Wind energy and Natura 2000

Pierre Tardieu, Chief Policy Officer
windeurope.org/summit2018
**WindEurope: Representing the whole wind industry**

<table>
<thead>
<tr>
<th>Category</th>
<th>Examples</th>
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</thead>
<tbody>
<tr>
<td>Wind turbine manufacturers</td>
<td>e.g. GE Renewable Energy, Siemens Gamesa</td>
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<td></td>
<td>e.g. Vestas</td>
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<tr>
<td>Wind farm developers</td>
<td>e.g. Acciona, RES, Shell, Vattenfall</td>
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</tbody>
</table>
| Power utilities                 | e.g. E.on, EDF Energies Nouvelles, Enel, Iberdrola
|                                 | Renovables                                     |
| Component manufacturers         | e.g. ABB, LM Wind Power, BASF, ZF              |
| Installation / logistics        | e.g. DHL, Port of Amsterdam, Van Oord          |
|                                 | Marine ingenuity                               |
| Financial services              | e.g. Allianz, Rabobank, Swiss Re               |
| Research institutes             | e.g. Catapult, Fraunhofer IWES, TUDelft, DTU   |

+ National wind associations
Wind power across EU

173 GW
By 30 June 2018

12%
of 2017 EU power demand

Wind power across EU

GW installed
Penetration

Join the Global Wind Summit

Wind Europe
The global wind conference
Wind Hamburg
The global wind industry expo
Growth of wind energy in Europe

![Graph showing growth of onshore and offshore wind energy in Europe from 1995 to 2017. The graph includes data points for wind penetration rate (%).](Image)

- **1995**: 2 GW (Onshore), 1% wind penetration rate
- **2000**: 13 GW (Onshore), 1% wind penetration rate
- **2005**: 38 GW (Onshore), 3% wind penetration rate
- **2010**: 80 GW (Onshore), 5% wind penetration rate
- **2017**: 153 GW (Onshore), 12% wind penetration rate

- **Offshore (GW)**: 16 GW in 2017

The graph illustrates the significant increase in wind energy capacity and penetration rate in Europe over the years.
Onshore outlook

- Strong installation activity in large countries
- Uncertainties after 2020 still remain
- Many countries have stalled completely (mostly CEE)

Positive Outlook
Uncertain Outlook
Poor Outlook
Offshore outlook

- Market still focused on North West Europe
- Stable pipeline next 4 years
- Uncertainty after 2020 in some countries
Ageing fleet in Europe

Source: WindEurope
Repowering growth
Reducing climate change using wind energy

- Reduces CO$_2$ emissions;
- Returns 30 to 40 times more energy back to the society than it consumes over its lifetime (6-12 month energy payback);
- It is highly recyclable;
- Uses no water for power generation;
- Avoids air, water and soil pollution.
Potential impacts of wind farms on environment, habitats and species

- Direct loss of habitat;
- Habitat degradation and fragmentation;
- Noise and flicker;
- Direct impacts on certain species (e.g. Birds and Bats).

Best practices and actions

- Follow the mitigation hierarchy: **Avoid – Reduce – Compensate – Offset**;
- **Strategic positioning** outside the potential zones of negative impacts;
- There is no “one size fits all” mitigation option available. Measures should be commonly agreed on a case-by-case basis.

Strategically located and evaluated projects are less likely to be disputed in the stage of environmental impact assessment.
The Directives don’t exclude human activities in Natura 2000 Network but lay down the procedure that should be followed when planning new developments that might affect Natura 2000 sites.

**Appropriate Assessment** must be developed in advance to assess the potential impacts of the plan or project on the site’s ecological features and conservation objectives.

1 Appropriate Assessment is an iterative process allowing for improvements to the project or plan in order to avoid adverse effect on the integrity of the Natura 2000 site.
Wind Energy and Natura 2000

“The Habitats Directive does not, a priori, exclude wind farm developments in or adjacent to Natura 2000 sites”.

“It is not legislative in character, it does not make new rules but rather provides further guidance on the application of those that already exist”.

“The guidance recognises that the two nature Directives are enshrined in the principle of subsidiarity and it is for Member States to determine the procedural requirements arising from the Directives”.

Step-by-step assessment of plans and projects affecting Natura 2000 sites

- Possible negative impact on Natura 2000 site?
  - No ⇒ OK
  - Yes ⇒ Appropriate Assessment (AA)
    - No impact ⇒ OK
    - Negative impact ⇒ Alternatives?
      - There are alternatives ⇒ no authorization ⇒ new AA
      - No alternative ⇒ Imperative Reasons of Overriding Public Interest?
        - No IROPI ⇒ no authorization
        - IROPI ⇒ Priority habitats/species?
          - No ⇒ OK with compensation measures, notification to EC
          - Yes ⇒ Commission opinion required
CASE STUDY: Current Belgian Marine Spatial Plan

- 238 km² for Offshore wind farms;
- 7% of the Belgian marine surface;
- New proposal for MSP accepted by Council of Ministers;
- Public consultation initiated.
- Planned concession zones in N2000 area;
- Planned concession zones outside N2000 can affect N2000 areas.
Offshore wind farms in Belgium

• Framework 1: **North Sea Vision 2050 (Secretary of State)**
  – Current and future provisioning of ecosystem services should not be negatively affected
  – Development of human activities is possible, but should be done with great respect for naturalness

• Framework 2: **EU Habitat and Birds Directive**
  – Conservation objectives => Structural approach

  (Food webs, nutrient cycling, ecosystem services approach);

• Framework 4: **Marine Spatial Planning** - OWF in N2000 should be considered as multiple use
Participatory process in Belgium

- Facilitated by Cabinet of Secretary of State for North Sea - Philippe De Backer
- Participants:
  - Cabinet members;
  - Federal Public Service “Health, Food Chain & Environment”;
  - Belgian Offshore Platform (OWF industry);
  - Nature conservation NGO’s (Natuurpunt, GreenPeace, WWF, BBL);
  - Royal Belgian Institute Natural Science - OD Nature;

- Open discussions:
  - Offshore Wind Farms industry: objectives/ambitions
  - Nature conservation NGO’s: concerns
Key messages

- **Wind energy** contributes to the conservation of biodiversity combating climate change, one of the most significant threats to biodiversity.

- **Wind energy can be developed in or next to Natura 2000 sites** provided that screening, Appropriate Assessments and eventual derogations are done in line with European and national legislation.

- **Member States** should reconsider how they interpret the Birds and Habitats Directives. Particularly, when applying a precautionary principle.

- **Governments should not apply the precautionary principle when knowledge gaps exist on the potential impacts of a specific project** or a series of project, particularly in the case of unknown cumulative or in-combination impacts.
THANK YOU

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