Auftaktveranstaltung zum Förderschwerpunkt „Berufliche Bildung für eine Nachhaltige Entwicklung“ des BIBB

Offshore Windenergy & ”Energi på havet“

Sigurd Blöndal
sb@danperform.com / sb@danishoffshoreacademy.com
Auftaktveranstaltung zum Förderschwerpunkt „Berufliche Bildung für eine Nachhaltige Entwicklung“ des BIBB

Sigurd Blöndal
- MSc Enterprise Development

- Danish Offshore Academy
  - Concept Development

- Offshore Energy/ AMU-Vest – Project Manager
  - Coordination and development of Offshore energy educations

- Danperform – Senior partner
  - Management consulting (marketing and operational efficiency)

- External Lecturer, South Danish University/Business Academy Southwest, HD (O)

- Artexeuropre – Man. Director
  - B2B supplies mainly to airlines, hotels, banks, community offices, etc.

- Casa & Gentleman Retail – Man. Director
  - Retail sale of design home furnishing and men’s wear

- Islandsbanki
  - Office manager

20-08-2013
Auftaktveranstaltung zum Förderschwerpunkt „Berufliche Bildung für eine Nachhaltige Entwicklung“ des BIBB

Primary activities

- Inbound logistics
- Operations
- Outbound logistics
- Marketing & Sales
- Services

Support activities

- Procurement
- Technology development
- Human resource management
- Firm infrastructure

Margin through value

Green Energy
Wind, Waves, Tides

Blue Area
Maritime, Logistics, Administration, Handling, Finance, etc.
"Energi på havet" - Activities

**Main activities**
- Advisory Board established
- Inter North Sea research
- Power center
  - Start-up meeting by the Mayor of Esbjerg

**Work Packages**

**Additional activities**
- Dissemination of offshore energy in the Region of Southern Denmark and the rest of the country
  - Cooperation with workers unions, public jobcenters and Veteran organisations
  - Presentation of opportunities in Offshore for active employed and unemployed

Sigurd Blöndal 420-08-2013
WP’s

- Education Supply & Demand
  - Training and certification
    - Pull
    - Active dialog between customer and supplier
  - Long term educations
    - Push
    - The market sees no need for new programs but is very positive towards new initiatives by educational institutions
    - Adjustments and development of the existing ones
  - Growing demand for continuing education
  - Need for more effective dialogue
Industry specialist – Skilled workers

Offshore Competence Profiles – Skilled professionals or equivalent

Plastic maker
Surface treatment specialist
Blacksmith
Electrician
Mechanic
Other vocational professions

Personal and behavioural competences
- Safety Awareness, language (English), self motivated, cultural understanding, support from home, health certificate, phobia clarification, industry & business understanding

Additional skills
- Scaffolding, rigging, gripping, lifting, bolt tension, surface treatment, automation techniques, IT, project management, Robe Access

Safety
- GWO (Global Wind Organisation) package, plus additional relevant ones, like HUET & L-AUS

Equivalent skills
CWT – Computer Based Training

- A wide range of programs can be applied
  - Supply on demand
  - UC Syd, EASV, SDU & AAUE
  - EUC Vest, AMU-Vest, Rybners

Application of Research to educations

- Risk & Safety Management
  - Simulation of risk scenarios
    - Effective evacuation hampered by:
      - Many people
      - Confined space
      - Complex access
      - Circumstances (Evacuation is only the first problem)
WP’s

- Merit agreements
  - Mechanical Engineers and Technical Manager Offshore (PBA)
    - Cand.scient.tech in production - AAU
    - Cand.scient.tech Risk & Safety Management – AAUE
    - Cand.techn. i Maritime Technologi - SDU
      - ships, offshore installations og production firms

- Modularisation
  - AMU centers
    - Gradual competence development = skilled worker?
  - EASV – Operational Technic Manager
    - Individual agreements with universities
Future challenges

- Development of more dedicated dialog with firms in the industry
  - More resources to R&D
    - Not only societal compulsory participation
    - More engagement equals more benefits
    - Long term strategy is as important as daily "Fire Fighting"

- Danish Offshore Academy
  - Dialog orientet development
  - Anchoring of the educational project
Example of industry cooperation

<table>
<thead>
<tr>
<th>Module</th>
<th>Duration - hours</th>
<th>Certificate Validation - months</th>
</tr>
</thead>
<tbody>
<tr>
<td>First Aid</td>
<td>16</td>
<td>24</td>
</tr>
<tr>
<td>Manual Handling</td>
<td>4</td>
<td>24</td>
</tr>
<tr>
<td>Fire Awareness</td>
<td>4</td>
<td>24</td>
</tr>
<tr>
<td>Working at Heights</td>
<td>16</td>
<td>24</td>
</tr>
<tr>
<td>Sea Survival</td>
<td>12</td>
<td>48</td>
</tr>
</tbody>
</table>
Auftaktveranstaltung zum Förderschwerpunkt „Berufliche Bildung für eine Nachhaltige Entwicklung“ des BIBB

Sigurd Blöndal

20-08-2013
New Offshore Wind projects in Denmark

- Horns Rev 3: 400 MW
- Kriegers Flak: 600 MW
- Tender for 450 MW near shore wind farms
- 50 MW turbines for research and development

Energistyrelsen 2013
Auftaktveranstaltung zum Förderschwerpunkt „Berufliche Bildung für eine Nachhaltige Entwicklung“ des BIBB

A Sea of Energy
Location of offshore wind farms planned or under construction in the German Bight.

Wind farms
- under construction
- approved/planned

Converter platforms
- built
- planned

Cable lines
High-voltage, direct current (HVDC) connections

Excluding economic zone
(authorized for commercial exploitation, including energy generation)
Why Offshore Academy?

Introduction

Offshore Market Dynamics

The macro outlook for offshore wind power suggest a strong growth the next five years of 44% (CAGR) globally, with 18GW of new capacity expected between 2012 and 2016, and 61% of these projected to be installed in Europe.

Increasingly complex site characteristics drive new technology shifts. Deeper waters and longer distances to shore create new supply chain challenges.

Key to success is facilitating technology shifts and supply chain build-out to avoid supply chain bottlenecks. Long term contracting and strategic cooperation could accelerate the development.
The wind energy sector generates thousands of green jobs and will be at the heart of a renewable energy economy. But more well-trained workers are needed to fill the vacancies now and in the future.

Did you know?

- Wind power generates jobs ranging from manufacturing to project management.
- The European wind energy sector employs 192,000 people.
- Between 2002 and 2007, direct employment in the sector increased by 125% - an average of 33 new jobs every day, seven days a week in Europe.
- Jobs in wind energy have transformed cities and regions such as Bremerhaven in Germany, Nakskov in Denmark and Navarre in Spain.

What about the future?

- There should be 446,000 jobs in wind in Europe by 2020, and 479,000 by 2030.
- According to the European Commission the green energy sector could create 2.8 million new jobs and add 1.1% to GDP growth if the EU’s 2020 renewables target is met.

The wind industry needs more people to fill the available and future jobs – schools and universities need to promote careers in renewables, and training must be provided to allow workers to transfer to the wind power sector.

Kilde: www.ewea.org
• “We need to strengthen our educational programs”

• "We must ensure the ability to deliver goods and services to the world around us"

• "We need to strengthen the education level – there is a need for powerhouse in relation to education"

  ◦ Quote from Steen Brødbæk, CEO Semco Maritime – 18/09/2012