Analysis of the National Status Quo

Objectives
- Analysis of the current status of the building sector in Romania (continuous education and training in EE & RES):
  - Demand vs offer in the building sector
  - Bottlenecks for the labor market in the construction sector
  - Barriers (education, qualification, legislation, administrative, financial and social)
- Starting point for drawing up a strategy for the training of building workforce needed to achieve the 2020 energy targets in buildings

Statistics in buildings
- Population: 19,042,936 inhabitants
- Households: 7,086,717 units
- Dwellings: 8.5 million units (54.2% in urban area)
- Buildings: 5,117,940 bigdigs
- Living area: 398,037 sq.m (55.4% in urban area)
- The ownership profile - residential buildings - from 67% in 1990 to 98.3% at the end of 2010 (based on living area)
- Annual new build rate = less than 1% (mostly private funding)

Current workforce and forecasts in constructions sector

Bars to 2020 targets achievement in the building sector
- Legal and Policy:
  - Only one chapter “Energy and Climate Change” – 3 ministries involved
  - Poor correlation between individual sectors long term strategies
  - EU Directives transposed (but not adapted to national conditions)
- Administrative capacity:
  - Complex bureaucratic system
  - Need for capacity building – number and skills at national and local level
- Qualification/certification:
  - General lack of coordination among crafts and professions
  - NOF not yet aligned to EQF
  - Lifelong learning system at the beginning
  - Lack of well adapted professional / occupational standards for RES and EE in buildings
  - Reduced performance of initial education system (abandon rate, lack of key qualifications)
  - Older workforce and migration of qualified / skilled craftsmen
  - Not well adapted curricula and train the trainers process
- Market:
  - Fragmentation of the building sector
  - General National Economy health – poor private investments / low budget for subsidies
  - Workforce market opening – increasing migration to other countries
  - Work precariousness
  - Low level of income / salaries
  - Unregistered workforce from 21% (2000) to 35% (2011) – Commerce and Construction sectors = champions

Methodology
- Desk research:
  - Strategic public policy documents
  - National action plans
  - Specific legislation (construction sector)
  - Statistical data – public sources
  - National Prognosis Commission
  - EU projects implemented in Romania
  - Market reports (construction sector)
- Analysis - National Consultation Committee
- European Awareness Scenario Work

Characterisation of the building sector

Energy consumption in buildings

Evolution of main indicators (2005-2010)

Statistics:
- Annual price increase in construction sector % 13,2% 10,5% 8,0% 13,6% 2,9% 3,4
- Construction workforce % 2011: 9,5% 2012: 10,4% 2013: 11,1% 2014: 11,7% 2015: 12,2%
- Construction sector % 2011: 6,53% 2012: 7,41% 2013: 9,12% 2014: 10,91% 2015: 10,54% 2016: 9,97%
- Annual inflation rate (average) % 9,0% 6,6% 4,8% 7,9% 5,6% 6,1
- GDP annual grow rate % +4,2% +7,9% +6,3% +7,3% -6,6% -1,6
- Breakdown of final energy for residential sector % 2010: 15,0; 2011: 15,0; 2012: 15,0; 2013: 15,0; 2014: 15,0; 2015: 15,0
- Breakdown of final energy for non-residential sector % 2010: 85,0; 2011: 85,0; 2012: 85,0; 2013: 85,0; 2014: 85,0; 2015: 85,0
- Final energy (average 2005-2010) Total final energy 52,7 mtoe 2005: 11,0 mtoe 2006: 11,5 mtoe 2007: 12,1 mtoe 2008: 12,4 mtoe 2009: 12,4 mtoe 2010: 12,1 mtoe
- Final energy breakdown: primary 34,0 mtoe; 2005: 7,0 mtoe; 2006: 7,5 mtoe; 2007: 8,1 mtoe; 2008: 8,4 mtoe; 2009: 8,3 mtoe; 2010: 8,1 mtoe
- Electricity: 23,9 mtoe 2009; 24,1 mtoe 2010
- Natural gas: 10,0 mtoe 2009; 10,5 mtoe 2010
- District heating: 9,0 mtoe 2009; 9,2 mtoe 2010
- Renewable energy: 0,5 mtoe 2009; 0,5 mtoe 2010
- CO2 emission: 85,2 Mt 2009; 78,0 Mt 2010
- CO2 emission breakdown: residential sector 83,6%; 2009: 82,0%; 2010: 80,7%; 2011: 79,0% non-residential sector 6,4% 2009: 7,0% 2010: 9,3% 2011: 10,0%
- Energy consumption breakdown

Gaps:
- Qualitative:
  - Increasing obligations and market + decreasing active & qualified workforce
  - Individual lack of complementary competencies in existing qualifications
- Difficult to quantify: building workers to be trained in each sub-sector/ profession to each skill level + required qualification courses and schemes, trainers, bodies

Success stories & best practice
- Over 270 key actors in the National Qualification Platform
- Initiation of the National Consultation Committee as an inter-stakeholders consultation and collaboration instrument for multi-parties partnerships
- Support for building the necessary certification and qualification schemes for RES installers
- Active dialogue with key professional associations and NGOs to support their capacity to provide vocational training and qualification schemes
- Link to other initiatives and best practice cases

Strategic public policy documents:
- Specific legislation (construction sector)
- National Prognosis Commission
- EU projects implemented in Romania
- Market reports (construction sector)

Support for building the necessary certification and qualification schemes for RES installers

Targets 2020:
- CO2 reduction - 20% RES final energy - 24%
- Increase en. eff. - 19%

Informal economy:
- "Informal" economy as a percentage of "formal" economy in total employees (%)