

***European Technology Platform for  
Renewable Heating and Cooling  
RHC-Platform***

November 2009

[www.rhc-platform.org](http://www.rhc-platform.org)



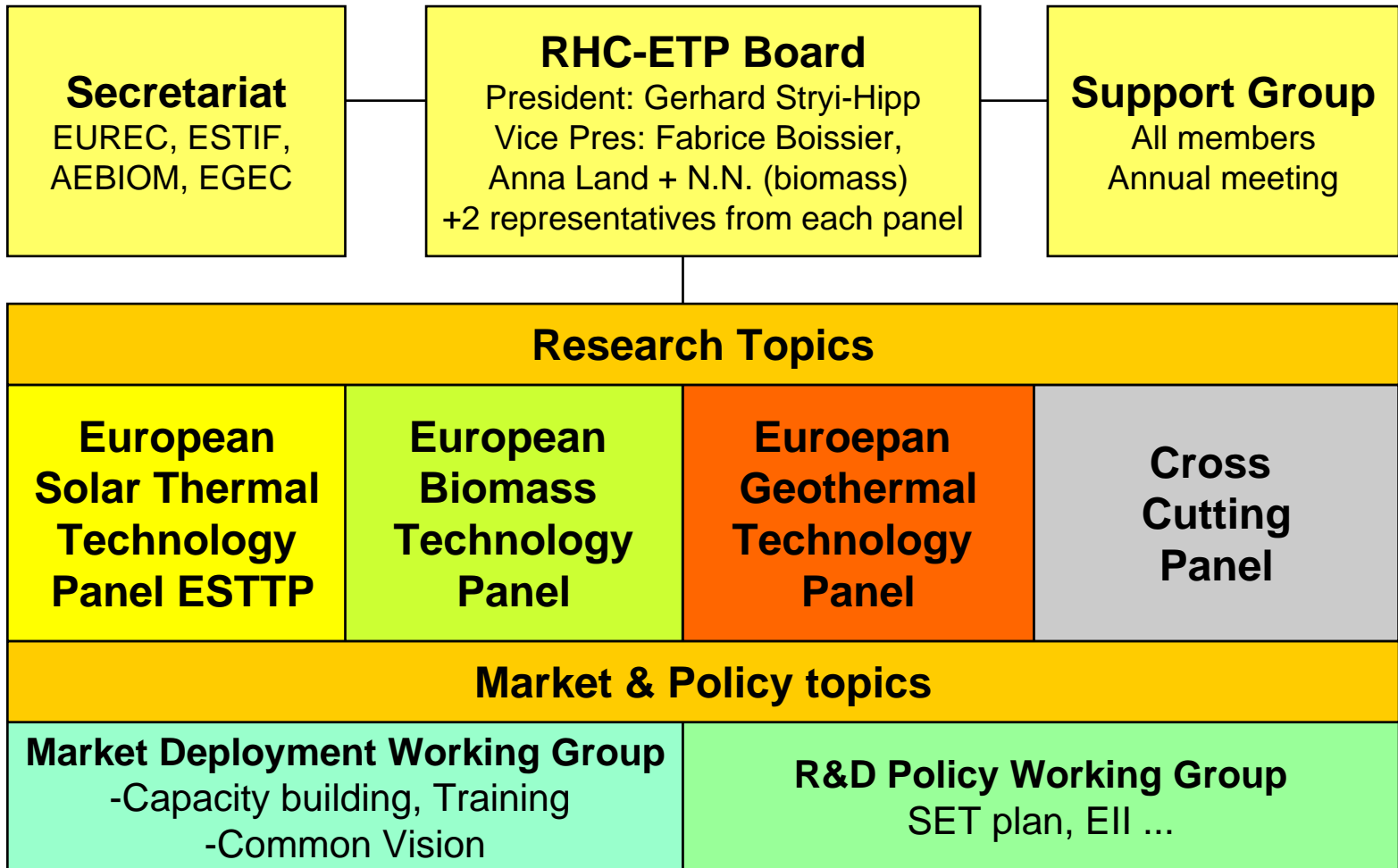
# History RHC-Platform

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- 2005: European Solar Thermal Technology Platform ESTTP was founded by Industry and R&D-Sector, development of the first vision paper and establishment of the ESTTP-structure
- 2006: ESTTP launch event with Andris Piebalgs and Mechtild Rothe  
12 groups are working on the Strategic Research Agenda SRA
- 2007: Start of the ESTTP-Secretariat, run by ESTIF, EUREC and PSE,  
funded by the EU Commission within an FP6-project
- 2008: Selection of a new ESTTP-steering committee  
Publishing the Solar Thermal SRA (Dec 2008)
- Oct 2008: ESTTP agreed to become the Renewable Heating and  
Cooling Technology Platform RHC-Platform  
The EU-Commission officially endorsed the RHC-Platform
- 2009: The Biomass and Geothermal Associations agreed to build up the  
RHC-Platform together  
The Solar Thermal, Biomass and Geothermal and Cross Cutting  
Panel were founded  
Establishment of the RHC-Platform board

Launch event European  
Solar Thermal Technology  
Platform ESTTP  
30 May 2006, Brussels  
With Mechtild Rothe  
and EU-Commissioner  
Andris Piebalgs

# RHC-Platform Structure



**Develop a common research strategy (SRA)  
for the Renewable Heating and Cooling sector**

**Give policy inputs (e.g. FP7, FP8, upcoming  
Communication on Financing of Low Carbon  
technologies, recast of Building Directive...)**

The RHC-ETP aims to:

- Improving/advancing RHC technologies and devices to make them a valid alternative to fossil fuel-based systems
- Developing enabling technologies (e.g. DHC networks, integration in buildings, storage...)
- Proposing research and demonstration programmes

# 3 phases of ETP activities

**Vision**

**SRA\***

**Implementation**

## Implementation activities

- Dissemination of Vision and SRA, PR-Work
- Harmonization of SRAs with European and National R&D Programs
- Lobbying for higher R&D budgets for RHC (EU and National level)
- Lobbying for stronger focus of FP7 and FP8 calls on RHC
- Stimulation of building up R&D capacities and structures
- Supporting R&D activities (initiate projects, find project partners,...)
- Strengthening the cooperation of R&D institutes and the RHC industry
- Cooperation with other industries/platforms

\*Strategic Research Agenda

# Example: Solar Thermal Vision 2030

## New buildings

100% solar heated buildings  
will be the building standard

## Existing building stock

Solar refurbished buildings,  
> 50% solar heated, will be the most cost  
effective way to refurbish the building stock

## Industrial and agricultural applications

solar thermal systems will cover process heating  
and cooling demands

## District heating and cooling networks

will be widely solar assisted

**Overall goal: 50% of the low temperature need up  
to 250° C will be provided by solar thermal**

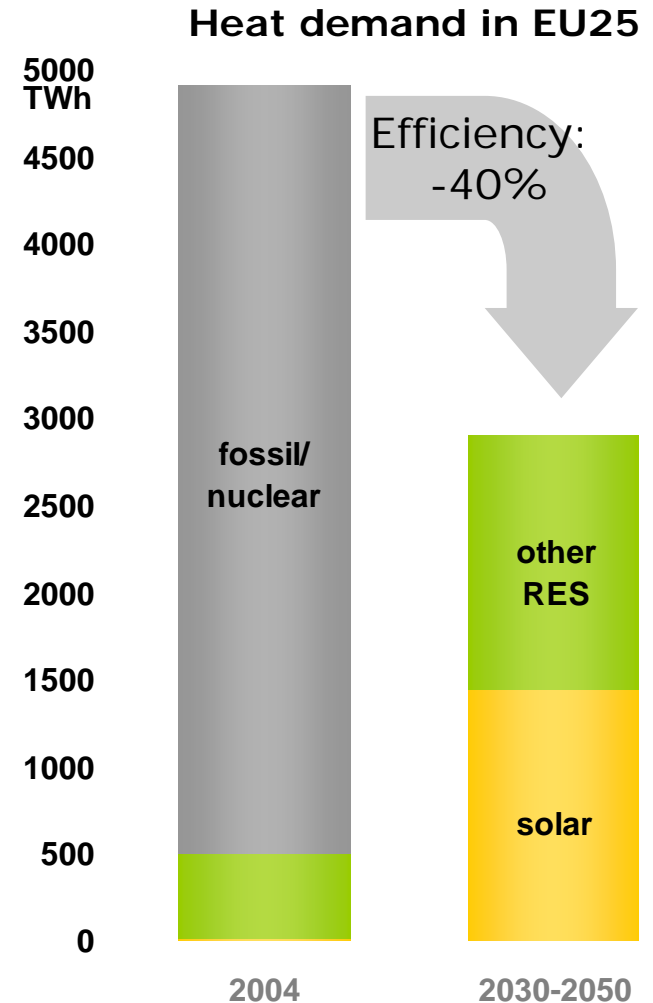




**The long term goal:**

**50% of the heat demand covered by solar thermal energy**

- **Increase the total installed ST power from 13 to 2400 GWth**
  - ⇒ **Factor 185 in installed ST power and energy production**
  - ⇒ **Cost reduction**
  - ⇒ **Building up capacities**
  - ⇒ **Innovations**







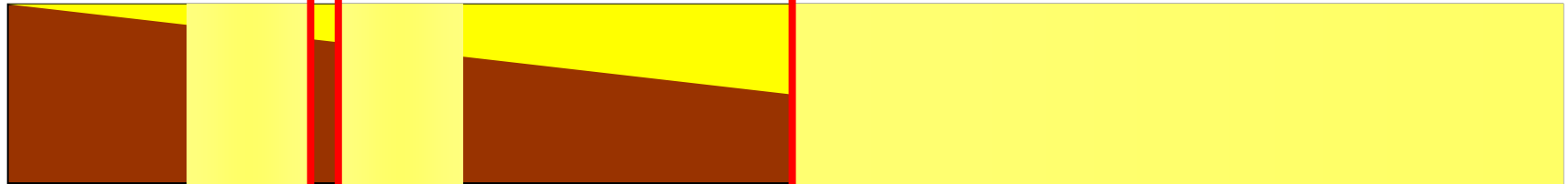
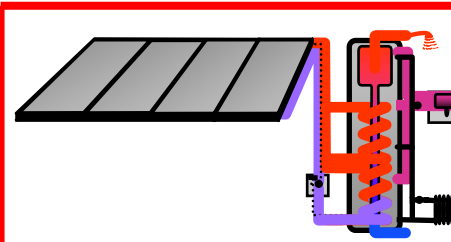
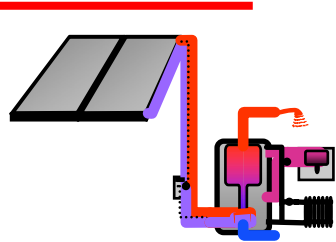
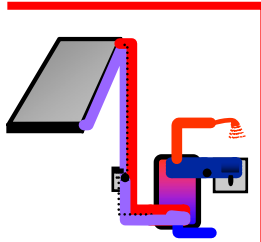
## Example: From DHW to 100% solar heated buildings

Solar Domestic  
Hot Water Heating  
10%-20%

SDHWH + Space  
Heating Support  
20%-30%

„Solar house 50+“ Mainly heated by solar  
SDHWH + Space Heating (support)

50% - - - - - 100%

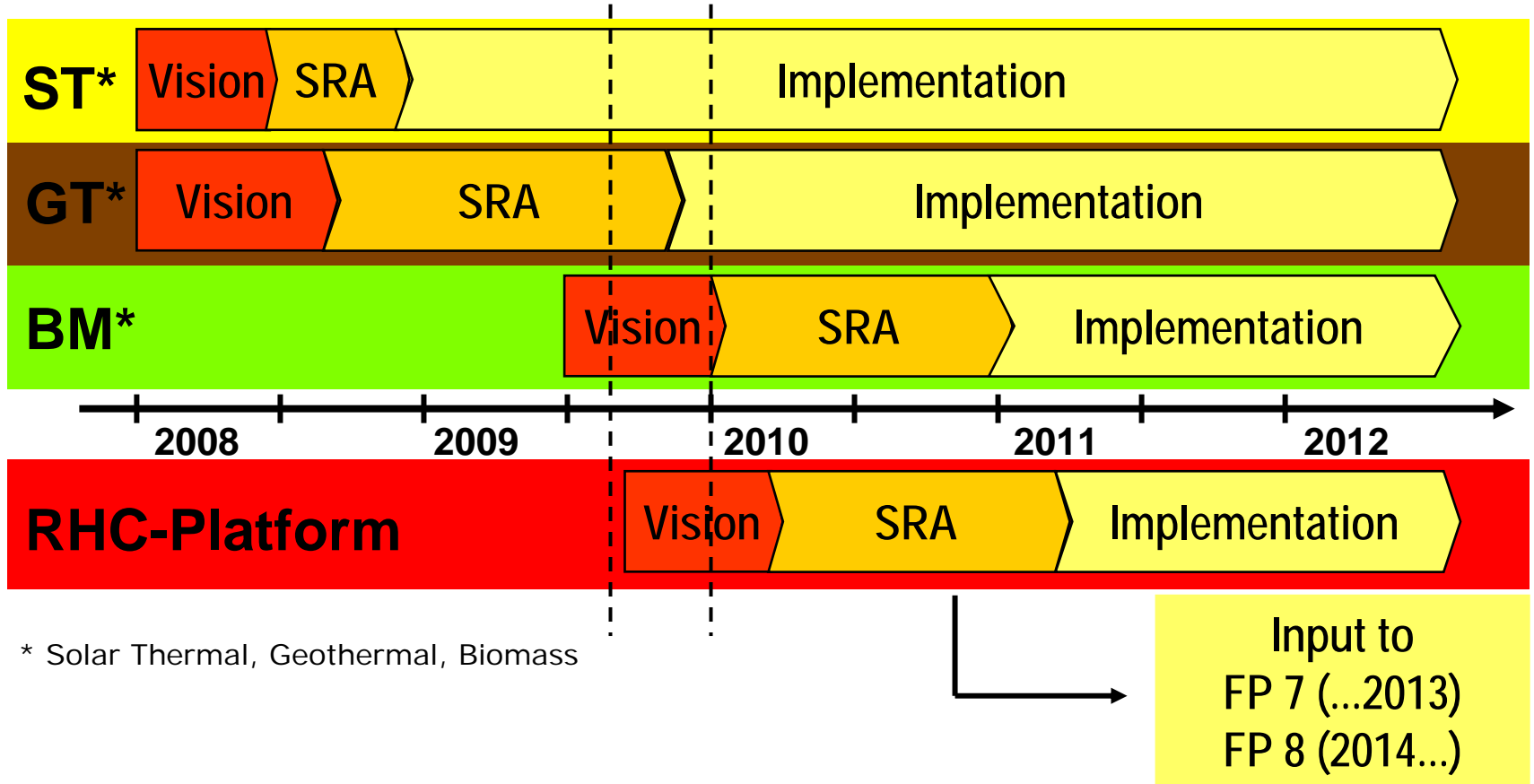


0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100%

Share of solar thermal energy of the heat demand of a building



# Developing a joint SRA



RHC-Platform in addition tries to introduce renewable heating & cooling into the SET-plan initiative

# Possible Cooperation with E2B

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- Development of the 50% solar heated building (long term vision: 100% solar heated building)
- Integration of renewable heating (biomass, geothermal, heat pumps, solar thermal) into efficient buildings
- Integration of solar thermal collectors in the roof and the facade
- Solar renovation concepts
- District heating concepts with renewable energies and low energy buildings
- Renewable energies in office and in high rise buildings
- Integration of renewable heating and cooling components in building elements like storages in walls, cooling ceiling,...
- ...