

Improvement and Harmonisation of Education in the POWER Region

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Workshop on Harmonisation of Training for the Offshore Wind Energy Industry, 26 April 2007 bfw Bremen

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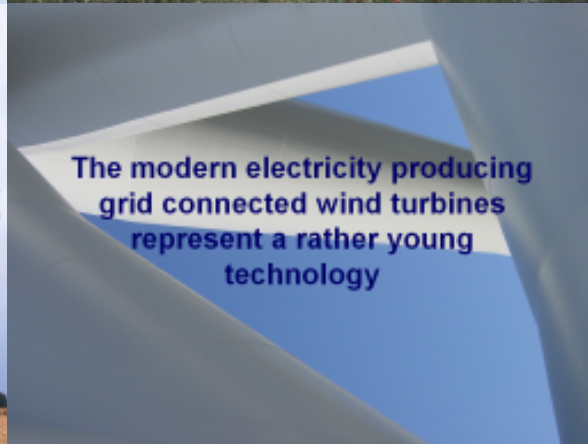
Using the power of wind has a long tradition in Europe



Windmills produced mechanical power



The modern electricity producing grid connected wind turbines represent a rather young technology



Historical Development in Germany



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The first German wind farm 1956



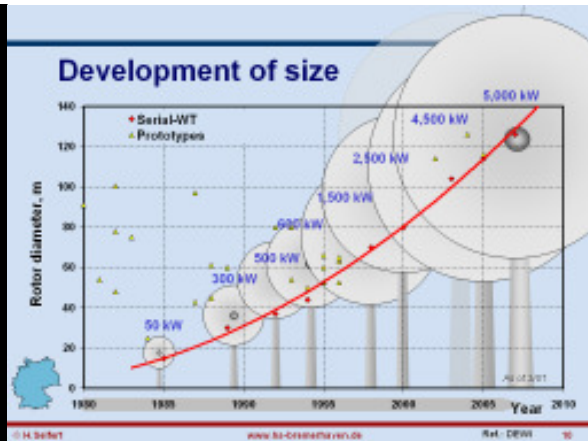
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1956 The first offshore turbine ?



Ref: DPVLR

Development of size



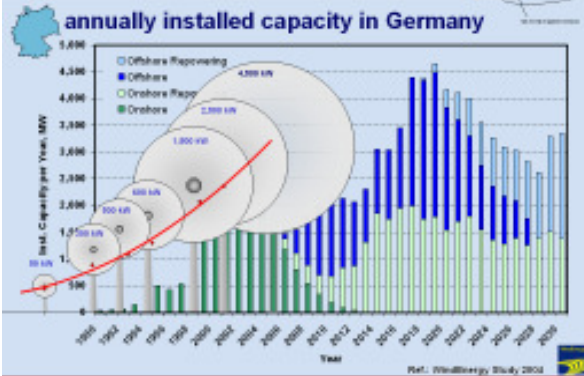
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Prognosis of the development of the annually installed capacity in Germany



There is a fast growing size combined with a fast growing number of units in Germany, Europe and world wide in only a few years

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We still have in Europe:

- different languages
- different national Standards and guidelines
- different national education systems
- even different Standards for screws



And the wind turbine techniques ?

Wind energy techniques uses multi disciplinary engineering

- Meteorology
- Aerospace engineering
- Electrical engineering
- Mechanical engineering
- Control engineering
- Economics
- Energy techniques
- Environmental engineering
- Civil engineering
- Measurement techniques
- Public acceptance



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And now we start into the off shore adventure



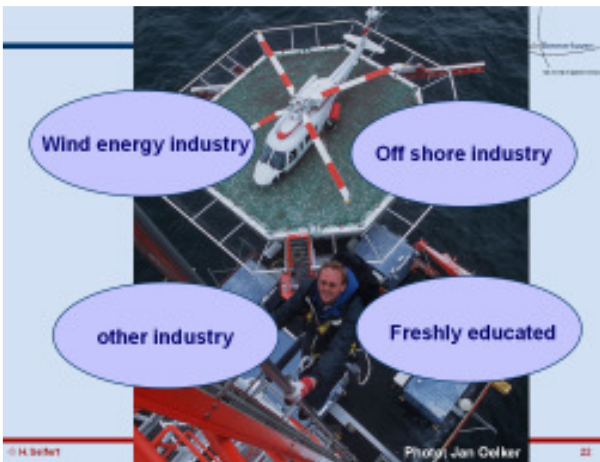
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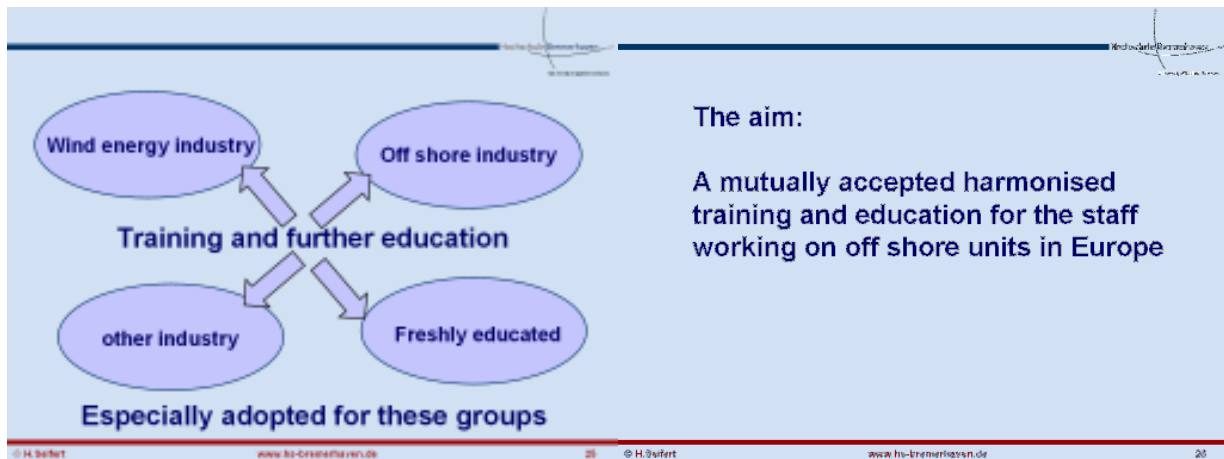
We have to prepare the future staff

Where can we recruit the offshore staff we need in the POWER region in the next years?




The optimal POWER worker

- Young and experienced
- Sound knowledge about wind energy technology
- Safety training on wind turbines
- Off shore safety training
- Expert in mechanics, electronics, electric's, hydraulics,
- First aid specialist
- Speaks several languages
- Single



Hochschule Bremerhaven Off- and Onshore-relevant Study Courses

- Maritime Technologies
- Process Engineering and Energy Technology
- Production Technology
- Ship engineering
- Logistics Engineering and Management
- Further education courses



Studiengang Maritime Technologie / Degree Course Maritime Technologies

<ul style="list-style-type: none"> 1. Semester 2. Semester 3. Semester 4. Semester 5. Semester 6. Semester 	<p>Grundstudium</p> <ul style="list-style-type: none"> Mathematik Physik Chemie Technische Zeichnung Technisches Englisch <p>Spezialstudium</p> <ul style="list-style-type: none"> Maritime Technologie Maritime Technologie Maritime Technologie Maritime Technologie Maritime Technologie Maritime Technologie <p>Wahlstudien</p> <ul style="list-style-type: none"> Maritime Technologie Maritime Technologie Maritime Technologie Maritime Technologie
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Study Course Maritime Technologies

