

Qualification requirements study

A study has been performed of the human resource qualifications that are required for the emerging offshore wind industry. In five EU member states (Belgium, Denmark, Germany, Great Britain and the Netherlands) a total of 32 companies from all sectors of the business area of offshore wind energy participated in expert interviews.

The interviews focused on five questions:

What is the current qualification profile of employees?

What new qualification requirements arise in connection with offshore wind energy?

How is the personnel of the company expected to develop (redundancies, new appointments) in the face of the offshore expansion?

What further education requirements can be formulated and for how many employees?

What requirements from the point of view of the companies, apply regarding changes to professional and university education?

The evaluation showed a wide range of new qualification requirements, some of which are cross-sector and others sector-specific. New requirements with regard to employee qualifications in the areas of project management, national and international law, quality assurance, occupational safety and health care, technical English and English for negotiations as well as offshore training arise in almost all sectors. In addition, sector-specific qualification requirements have been demonstrated which concern the areas of engineering training, welding and fibre composite technology as well as additional mechatronic knowledge for assembly and service employees.

Regarding further job specific education of employees the study showed that further education follows three routes:

In-house training: The majority of companies deal with the necessary further education through in-house training. Large companies run their own competence centres with company-specific training programmes. In addition, external experts run in-house training sessions such as for new equipment or new products as often the supplier is responsible for teaching employees the use of the new technology.

Learning on the job: Learning on the job is a common way of introducing employees to their new tasks. This is done by experienced "old hands" in the business mentoring the new employees. In comparison, the role played by e-learning and hybrid forms such as blended learning is very insignificant.

External training: In addition, use is made of external further education seminars, institutes of further education, professional associations, and higher education institutions and university competence centres. In view of the need for new qualifications outlined above the research institutes and competence centres are faced with a double task. On the one hand, they are at the forefront of research into new materials and processes. At the same time, however, they are in demand to provide wind-specific knowledge suitable for transfer to industry.

According to the companies, there is a lack of information on external training possibilities in all the countries investigated: which institutes of further education offer what and under what conditions. In response to this problem, POWER WP.3 developed a database of external training and education offers in the region. See Paragraph Database available courses related to offshore wind energy