

# Bonus Model

A new concept for EU Member States  
to support RES-H?

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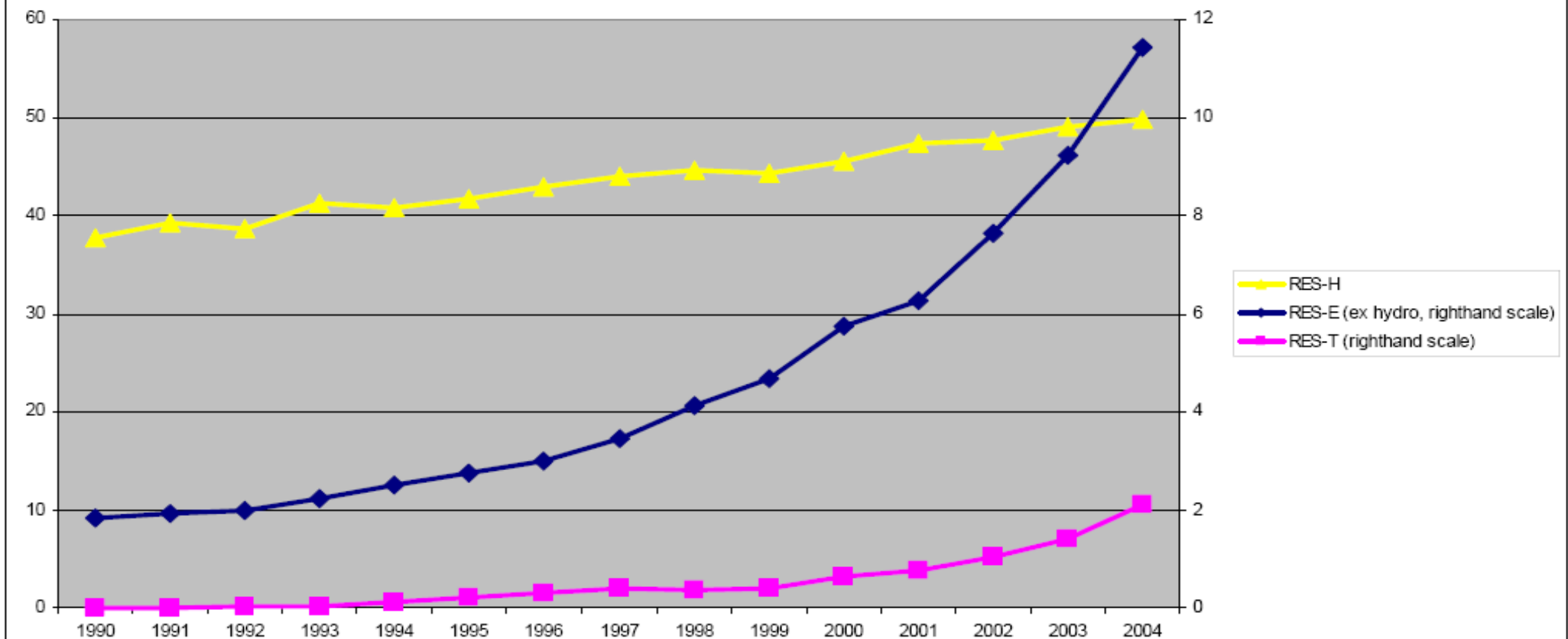
Öko-Institut e.V. – Freiburg/Darmstadt/Berlin – Germany

## Overview

- Why do we need more ambitious policies on RES-H support?
- Key requirements for and categorisation of RES-H support instruments
- What differs the heating from the electricity sector?
- Introduction to the Bonus Model:  
Principle architecture + Key design features
- The UK Renewable Heat Incentive
- Conclusions

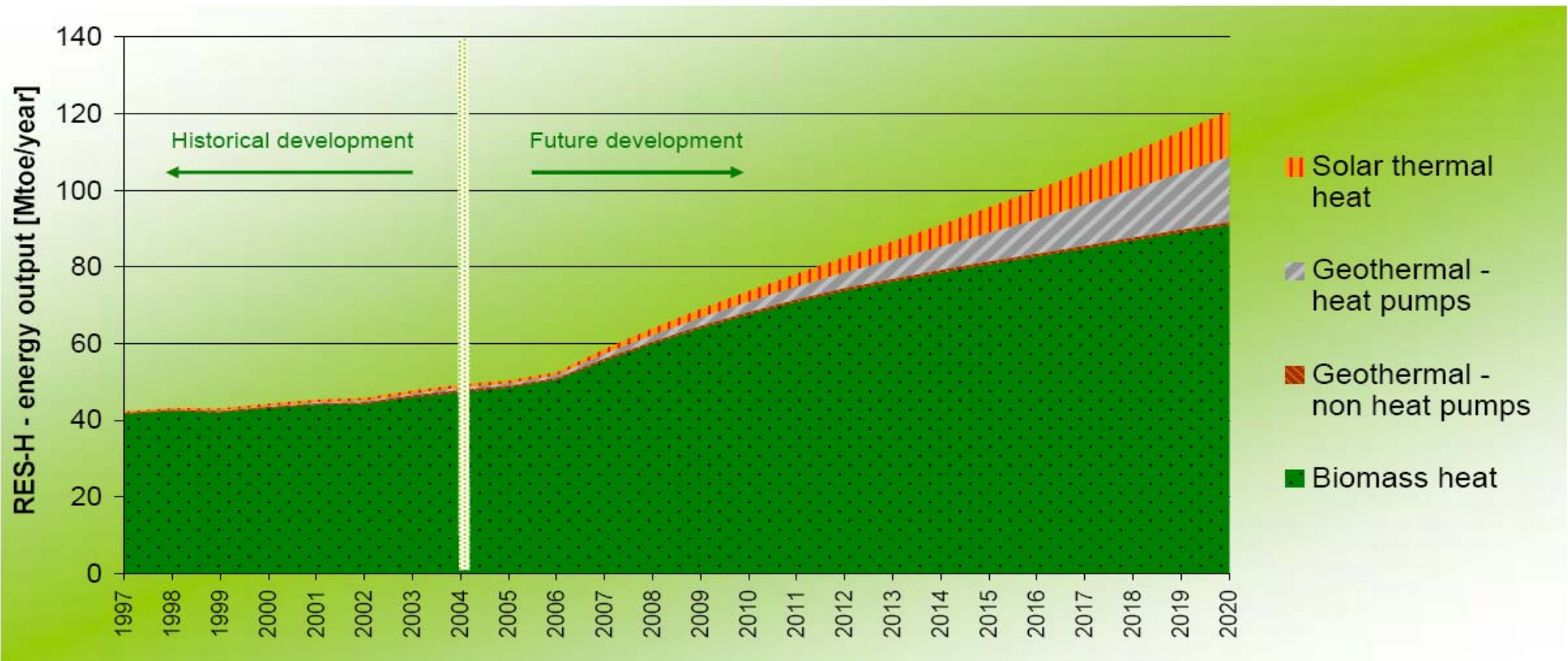
# Why do we need more ambitious policies on RES-H support?

The contribution of renewable energy (electricity, transport and heat) 1990-2004 (mtoe)



# Why do we need more ambitious policies on RES-H support?

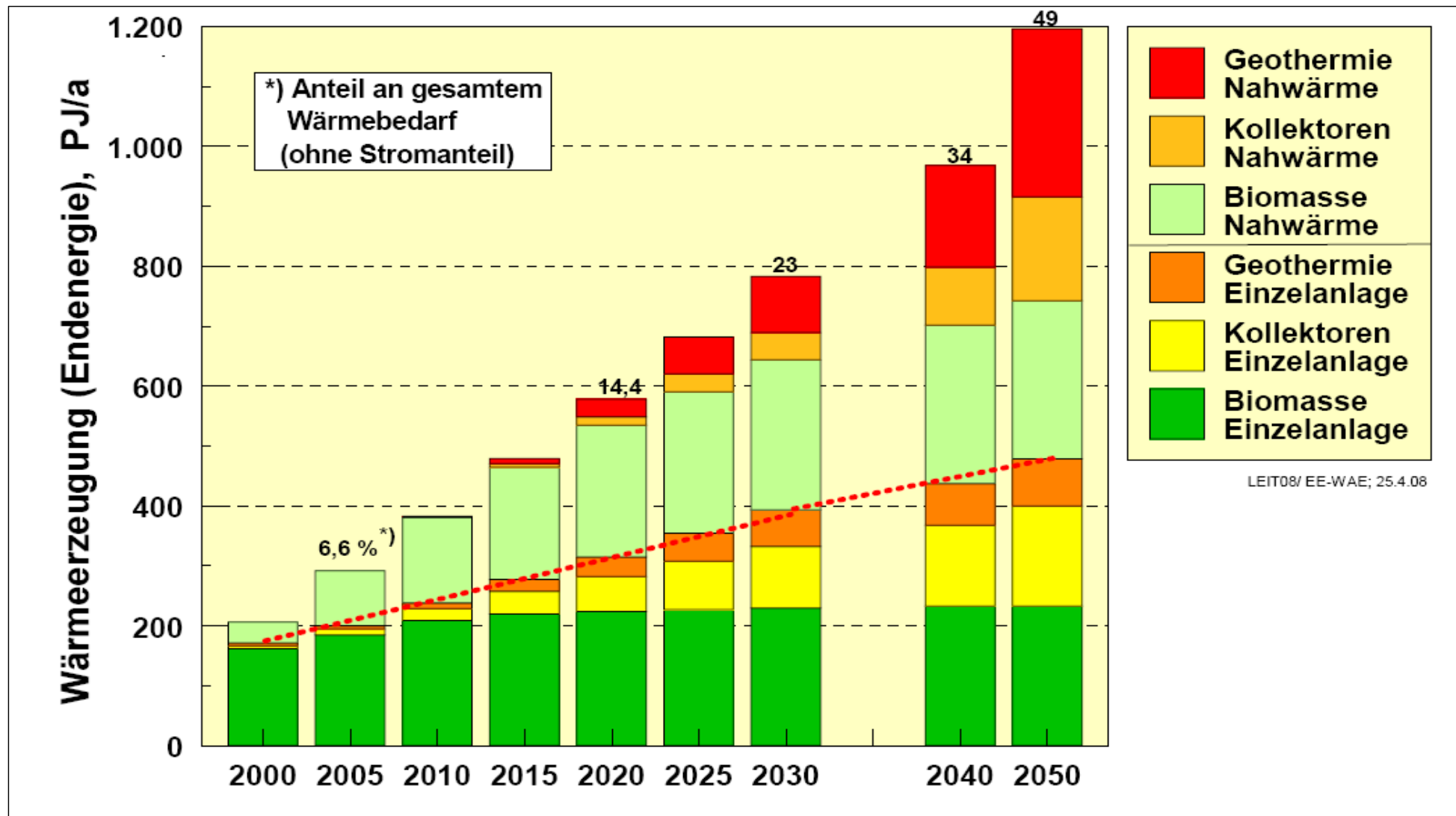
RES-H/C projections by 2020



## Key requirements for RES-H support instruments

- Achieving of RES-H targets
- Setting incentives for
  - supporting technology diversification
  - structural changes in the heating market (e.g. district heating)
  - RES-H penetration in the building stock
- Securing stable and reliable support conditions
  - in order to avoid stop-an-go development support should preferably be independent from public budgets or at least politically “stabilised”
- Cost efficiency
  - targets should be reached at lowest cost possible
  - transaction costs and risk of windfall profits should be minimised

# Long-term Goal for RES-H market development in DE



# Categorisation of RES-H support instruments

Type of instrument	Examples
Fiscal instruments (financial flows go through a public sector agency)	Subsidies (e.g. Government grants) Soft loans Tax breaks
Use obligations (obligation imposed on specific parties to utilise RES-H to a defined minimum extent)	Installation obligations (e.g. for new and/or existing buildings)
Purchase, sale, and remuneration obligations	Price or quota regulations such as <ul style="list-style-type: none"> <li>• Quota systems (e.g. quota on fuel/heat suppliers or manufacturers)</li> <li>• Bonus system</li> </ul>

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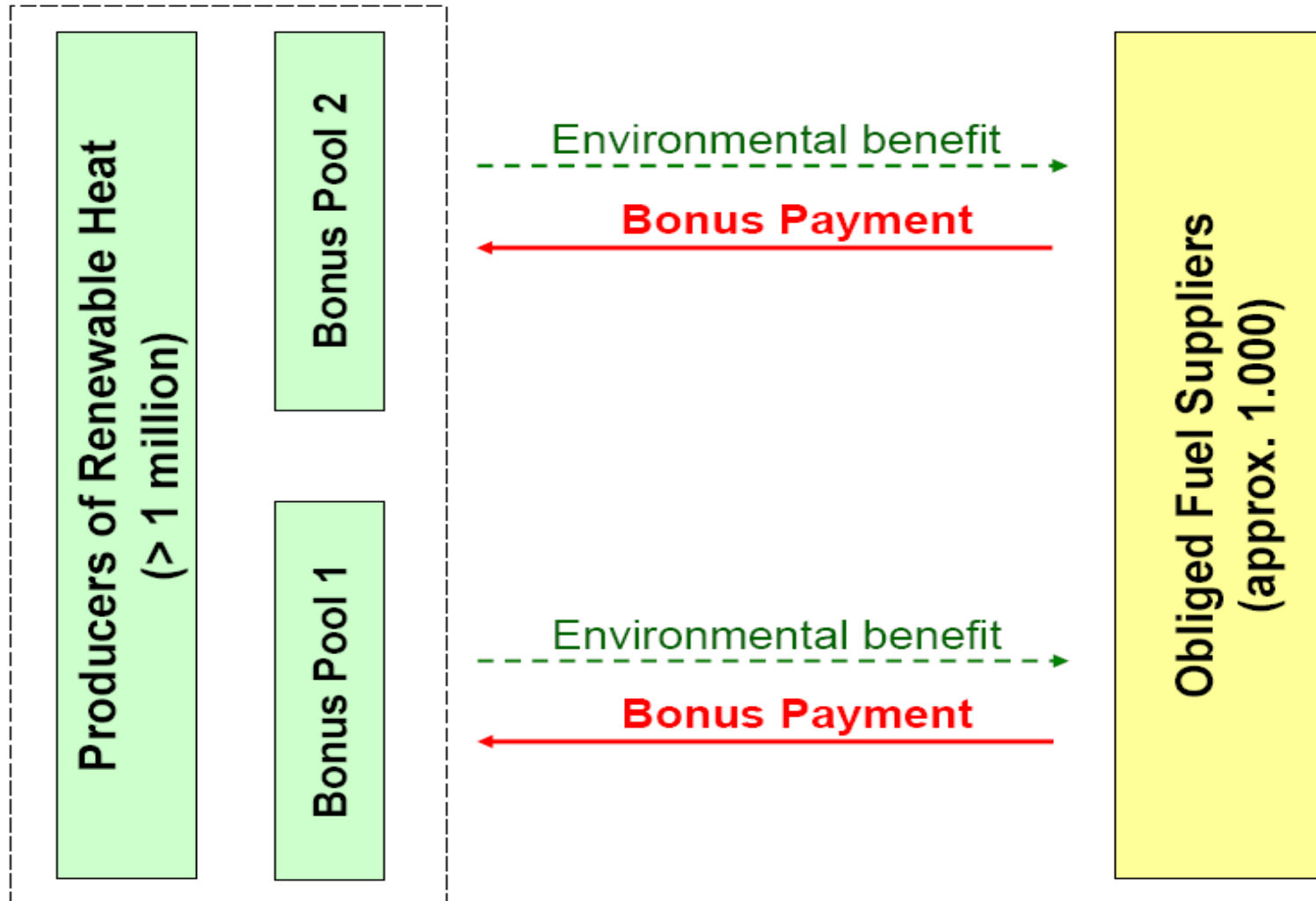
## What differs the heating from the electricity sector?

- Usually there isn't any homogeneous and country-wide transmission grid for heat
- In many Member States the penetration of grid based heat supply is still quite low
- Heat production is highly decentralised, in many Member States the domestic heat demand is mainly generated on-site
- Heating markets are rather heterogeneous; they cover several energy carriers (e.g. gas, oil, coal, renewables) and have a rather diversified actor structure
- Translation of the success story "feed-in" to the RES-H sector will end up with a bonus type of system (bonus model)

## Overall Design Features of a Bonus Model

- The bonus model concept involves major elements of a classic feed-in scheme (well known from the RES-E sector)
- RES-H operators are entitled to receive a legally fixed bonus payment per kWh of heat produced and used
- Bonus level and payment period is set by the government and established by law
- Bonus level can easily be adapted and periodically adjusted to the specific needs of the different RES-H technologies (e.g. special incentives for the implementation of grid based heating systems or installation of RES-H devices in the building stock)
- Key design element: Organisation of the relationship between the beneficiaries and the obliged parties that need to pay the boni (e.g. Which party to oblige?)

## Principle Architecture of a Bonus Model



## How to best organise the support?

- Millions of potential beneficiaries would involve millions of financial transactions
  - Introduction of pooling organisations which
    - act on behalf of the beneficiaries
    - aggregate the interests and bonus claims of the beneficiaries
- Small beneficiaries (e.g. households) should underlie similar routines as under a typical grant scheme
  - bonus payments should be aggregated over several years (e.g. two payments in total)
  - determination of eligible RES-H volume should be based on standard plant parameters and simple calculation models
- Large RES-H systems should underlie more stringent monitoring requirements and receive the bonus annually

## Who should be obliged to pay the boni?

- Obligated parties (who pay the bonus) should be selected in accordance with the "polluter pays" principle and practicability criteria (minimise transaction costs!)
- Example DE: Obligation could be assigned to those companies which
  - produce, import or supply fossil fuels for heating purposes, and
  - fall under the Energy Tax Act\*
- Each obliged company would be required to pay the bonus in accordance with its market share

\* Advantage: Most data required for determining the specific bonus volumes each obliged company has to pay is already gathered under the scope of the energy tax system

## The UK approach: The Renewable Heat Incentive (RHI)

- UK government is entitled to set up a bonus type of system
- Design features:
  - the incentive will apply to RES-H generation at all scales (from the household scale to large industrial facilities) potentially also including producers of renewable biogas and biomethane
  - incentive will be technology specific and banded by size
  - At smaller scales (e.g. households) it will be considered to provide the support payments as a lump sum up front
  - The incentive will be funded by a levy on suppliers of fossil fuels for heating purposes
- Detailed design will be developed in 2009/2010, RHI is supposed to come into force in April 2011

## Pros and Cons of the Bonus Model concept

- + Fixed long-term boni ensure a high degree of investment security
- + Bonus model can be designed as to provide incentives for structural goals  
(e.g. technology diversification, expansion of district heating systems)
- + High economical efficiency  
(incentives to locate RES-H devices where it is most profitable)
- Communication challenge:  
The concept is rather new and seems to be rather complex, up to now there has been limited discussion and experience on such a new model

## Conclusions

- The new EU RES Directive will lead to an intensification of the discussion about ambitious support frameworks for RES-H
- The Bonus Model seems to be a rather good support concept to boost the RES-H market
- It ensures a high degree of investment security and has the potential to provide good incentives for
  - the development of new technologies,
  - structural changes in the heating market (e.g. district heating schemes)
  - increasing the RES-H penetration in the building stock
- However, the concept is rather new. The challenge lies in the communication of this new approach

# Thank you for your attention

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