ec.europa.eu/comm/energy/index_en.html)



## Seventh Framework Programme

<http://cordis.europa.eu/fp7/>

## Calls for proposals

<http://cordis.europa.eu/fp7/>



## Conferences, proceedings, Newsletter

[http://ec.europa.eu/comm/research/energy/gp/gp\\_events/action/article\\_2790\\_en.htm](http://ec.europa.eu/comm/research/energy/gp/gp_events/action/article_2790_en.htm)

<http://ec.europa.eu/comm/research/energy/pdf/renews5.pdf>



## National Contact Points

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SEVENTH FRAMEWORK  
PROGRAMME