Financial incentives for better quality of the works – Austrian example

4th September 2015

Susanne Geissler
ÖGNB – Österreichische Gesellschaft für Nachhaltiges Bauen
geissler@oegnb.net

IEE/13/610/SIO2.675574

01/03/2014-28/02/2017
Objectives of Austrian QUALICHeCK study

- Objectives
  - To analyse the range of deviation of EPC energy performance indicators depending on the quality of input data and the type of EPC (design EPC and completion EPC, in Salzburg region required for financial incentive)
  - To analyse the cause of deviation including on-site visits of selected buildings

- Scope
  - 26 multi-unit new residential buildings in rural and urban areas in the province Salzburg, well documented with EPC issued after 2009 (design EPC and completion EPC), approximately 30,000 m²
  - Focus of analysis on 4 scientific / technical areas:
    - Transmission characteristics
    - Ventilation and airtightness
    - Sustainable summer comfort technologies
    - Renewables in multi-energy systems
On-site visit visual checks based on EPC data and experts interviews – checking irregularities detected during EPC analysis

Building physics
• Check of geometrical data, building orientation, azimuth angle

Windows – window installation
• Window type, door type and openings, thermal bridges, window frame insulation, shading / overhangs

Unconditioned area
• Cellar and staircase conditioned? Indoor temperature, heat dissipation system

Building services technology
• Heating system check, forerun temperatures, system changes not in line with technical planning, discussion with facility managers

→ Quality of the works ✓ What is the reason?
Legal framework of energy efficiency in residential buildings

Energy efficiency legislation: mandatory energy minimum requirements and EPC required for building permit at the regional level, but harmonised approach (however, still differences)

Public funding for better energy efficiency than required by the building legislation – legislation according to Art 15a Constitutional Law

Conditions for receiving subsidies for new buildings and renovations:
1. Household income must not exceed a defined limit
2. Energy performance demonstrated by the EPC must be better than required by law → it is mandatory to meet more ambitious minimum requirements; additional incentives can be given for improved energy performance better than minimum requirements

Positive: Range of household income is very wide → a big part of construction activities in the residential sector is under this scheme (e.g. Province of Salzburg: ca. 30% of new constructed flats)

Negative: Requirements and compliance checks scare people off, share of funded buildings has been decreasing
Compliance and quality of the works: focus is on the subsidy scheme – requirements become legislation from 2019 on

EFH – single family house
MFH - multi unit residential building
GWB – large residential buildings
Charakteristische Länge – Surface to volume ratio
OIB – OIB Guideline – basis for regional building legislation

Heizwärmebedarf – Heating energy demand
Red line – minimum requirement according to building legislation
Yellow line – minimum requirement according to subsidy scheme
Grey line: average of building stock
Exemplary description of subsidy scheme

• Several options in the province of Salzburg

• Example: Subsidy for developers constructing multi-residential buildings for rent (there are defined conditions for renting the units)
  • Type of subsidy: grant, paid after completion of the building and requirements fulfilled; application before start of construction based on design EPC and having consulted the responsible department of the public authority is mandatory
  • Amount: Depending on useful area and paid per m2 useful area: up to 500 m2 useful area grant is EUR 650 per m2, and above 2,500 m2 grant is EUR 550 per m2 useful area; between 500 m2 and 2,500 m2 the grant is adapted accordingly
  • For better energy performance than necessary for the basic subsidy (which is already more ambitious than the requirements according to building legislation), additional grant is available
In case of non-compliance: penalty versus collaborative quality assurance to improve quality of the works

Amount of money is substantial → incentive is high to enter the subsidy scheme

Penalties in case of non-compliance:

• In theory: loss of subsidy in case minimum requirements are not met
• In practice: not possible because ... loss of societal support

Therefore: focus on quality assurance

• Close cooperation between public administration and the developers/building owners.
• Very effective because not only detection of mistakes but also suggestions how to improve to meet the requirements → public administration needs qualified personnel or contracts out to a third party.
• As a consequence of control, developers of multi-unit residential buildings have established their internal quality assurance schemes and have been working on constant improvement.
  Challenge: single family houses.
Thank you for your attention!