

European Wind Energy
Technology Platform
(TPWind)



The Working Groups of TPWind

Work Program Proposal

Working Group 5 - Wind Market and Economics

Prepared by the TPWind Secretariat

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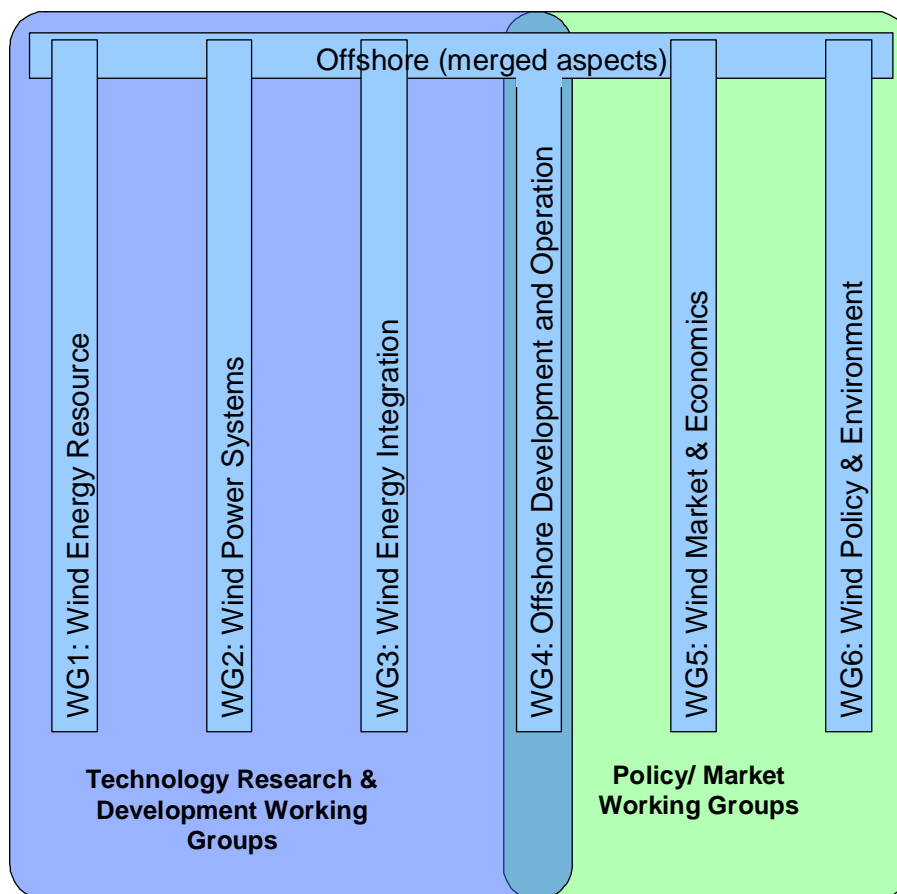
Introduction

As endorsed during the Second Steering Committee meeting of the European Wind Energy Technology Platform (Milan, May 9th 2007) the Working Groups of the Platform are:

- WG1: Wind Energy Resource,
- WG2: Wind Power Systems,
- WG3: Wind Energy Integration,
- WG4: Offshore Development and Operation,
- WG5: Wind Market and Economics,
- WG6: Wind Policy and Environment.

Moreover, it has been decided that each Working Group is dealing both on onshore and offshore aspects. The WG4 is focused on offshore-specific aspects.

In the following, a short description of the foreseen topics covered by each Working Group is provided, enabling to select the right experts for each Working Group.



WG5: Wind Market & Economics (A. Santamaria)

This Working group is scrutinizing the economics and market instruments related to wind energy, both onshore and offshore. Key areas in this thematic may include: *cost and financing of wind turbine and wind farm projects, supply chain analysis and proposal for improvements, market instruments for electricity exchanges at EU level, impact of certificates on the wind energy market.*

Upstream – wind turbine and electricity production:

This aspect refers to the investment in electricity generation units, at turbine and wind park scale.

At turbine scale, exchange of materials on the Market implies common rules, and then **certification & tests standards**.

The **supply chain** has to be studied: significant costs reductions have been performed by the car industry, household appliances or electronic devices by standardizing main components and sharing industrial capacities between manufacturers.

At wind park scale, the exchanges can be seen as a black box with input and output. Output is investment, and input is profitability. Investment occurs when the profitability index is sufficient, and guaranteed for a sufficient duration. **Mechanisms enabling a sufficient return on investment have to be optimised for a sustainable development of the market.**

Moreover, the “cost of money” and financial engineering concepts have a huge impact on the cost of a project. Negotiations with financial institutions might lead to significant progresses. Public support can be provided through dedicated low rated funds.

Downstream – electricity transmission & consumption:

The support of electricity exchanges is the electricity grid. Limitations in the electricity grid structure leads to limitations in market exchanges. System integration policies are needed in two aspects:

- Ø **Grid integration policies, strategic grid planning and coherent grid codes**
- Ø **Energy markets integration, policies and regulatory development to ensure access of wind energy to energy markets**

Certificates are tools for linking the upstream and downstream aspects. The impact of certificates on the electricity markets has to be assessed.