



European Wind Energy
Technology Platform

Training opportunities, needs and recommendations in the European wind sector

Oscar Fitch-Roy
GL Garrad Hassan



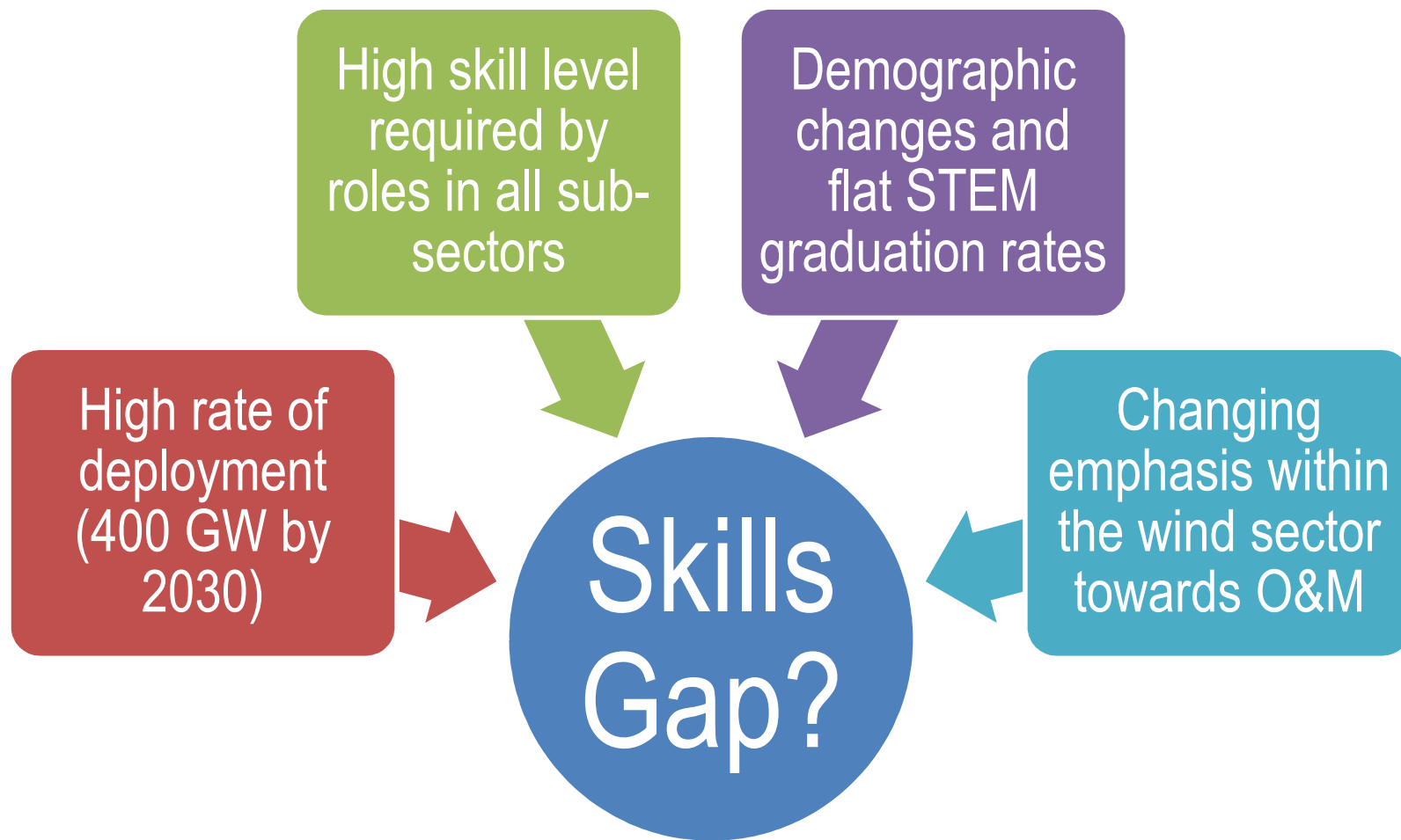
European Wind Energy
Technology Platform

Content

- Context and rationale
- Methodology
- Findings
- Recommendations for progress



The European wind energy sector





Method

Supply

- Desk study of existing training opportunities

Demand

- Interviews, surveys and installation trends



Sources of supply

Educational initiatives



Apprenticeships and technical courses



Dedicated training centres



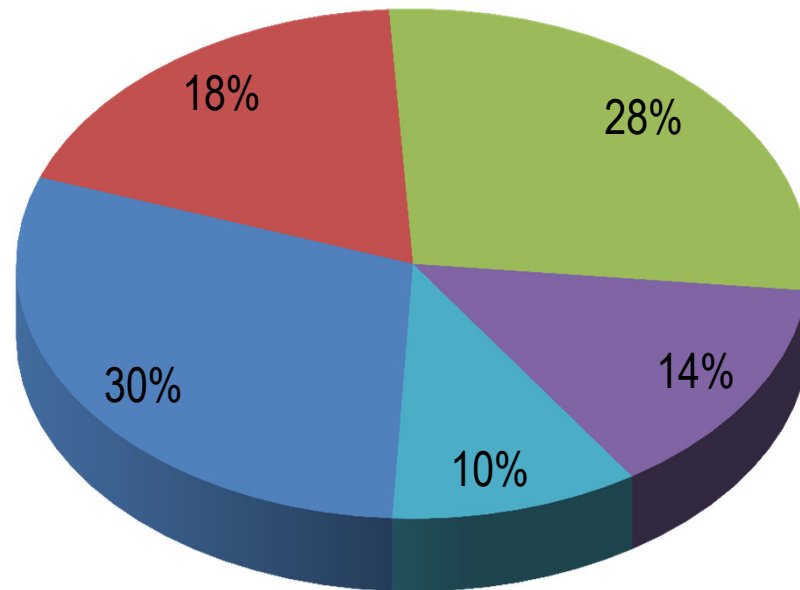
University courses



Knowledge sharing networks and wind energy training support



Estimate: ~40,000 suitably qualified personnel enter the sector each year.



- Manufacturing - Direct
- Installation
- Other Direct Employment
- Manufacturing - Indirect
- Operations and Maintenance



Demand for trained personnel

Interviews

Shorter 'conversion' courses attractive

Vocational training standards may be beneficial

Demand for industry input to academic offerings

Changing needs as markets mature

Surveys

78% say difficult or very difficult to get the right staff

Collaboration between academia and industry needed

Problem solving aptitude preferred

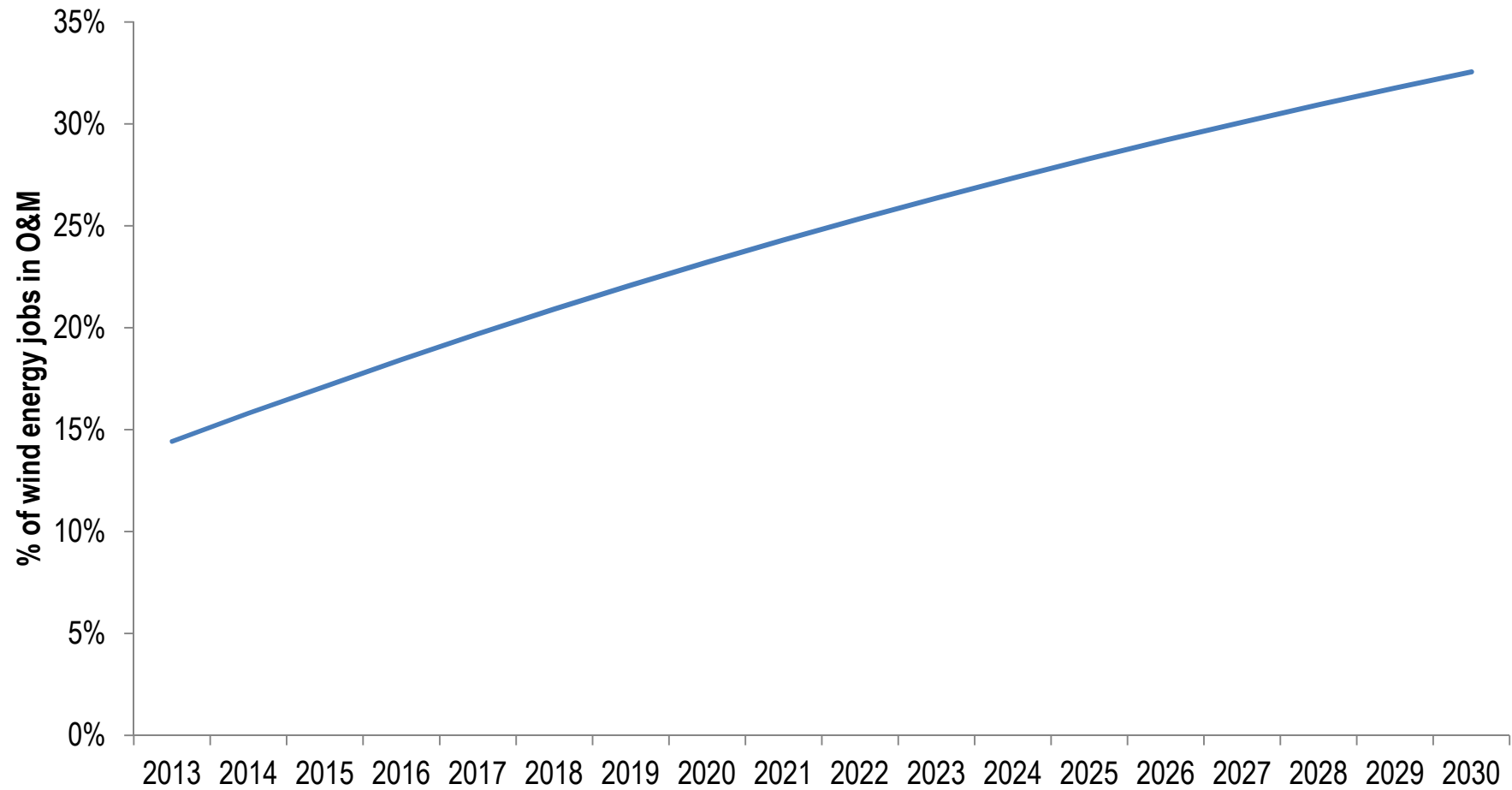
Installation Trends

400GW by 2030

Changing jobs mix driven by increased cumulative capacity

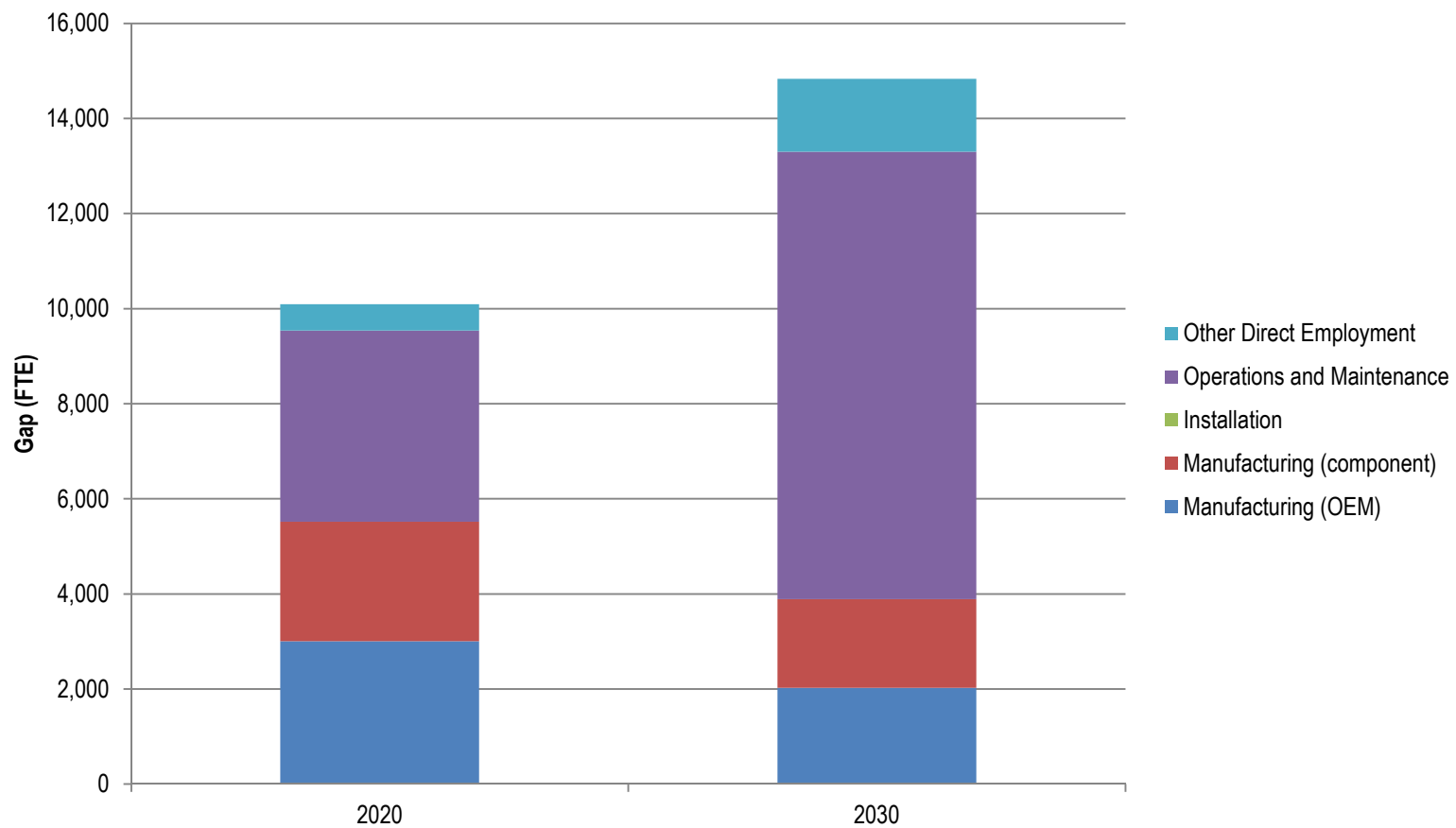


Changing focus towards O&M jobs





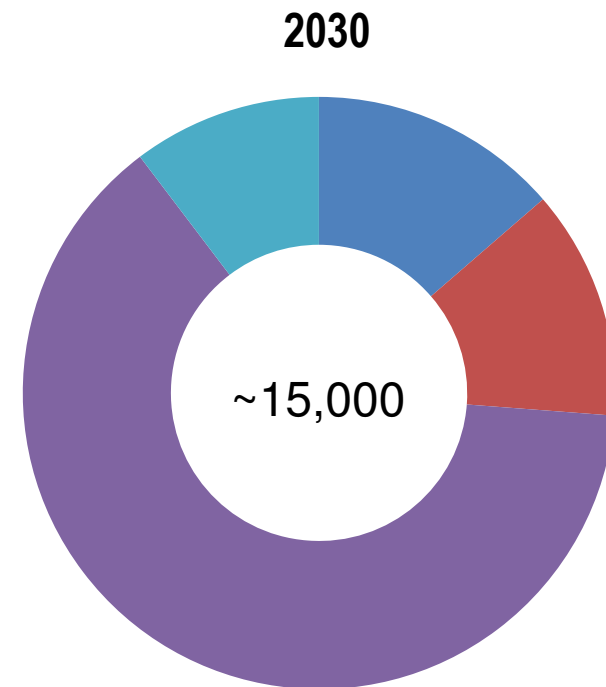
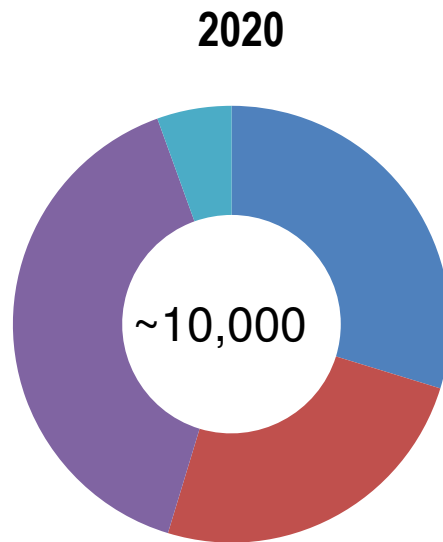
Gap in 2020 and 2030





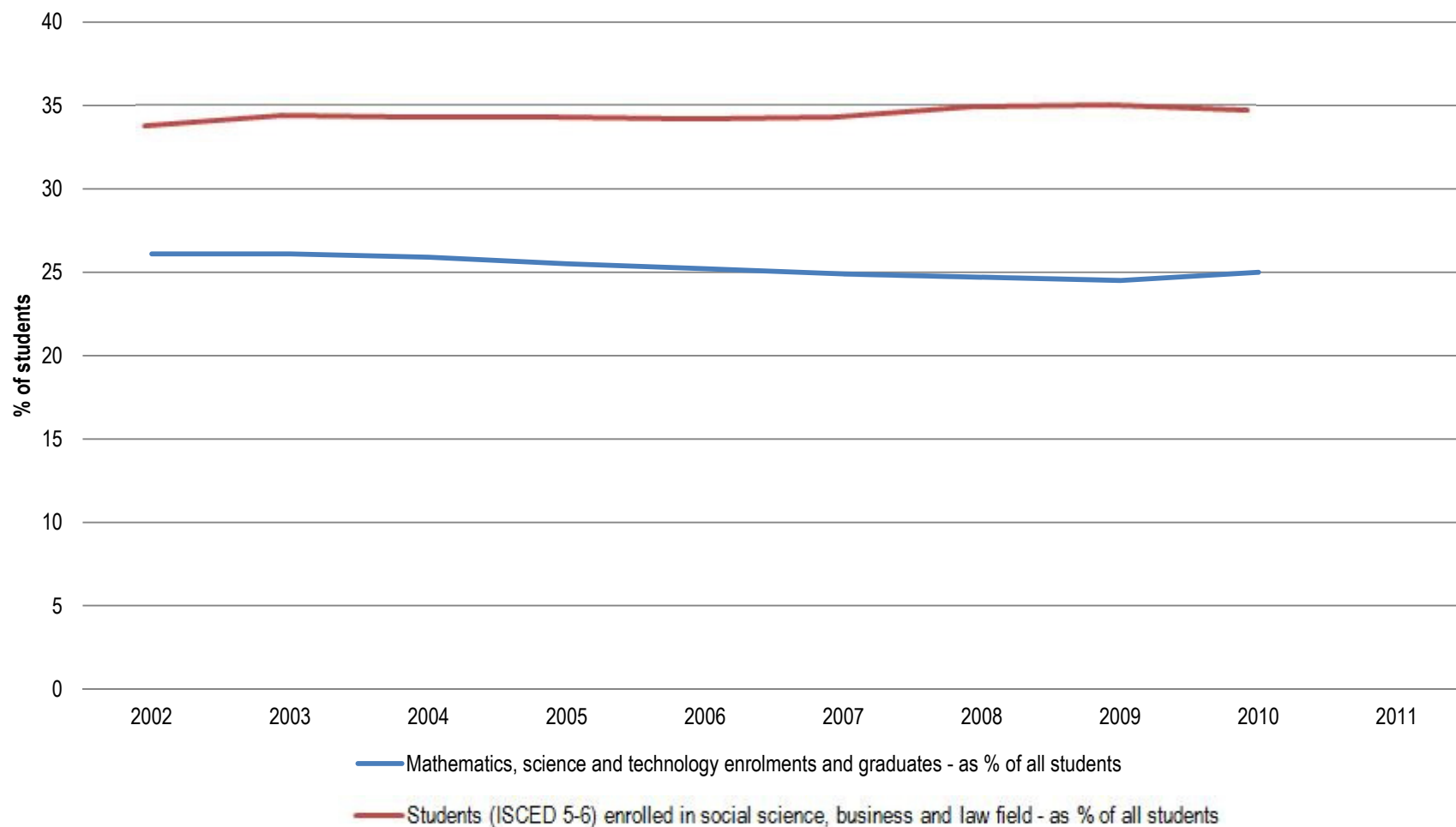
Gap in 2020 and 2030

- Manufacturing (OEM)
- Manufacturing (component)
- Installation
- Operations and Maintenance
- Other Direct Employment





Demographics...





Conclusions

Two big trends:

- ❑ Increasing demand – *more roles to fill – especially in O&M*
- &
- ❑ Constrained supply – *driven by demographics and a possible lag in training provision*



5 Recommendations for progress

- Improve core STEM skills available to industry
- Get the benefits of industry experience into training and education institutions
- Expand the cohort of graduate-level wind energy generalists
- Harmonise Vocational Education and Training (VET) offerings at the EU level
- Increase the emphasis on O&M training

Thank you for your attention!



European Wind Energy
Technology Platform

<http://www.windplatform.eu/>

secretariat@windplatform.eu