

# POWER cluster midterm conference



Offshore wind Energy in the North Sea Region

## Workforce needed Now and in the Future and how to get them educated

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The Interreg IVB  
North Sea Region  
Programme



European Union  
The European Regional Development Fund

[www.power-cluster.net](http://www.power-cluster.net)

INTERREG IV B North Sea Region Programme 2007 – 2013  
All Energy Europe Aberdeen May 2010

The Northern European  
competence network  
for offshore wind energy

# Urgent need for qualified workforce

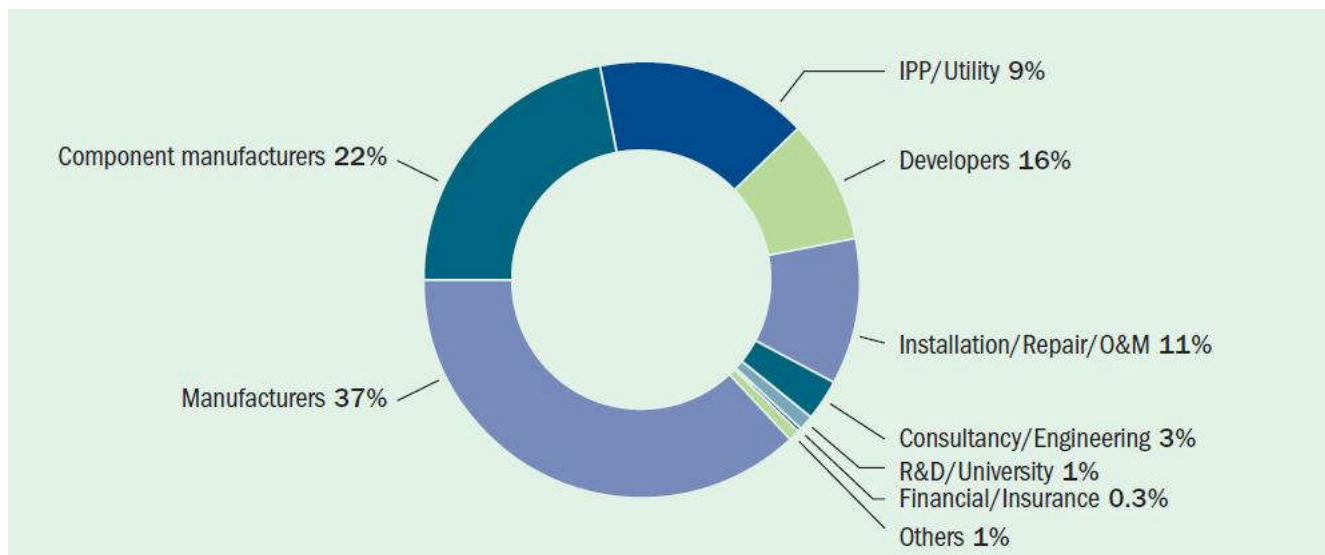


Some 400.000 jobs in 2030

EWEA "Wind at Work" 2009

~ 200.000 new jobs offshore!!

# Which qualified workforce??



**Academics:** EQF levels 6-8: R&D, Engineering, Developers, Others

~ 5 - 10%

**Engineers:** EQF levels 4-6: Manufacturing, Installation, O&M etc

~ 30 %

**Technicians:** EQF levels 3-5: Manufacturing, Installation, O&M etc

~ 30 - 35 %

**“Un”skilled:** EQF levels 1-2: Support: assistance, production, transport

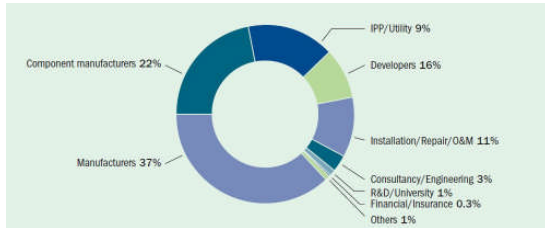
~ 20 %

**Rest:** EQF levels 3-8: Management, Finance/insurance, Developer, IPP/Utility

~ 10 %



# How much qualified personnel??

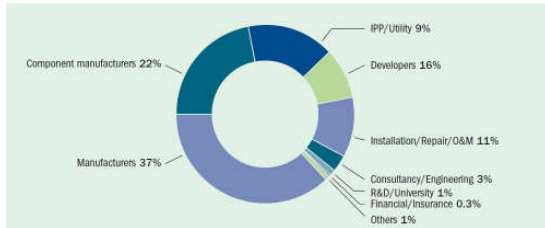


In numbers:		Total	Per year	“Offshore”
<b>Academics:</b>	EQF levels 6-8:	35.000	1.750	1.000
<b>Engineers:</b>	EQF levels 4-6:	120.000	6.000	3.000
<b>Technicians:</b>	EQF levels 3-5:	150.000	7.500	4.000
<b>“Un”skilled:</b>	EQF levels 1-2:	60.000	3.000	1.000
<b>Rest:</b>	EQF levels 3-8:	35.000	1.750	1.000

20.000      10.000  
New people per year!!



# How much personnel per year??



## Offshore Wind Demand

### Type:

- Academics:**
- Administrative/Management
- Engineers/technicians**
- Unskilled**

### Level:

- EQF levels 6-8
- EQF levels 3-6
- EQF levels 3-6:
- EQF levels 1-2:

### Total

EQF levels 6-8	1.250
EQF levels 3-6	750
EQF levels 3-6:	<b>7.000</b>
EQF levels 1-2:	1.000

# Power Cluster Skills development (WP3)



Vestas

## Issues addressed:

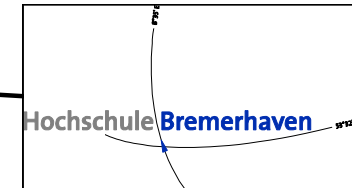
- educational modules at different levels
- common training standards
- addressing shortage of technicians:
  - inspiring the youth
  - rise awareness among teachers and students



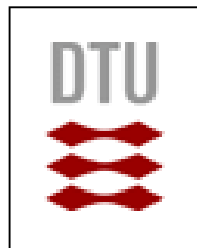
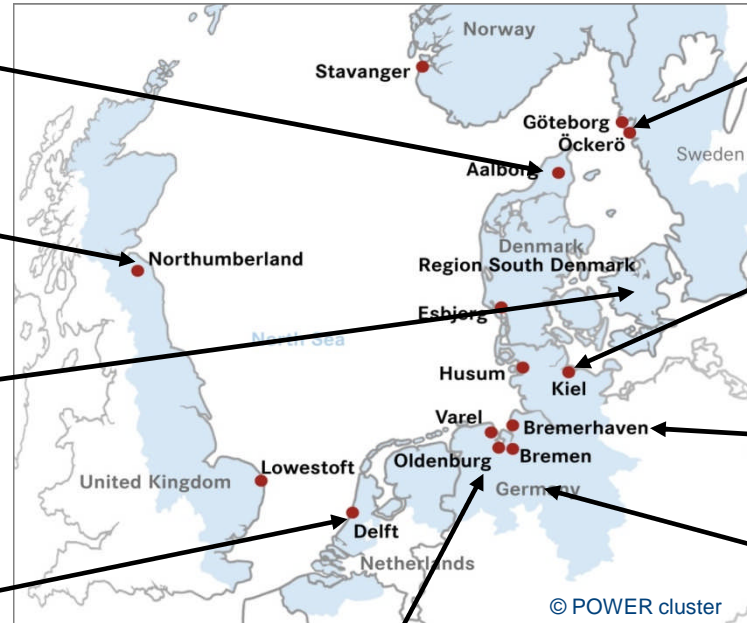
# Power Cluster wind energy educators in the partner region



Chalmers



**max 5% of the need**

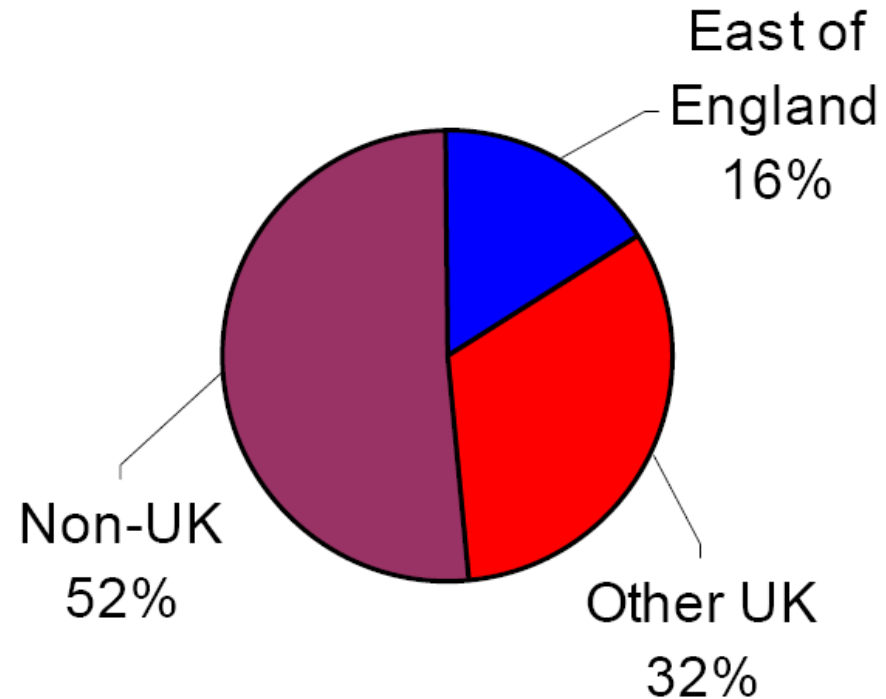


# Local content of Offshore wind



## Case Study:

- Scroby Sands
- Near Great Yarmouth  
East of England
- 16% local content (£)
- 48% National (UK) content (£)



Power Interreg III study  
Douglas Westwood 2005



# Development of Offshore wind

- Genuine European activity
- Substantial regional content

## Offshore wind education:

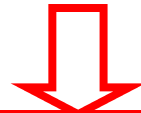
- Genuine European dimension
- Regional implementation
- Needed: European Standards
  - Qualification Framework (EQF)
  - Harmonisation & Certification!!



# Power Cluster WP3 (Skills) builds on EAWE and on the Windskill project:



- Academic standards: Bologna Treaty and the European Wind Academy
- European Qualification Standard for operational skills
- Modularised education and training concept



European accreditation body needed

