



Federal Ministry
for Economic Affairs
and Energy

Incentive Programs for Renewable Energies for Heating and for Energy Efficiency in Buildings

07. February 2017

Unit IIC3 – Renewable energy in the heat market
and Promotion of Energy Efficiency in Buildings

Agenda

- (1) Market Incentive Programme
- (2) CO2-Building Rehabilitation Programme
- (3) Energy Efficiency Incentive Programme
- (4) Achievements

(1) Market Incentive Programme

Background:

- **Standard heating system:** gas/oil boilers; about 12-14% district heating.
- **Relevant targets** of the German energy transition for 2020:
 - Reduction of GHG emissions by **40%**
 - Reduction of final energy consumption for heating by **20%**
 - Increase of **RES-share to 14%** in the heating and cooling market

(1) Market Incentive Programme

Goals of the programme:

- Promoting the **expansion of renewable energy technologies in the heat market**
- Incentivising further **innovation in this market segment**
- Convince consumers and industry to switch from **fossil fuels to highly efficient, RES based heating and cooling**

(1) Market Incentive Programme

RES technologies:

- **Small scale installations:**
 - Solar thermal Installations
 - Biomass
 - Heat pumps
- **Large scale installations**
 - Large Heat pumps, Solar thermal or Biomass installations
 - Biogas pipes for non-processed biogas (raw biogas)
 - Deep geothermal installations
 - Local Heating Grids for Heat from RES
 - Large Storages for Heat from RES

(1) Market Incentive Programme

Financial resources: ca. €300 M

- funded by **the German federal budget** and **the energy and climate fund (EKF)**
- **Investment grants** for small installations granted by Federal Office for Economic Affairs and Export Control (BAFA) – for small scale installations
- **Repayment grants**, granted for loans at reduced rates of interest by KfW bank – for large scale installations

(2) CO₂-Building Rehabilitation Programme

Background:

- Ca. **40% of the final energy consumption** in Germany is deployed for the heating of buildings, water heating as well as lighting.
- The share of the building sector with respect to CO₂-emissions was about **33%** .

(2) CO₂-Building Rehabilitation Programme

Goals of the programme:

- Promoting the implementation of energy efficient measures in the building sector (residential and non-residential buildings)

Financial resources:

- In 2016 the programme (especially the KfW-programmes) is backed with a budget of € 2,0 B (€ 1,7 B for reduced interest rates and repayment grants as well as € 300 M for investment grants)

(3) Energy Efficiency Incentive Programme

Goals of the programme:

- Promoting a **further increase of energy efficiency** in the building sector and the **usage of renewable energy** in the heat market

Financial resources:

- **€ 165 M p.a. for 2016-2018**

(3) Energy Efficiency Incentive Programme

Promotion:

- **Ventilation package:** ventilation systems combined with modernisation measures for the building shell (e.g. windows, insulation)
- **Heating package:** replacement of inefficient heating (fossil and renewable) combined with the **optimisation of the whole heating system** in the building

(3) Energy Efficiency Incentive Programme

Promotion:

- Introduction of the innovative **fuel cell heating system**
- **Information and qualification** to support the investive promotion.

Integrated in existing programmes:

- Application via KfW-programmes of the **CO2-Building Rehabilitation Programme** or via **Market Incentive Programme**

(4) Achievements

Market Incentive Programme

- RES have reached a share of **13,3% of final energy consumption** for heating / cooling in 2015 (National target 14% by 2020)
- **Predominantly use of biomass** (86,6%) among the renewable energy sources utilized for heating
- The mix is changing however; today **more heat pumps** are promoted than biomass boilers.

CO2-Building Rehabilitation Programme

- **Investment volume:** ca. € 2,4 B
- CO2-emission was reduced by **8,6 M tons a year since 2006** (with respect to the utilisation period of 30 years of the deployed measures)
- Over **300.000 jobs** in the middlestand and skilled crafts and trades have been generated.



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Thank you for your attention!

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