Analysis of the German vocational education and training system for construction workers

Basics of the German training system

- 3 to 3.5 years in the dual training system
- 45 relevant building and construction occupations (30 alone in the craft sector)
- Crafts: Advanced training to a 'master of crafts' with over 1800 hours
- nationally regulated training regulations and master's certificate regulations

Quantitative analysis of continuing VET offers in Germany

- survey in the German crafts sector and in German industry
- around 300 different courses for renewable energies and energy efficiency in the German crafts sector and in industry
- more than 200 courses alone in the crafts sector
- focus on courses with a) 5 to 50 hours and b) 200 hours and more

Analysis of labor supply and demand in construction trades until 2020

Quantitative demand for skilled workers by 2020

- Benchmark scenario (projection of current trends without additional investment)
  - no nationwide shortage of skilled workers
  - increasing employment of older persons
  - higher labor force participation of women
- Alternative scenario (modelled calculations for additional investments of € 23.6 billion a year (2014-2020))
  - consideration of all building trades: mathematically, the labor supply meets the demand
  - But: In some selected professions shortages may occur
  - electrical trades
  - Metal construction, plant engineering, steel construction, installation, assemblers
  - Regional differences cannot be mapped, but are very likely
  - From 2020 on there will be increasing nationwide shortages in the construction labor markets

Statistics on the building and the construction sector

The German building sector

- Goals in the building sector until 2020: analysis of residential and nonresidential buildings
  - approximately 18 million residential buildings (2.7 to 3.4 billion square meters space)
  - around 2.5 million non-residential buildings (2.2 to 2.7 billion square meters space)

Building sector - statistics

German building sector

- approx. 40% end energy consumption and 30% of greenhouse gases (CO₂ equivalent)
- 20.5 million buildings
- 75% built before 1977, 90% below ENEV-2009 (German energy saving regulation) level
- Potential for energetic refurbishments with a high chance of fast energy savings. 760 PJ need to be saved

German building construction sector

- Approx. 505,000 companies with 2.4 million employees, more than 80% of employees are qualified or highly qualified workers

Institutional work

Meetings and events

- Kick-off-meeting 12.01.2011
- 3 consortium meetings

Presentation of interim results 05.31.2012

National platform

- 56 suppliers (incl. consortium)
- from different types of society

Website www.bauinitiative.de

Objectives in the Energy Sector

Measures initiated in Germany:

- Germany strengthened its efforts
- Building sector: legislation, financial incentives, information
- Energy concept 2010, energy transition (Energiewende) 2011
- Gradual phasing out of nuclear power until 2022 and
- Accelerated shift to renewables and more energy efficiency