



Session 2, 21 May, 2015

Robert Brunner (A), Renewable Energy: Benefit or Threats for Protected Areas?

Regional Park of Migliarino, San Rossore and Massaciucoli, Italy



**Renewable energy:  
Benefit or threat for protected areas?**

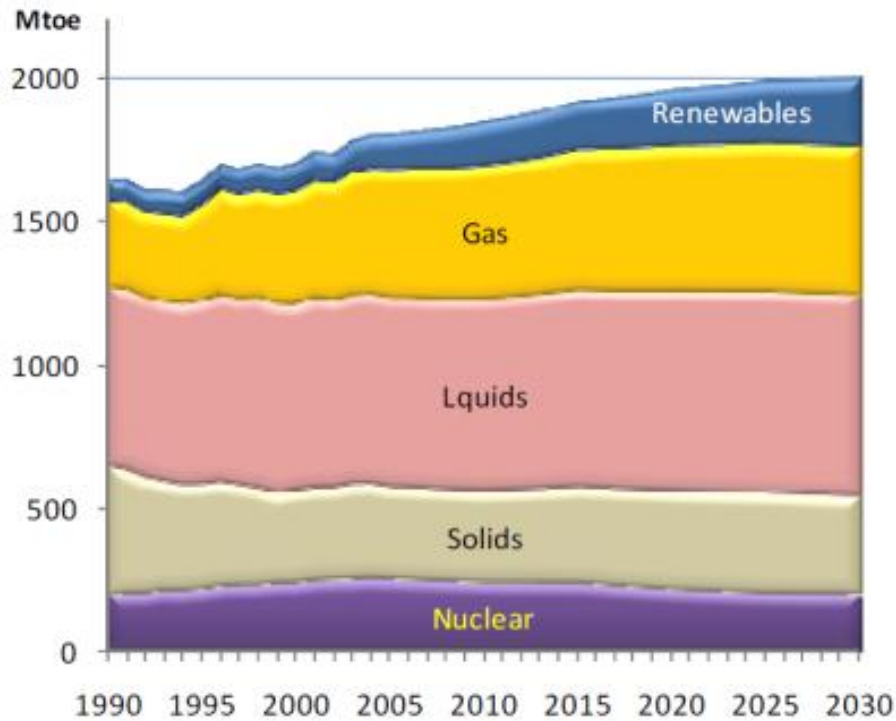
Photo by courtesy Barabar Krobath



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**Primary Energy Demand in EU-27 1990-2030**

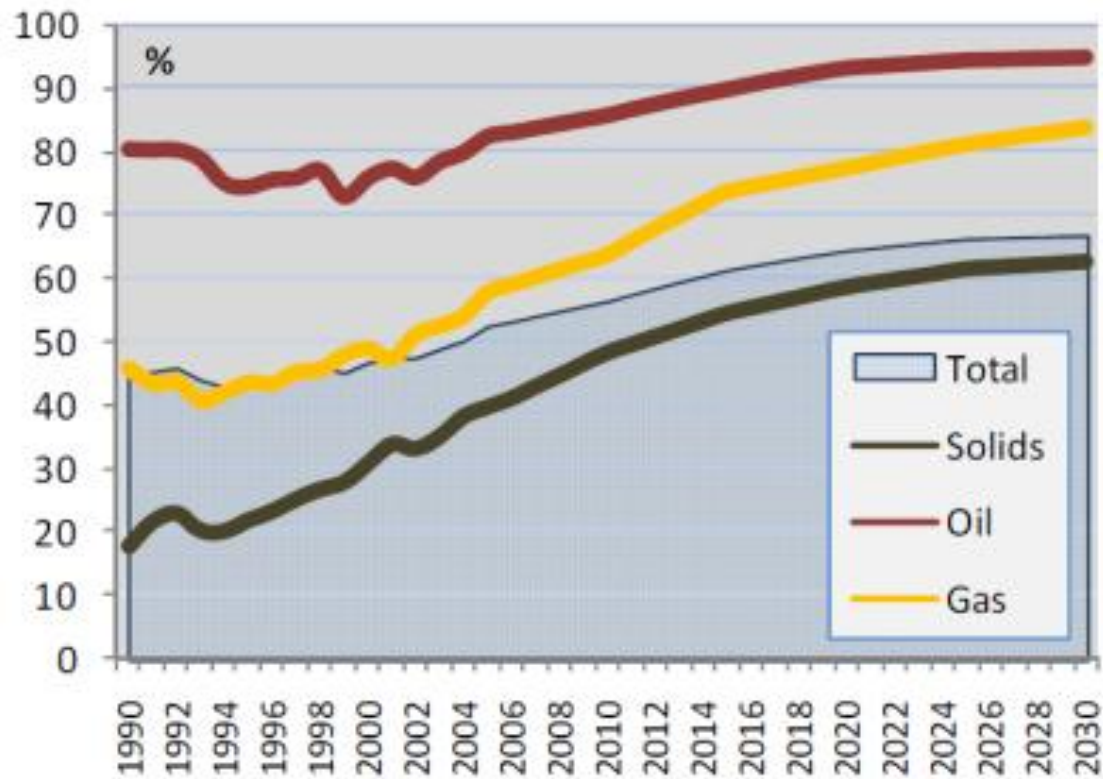
European Energy and Transport Trends to 2030, Update 2007, S. 72



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**Dependency on Imports by Energy Sources in the EU-27  
1990 to 2030**



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## **FIVE TARGETS FOR THE EU IN 2020**

### **TARGET 3. CLIMATE CHANGE AND ENERGY SUSTAINABILITY**

- **Greenhouse gas emissions 20%** (or even **30%**, if the conditions are right) **lower than 1990**
- **20% of energy from renewables**
- **20% increase in energy efficiency**





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## Criteria for the Award of the European Diploma for Protected Areas – Specific criteria

2. absence of permanent human occupation and of economic activities such as agriculture, forestry, mining, industry and tourism (no development). Certain traditional activities may be authorised for the sole purpose of maintaining the environment. Certain obligations, previous to the award of the Diploma, can be allowed to continue, provided they are localised and controlled and do not interfere with maintaining the biological and landscape diversity of the area. An attempt should be made to minimise or even eliminate them;
3. guarantees that the existing human activities and installations in the surrounding area cannot damage the physical and biological integrity of the protected area;

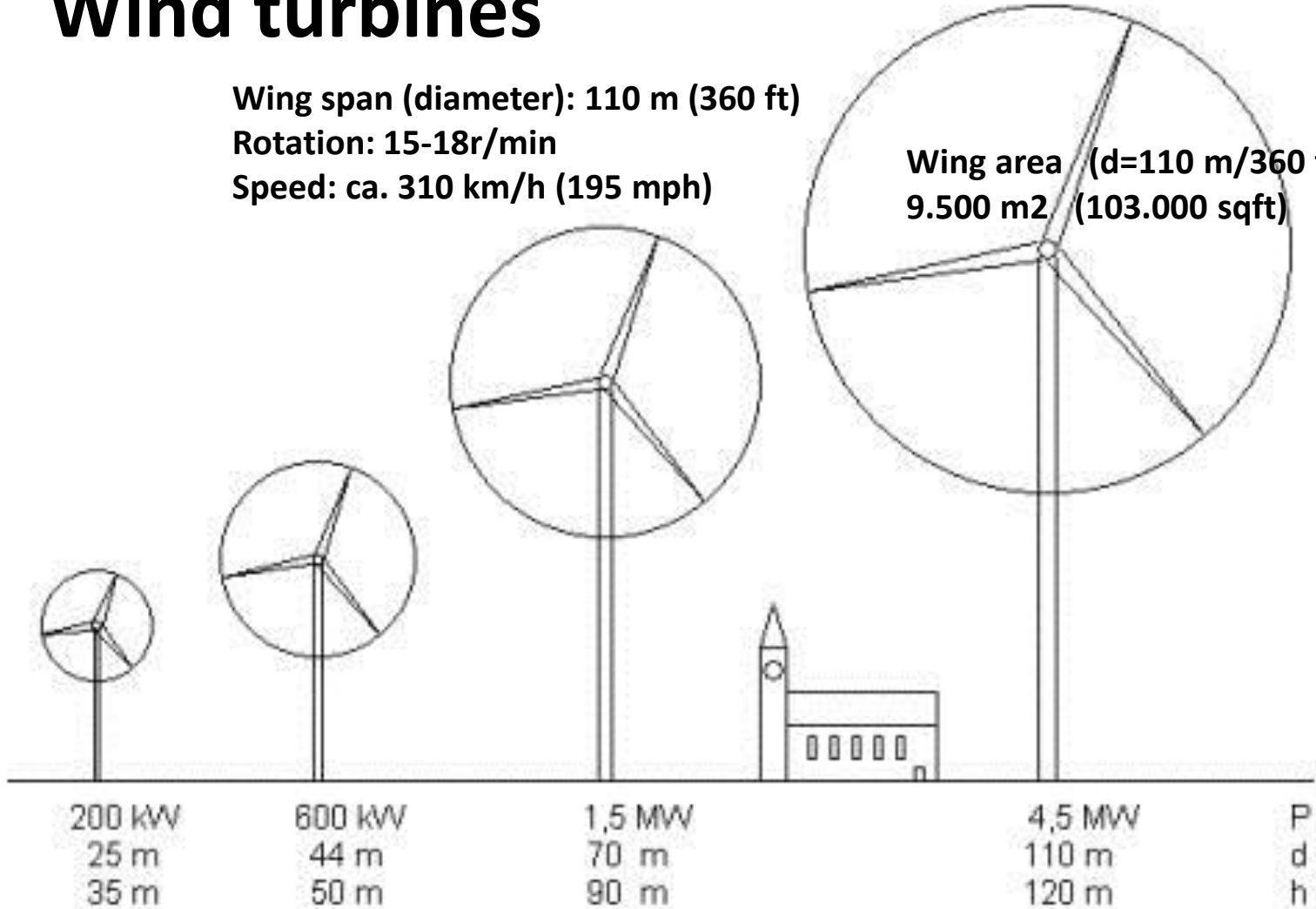
# Wind turbines

**Wing span (diameter): 110 m (360 ft)**

**Rotation: 15-18r/min**

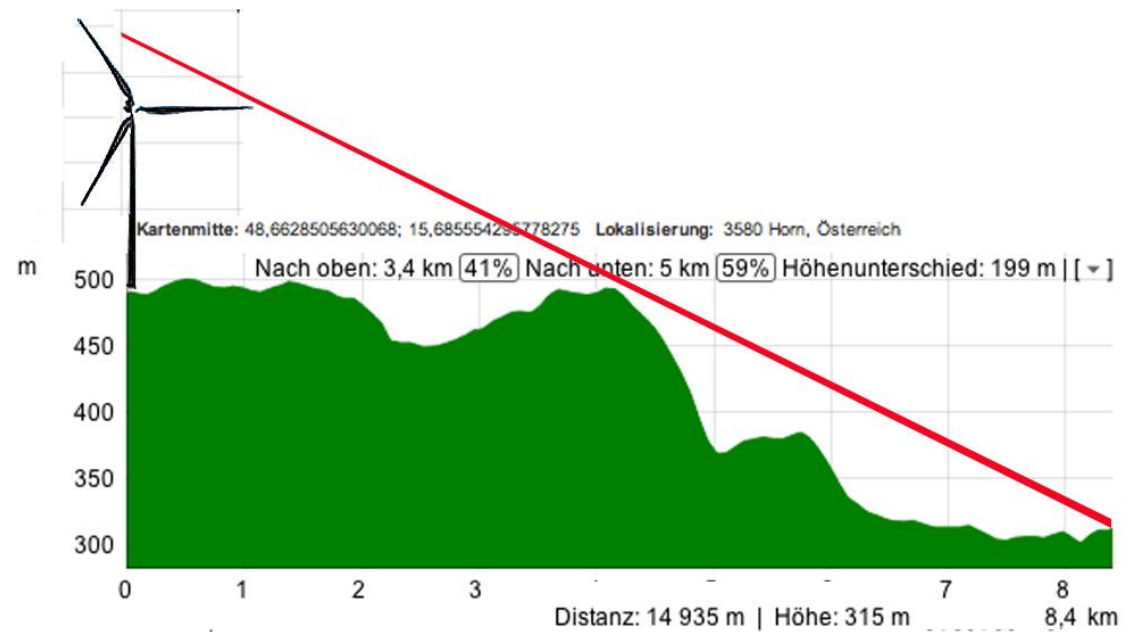
**Speed: ca. 310 km/h (195 mph)**

**Wing area (d=110 m/360 ft):  
9.500 m<sup>2</sup> (103.000 sqft)**













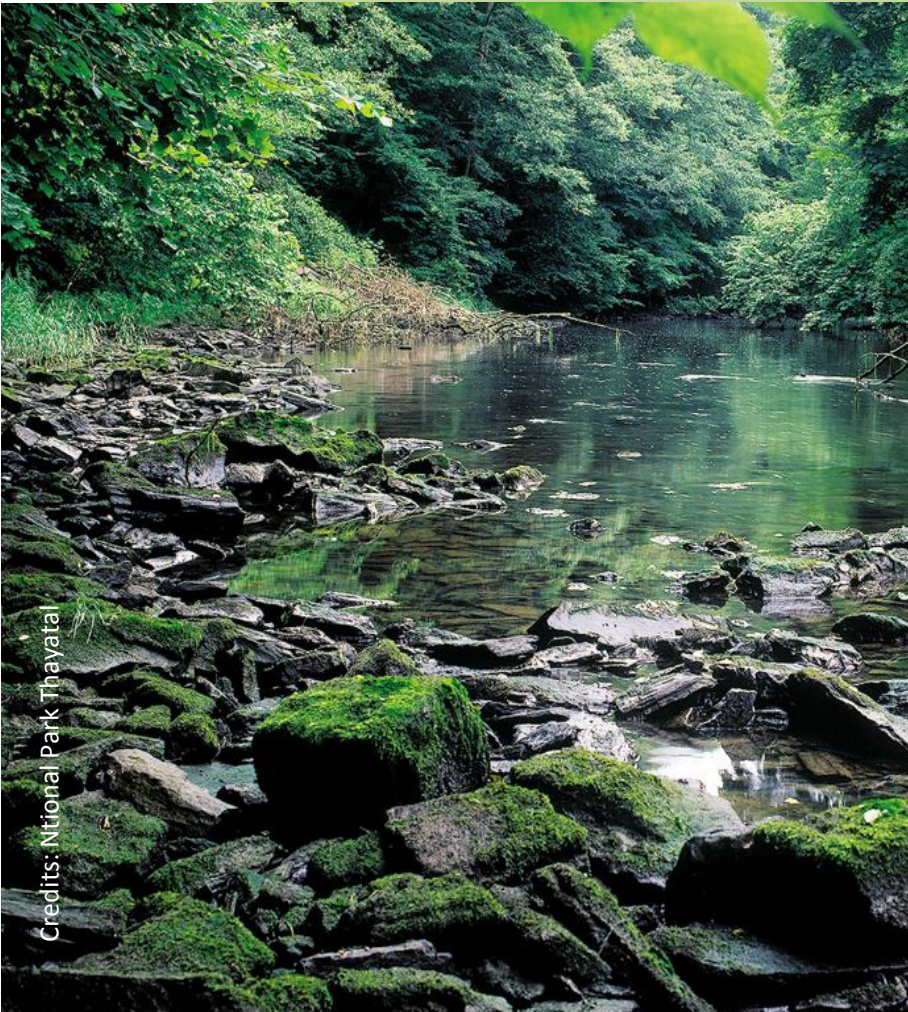
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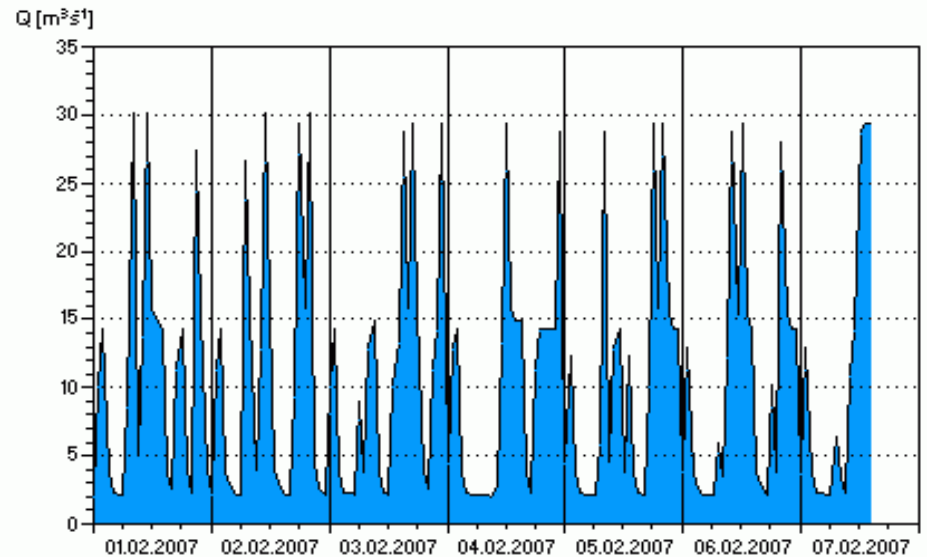
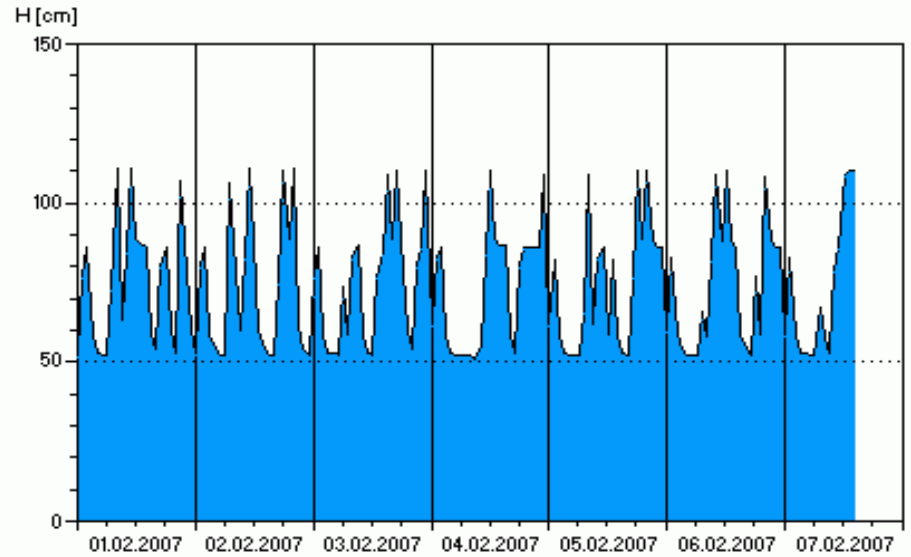
Regional Park of Migliarino, San Rossore and Massaciuccoli, Italy



Credits: National Park Thayatal (bottom),  
Susanne Muhar (Boku Vienna) (2)



Credits: Nilton Park Thayatal



**The consequences of hydro-peaking.**



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Credits: Susanne Muhar (Boku Vienna) (2),  
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## Conclusions

### Assessment criteria for authorities

- Impacts on habitats and migration routes of birds and bats
- Impacts on habitats and corridors of wildlife
- Repercussions on the landscape
- Effects on touristic and recreational areas
- Impacts on river ecosystems

### Recommendations to the CoE

- Pay more attention to installations and infrastructure outside the ED site
- Enhance the knowledge about impacts with additional studies on bats and landscapes
- Support the ED sites through extraordinary appraisals