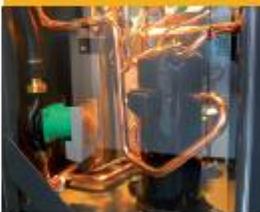




Strengthening EU actions on Renewables for heating and cooling: Why and What?

**5th Annual Event of the RHC-Platform
22 May 2014**

RES H&C technologies available to meet the different needs

	Biomass	Geothermal	Solar Thermal	Heat Pump
Industry	<p>High temperature 251°C to 400°C</p>   	<p>Medium temperature 96°C to 250°C</p>   	<p>Low temperature 0°C to 95°C</p>    	
Residential				
Tertiary				

Different RES H&C can provide heat at low and medium temperature levels. Biomass can provide heat above 250°, while further R&D can enable solar thermal collectors and deep geothermal technology to cover high temperature heat demand.



Enabling Renewable H&C development: WHY?

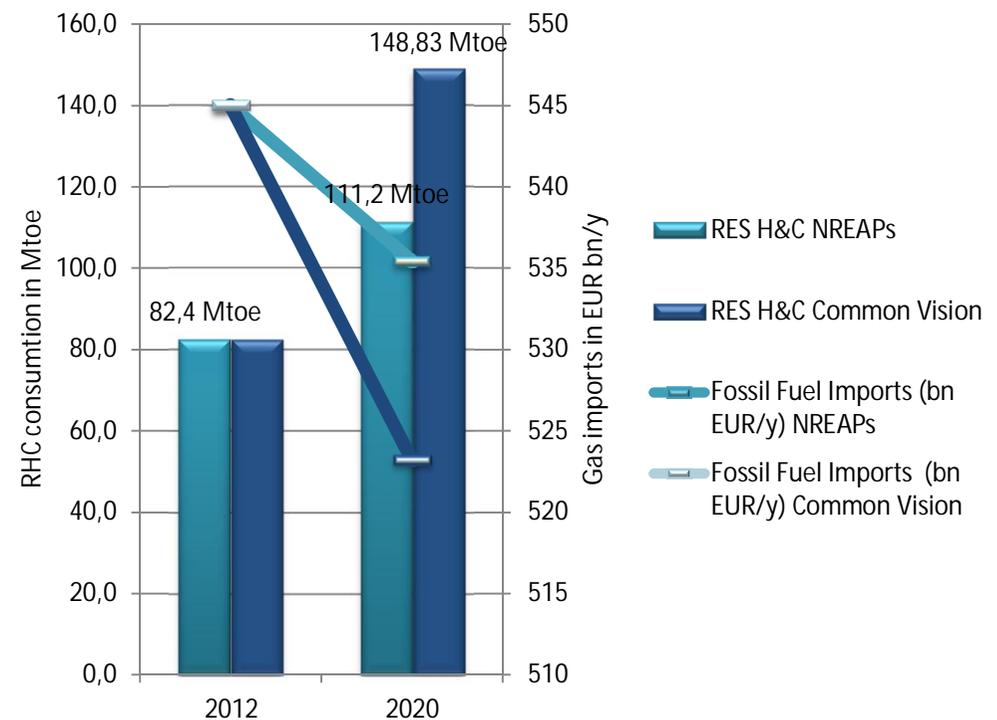
- Reduce energy dependency
- Provide affordable and stable solutions to the consumers and industry
- Create local jobs and foster European competitiveness
- Reduce pollution and carbon emissions
- Meet the 2020 Renewable Energy target

Enabling RHC development: Why?

Reducing EU's dependency on fossil fuels

- **EU's fossil fuels imports:** dramatic GDP-leakage - EU spent €545 bn (4.2% of GDP) on importing fossil fuels in 2012 alone
- **Natural gas dependency rate:** from 47.1% in 2001 to 65.8% in 2012
- **Use of natural gas in the EU:** ~ 40% buildings; ~ 30% in industrial processes and ~ 25% in power plants
- **A solution:** Through geothermal energy, solar thermal energy, bioenergy and other RES, the EU could save €21.8 bn /y in 2020 in energy imports compared to 2012

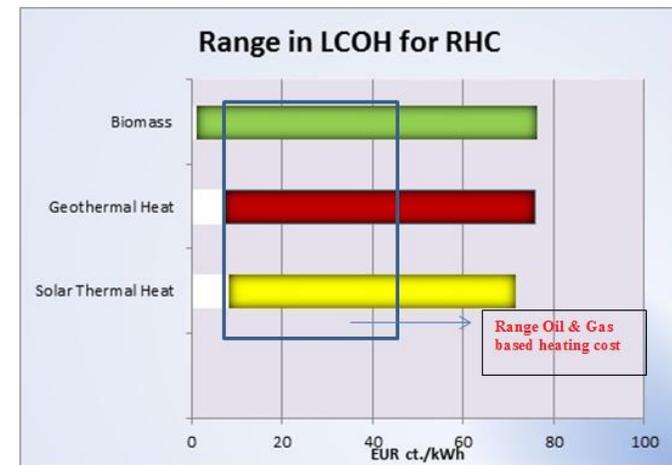
Avoided fossil fuel imports caused by RHC



Enabling RHC development: Why?

Provide affordable and stable solutions to individual consumers and industry

- Price of electricity and fossil fuels has been rising over the last years and will increase dramatically in the next decades (energy poverty and competitiveness obstacle)
- Between 2010 and 2020, oil and gas prices for heating will increase by 38% and 47% respectively
- Average electricity prices are projected to increase by 31% between 2010 and 2030
- **RHC technologies are the solution against volatile and costly alternatives through providing stable and affordable options to consumers and will be more and more competitive in the future**



Enabling RHC development: Why?

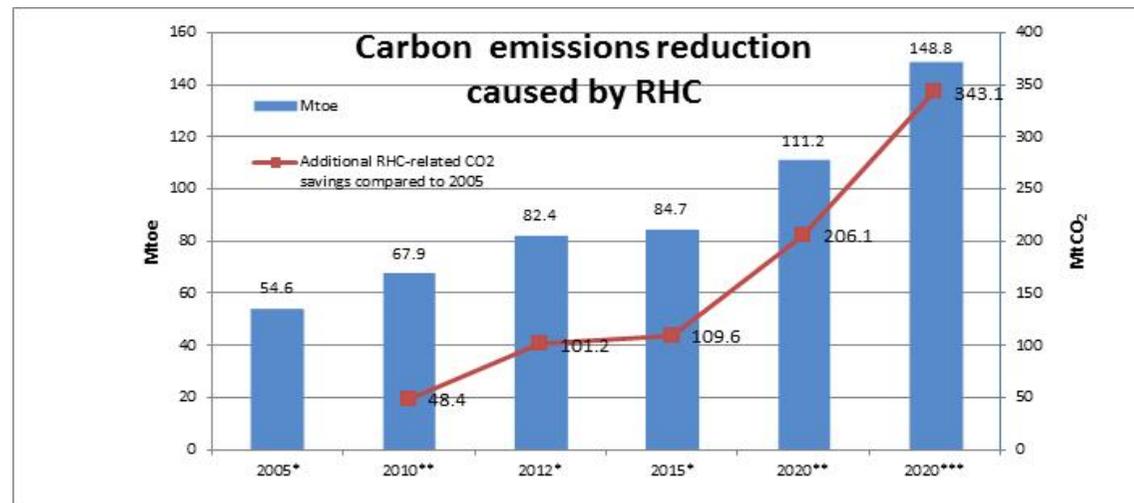
Create local jobs and fostering European competitiveness

- 428 thousand EU jobs today in the biomass, geothermal solar thermal sectors (International Renewable Energy Agency)
- Expected to increase substantially in the coming years
- H&C sector is mostly decentralised: thermal solutions need to be available locally (on site or nearby) → relevant part of the investment is related to the lower end of the value chain, in activities such as commercialisation, installation and maintenance
- Europe is leader in the manufacturing and design of RHC technologies which quality is a strength at global level

Enabling RHC development: Why?

Improve urban conditions and reduce carbon emissions

- European Commission's Energy Roadmap 2050: **RHC is vital to decarbonisation**
 - improving the urban environment conditions
 - can contribute to reduce the annual GHG emissions by 343 MtCO₂ eq. in 2020 compared to 2005 levels

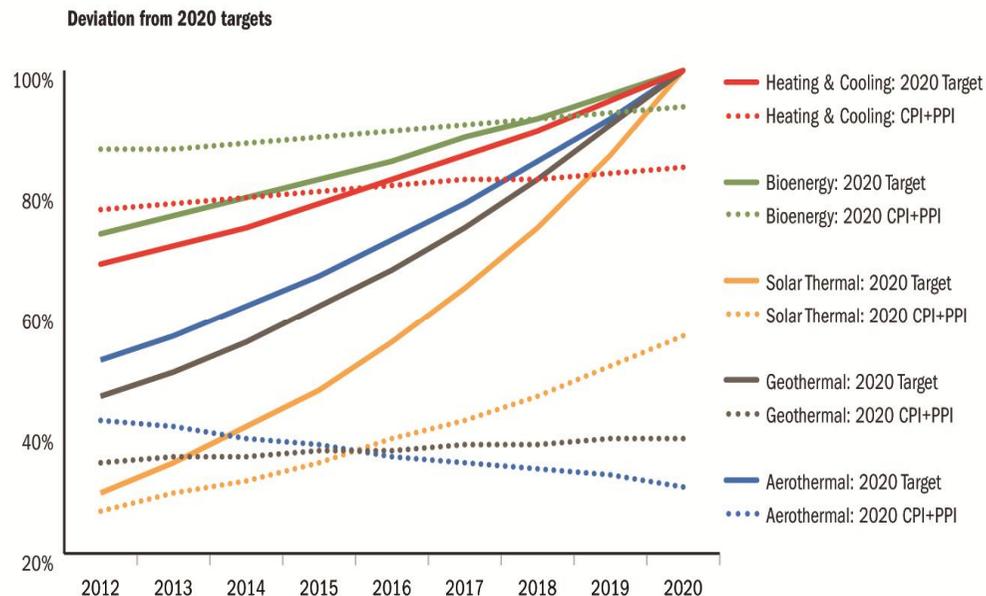


*EUROSTAT, **NREAPs, *** RHC Common Vision

Enabling RHC development: Why?

Meet the 2020 Renewable Energy target

Latest European Commission “Renewable energy progress report” (March 2013): *“The heating and cooling sector ...has experienced slow growth since 2005. Moreover the analysis undertaken for the Commission suggests that the share of renewable energy in the heating and cooling sector may actually decline in the coming years”*, while the gap in 2020 regarding the targets in the NREAPs may range from 15% to 19%





Enabling RHC development: WHAT?

- Level playing field for Renewables and fossil fuels
- More ambitious and clear policies for the 2030 framework
- Mandatory minimum requirements of RES in buildings
- Strategy for the existing building stock
- Adequate and dedicated financing

Enabling RHC development: WHAT?

Level playing field for Renewables and fossil fuels

- Energy price market signals remain distorted in favour of fossil source: regulated price ; low CO2 price
- 90% of the energy in the heat sector is made of installations below 20 MW (outside the EU ETS)
- External costs (emissions, pollution) barely taken into account (no CO2 tax in most Member States)

 **End-users price of conventional sources of energy is always lower than the real costs to society. Renewable energy sources need a level-playing field**

Enabling RHC development: WHAT?

More ambitious and clear policies for the 2030 framework

Commission's 2030 proposal for Climate and Energy policy:
single GHG emissions target of 40%

- This corresponds to an increase of the RHC share from 21% in 2020 to 25% in 2030 → Business as usual scenario
- This is not in coherence with art 194 of the Treaty of the EU pointing out that Union policy on energy shall aim to promote energy efficiency and energy savings and the development of new renewable forms of energy
- **A more ambitious and binding RES target is needed**

Enabling RHC development: WHAT?

Mandatory minimum requirements for RES in buildings

- RES Directive – « *building obligation* » non binding provision (art 13(4)-(6): in place in some countries and recognised to be an effective support measure to promote the use of renewables for heating and cooling
- In order to make this measure even more effective: **need to assess the effectiveness of this measure and make it binding**

Enabling RHC development: WHAT?

Strategy for the existing building stock

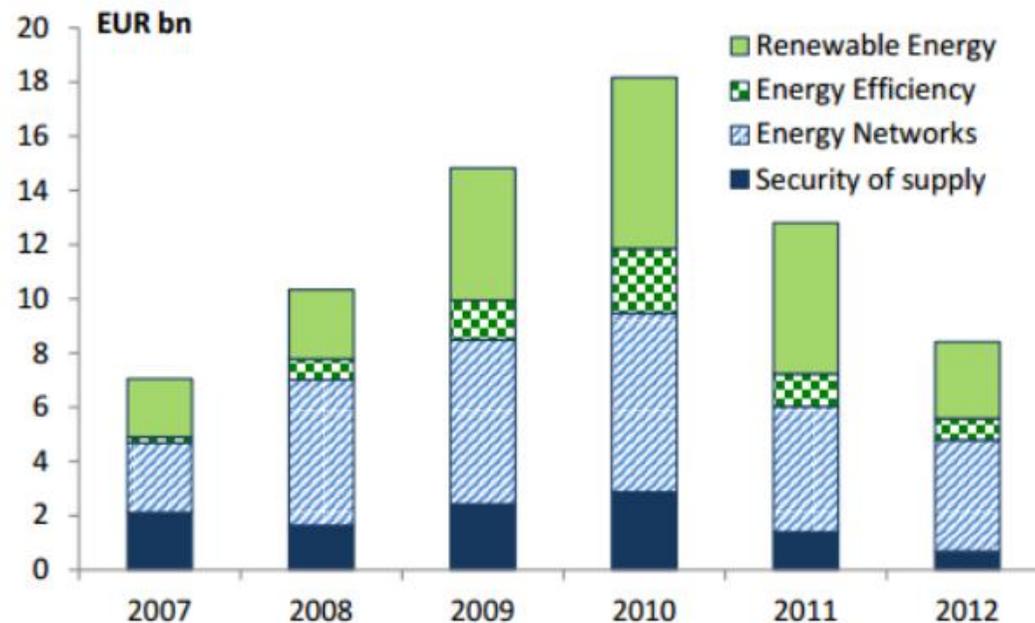
- Most of today's building stock will remain in place for the next 40-50 years
- EPB Directive recast analysis: for the period 2010-2020, under a business as usual approach, the average energy-related renovation rate is 1,7% → very low rate that was not addressed by a specific measure (eg: mandatory requirement for building renovation at large) in the EPBD ⚠ Lost opportunity
- **The current revision of the Energy Efficiency (EE) Directive is a new opportunity to set up an EU strategy to address the existing building stock**

Enabling RHC development: WHAT?

Financing

- **Adequate and dedicated ways to activate the current and future available funds**, including EU Structural and Investment Funds and EIB loans.

EIB lending to the Energy Sector, 2007-2012





THANK YOU FOR YOUR ATTENTION

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