Newsletter

June 2014





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Editorial:

by the RHC-Platform secretariat

Dear Members,

The secretariat of the European Renewable Technology Platform on Heating and Cooling is run by four European associations: EUREC (the association of European Renewable Energy Research Centres); EGEC (European Geothermal Energy Council); ESTIF (European Solar Thermal Industry Federation); AEBIOM (European Biomass Association).

The main challenge of the RHC-Platform has been to bring together stakeholders from biomass, geothermal and solar thermal sectors, including related industries (district heating and cooling, heat pumps, thermal storage...) to define a common strategy for increasing the use of renewable energy sources for heating and cooling. Starting with 250 members at the beginning of 2010, the number of stakeholders has increased to its current 800.

Officially recognised by the European Commission, the RHC-Platform has been instrumental in *raising the profile* of the renewable heating and cooling sector in Europe and to attract more funds to research, development and deployment in this area.









RHC-Platform Newsletter - June 2014



In the past years, the Platform has reached an important number of achievements:

We managed to actively participate in the definition of the priority areas for EU policy and research funding for renewable heating and cooling technologies.

Five annual events (Bilbao, Budapest, Copenhagen, Dublin, Brussels) have been organised since 2010, with the support of the Presidencies of the European Union, and more workshops have taken place to define sectoral research priorities, as well as to foster synergies with trans-national funding initiatives (e.g. the EUROGIA cluster), and with national actors.

Three common strategic documents have been produced:

- <u>Common Vision</u> for the Renewable Heating and Cooling sector in Europe by 2020, 2030 and 2050.
- <u>Strategic Research and Innovation</u>
 <u>Agenda</u>
- Common Implementation Roadmap, which will soon be available for downloading.

Further to the common documents, each of the four panels published Strategic Research Priorities and a Technology Roadmap.

The next challenges facing the RHC-Platform are:

- To ensure the follow-up of its Common Implementation Roadmap as a means to provide inputs to the future HORIZON2020 Work Programmes.
- To prepare and disseminate regular up-to-date information on the RHC sector in terms of its regulatory and market context.
- To ensure visibility of the RHC-sector via the organization of high level annual events.

The secretariat of the RHC-Platform is ready to take over the next challenges to ensure growing visibility for the RHCsector and its success in an increasingly competitive world.

We wish you happy holidays and look forward to keep working with you.



The Common Implementation Roadmap is published!

From vision to implementation

We are very pleased to inform you that the RHC-Platform has just published the Common Implementation Roadmap for Renewable Heating and Cooling Technologies.

The Common Implementation Roadmap is the latest in a series of publications from the European Technology Platform on Renewable Heating and Cooling (RHC-Platform), which, over the last few years, have taken RHC technologies from a vision to an implementation plan . The Common Implementation Roadmap takes over from the work done by the four individual Technology Roadmaps and explores the interconnectivity between the different RHC technologies.

Research is one of the cornerstones for the further development of RHC technologies and their widespread use. New solutions, the adaptation of existing ones for new applications and markets or just critical measures to



markets, or just critical measures to demonstrate, standardise, combine or popularize technologies which already exist, will contribute to an accelerated deployment of RHC in the EU in the context of the 2020 milestones. However, there is an inherent complexity in developing Renewable Heating and Cooling Technology Roadmaps due to the variety of ways heat can be produced, transported, stored, and delivered, and the many different profiles of end users, as well as the difficulty to draw exact boundaries between them.

This need for clarification and identification has been one of the paramount goals of the RHC-Platform during the past years of activity and is summarised in Chapter 2 and Chapter 3. Three main aspects are considered: the identification of technologies which ought to be developed as a priority based on the work of the four panels, the relationship between the different Research & Innovation (R&I) priorities with these cross-cutting technologies and, finally, how RHC research is addressing the needs of the different users and demand profiles that exist in the EU.

As noted in the European Commission's Energy Roadmap 2050, there is no doubt that RHC is vital to the decarbonisation of our energy sector. Decarbonisation should not be regarded as a burden, but rather as an opportunity for Europe's sustainable growth and industrial renaissance alike.

The significant role that RHC can play towards achieving this goal is based on three main pillars which are comprehensively analysed in Chapter 4. These pillars are the RHC contribution to the security of our energy supply (reducing our fossil fuel imports in doing so), to a more cost competitive and less price-volatile energy market, and, last but not least, to a reduction in the emission of pollutants by decreasing our consumption of fossil fuels, resulting in a better urban environment.

Finally, Chapter 5 addresses how private investment - critical in decarbonising the Heating and Cooling sector - could be stimulated. A key message here is that, not only it is necessary to strengthen R&I investments and increase the budget for R&I projects, but also to strengthen the market deployment policy for RHC technology.

The Roadmap is available at: <u>http://www.rhc-platform.org/publications</u>



News from the Solar Thermal Technology Panel

The Solar Thermal Technology Panel (ESTTP) concentrated its efforts on finalizing the "Solar Heating and Cooling Technology Roadmap".

This Roadmap was presented by Mr Werner Weiss, the ESTTP Co-chair. at the RHC-Platform annual event held in Brussels on 22 May 2014. It defines the development of solar compact (SCOHYS), hybrid systems the technological improvements in Solar-Active-Houses (SAH) and the development of systems supplying solar heat for industrial processes (SHIP), as the technological solutions to provide sustainable and affordable clean. thermal comfort.

The ESTTP also focused on completing the solar thermal contribution to the "European Strategic Energy Technology Plan (SET-Plan) integrated Roadmap". The main goal of this Roadmap is to combine the different roadmaps for the technologies included in the SET-Plan into one integrated roadmap that would facilitate the definition of priorities related to Research and Innovation over the coming years.

During the ESTTP meeting, held in Brussels on 21 May 2014, several issues were raised regarding the future of the RHC Platform and of the solar thermal sector. The discussion focused on how to attract new players to the platform, namely from the solar thermal industry. The discussion addressed some specificities of this technology in comparison with other renewable energy sectors (PV, wind, biomass, etc.). One of the main differences is the size of the companies within the solar thermal industry. As it consists mainly of Small and Medium-sized Entreprises, the efforts related to the allocation of human resources to the activities of the platform is more keenly felt than by large companies. Hence, the Panel stressed the need for a broader cooperation with the industry sector on technology issues, increasing the

communication between industry representatives at EU and national level.

Another important issue raised during the meeting was that, even if there is more political awareness of the solar thermal sector thanks to the RHC Platform, there is still the perception in the market and among policy makers that other renewable energy sources are more competitive; this is because they are sold as financial products and not as technology. Therefore, these sectors are more attractive to public and private funding. Members of the Panel agreed that only by working on technology development and on support schemes will it be possible for the solar thermal sector to be more competitive and to succeed on the market.



News from the Geothermal Technology Panel

Geothermal Roadmap Published

The implementation roadmap of the geothermal panel, which details a plan for research and development in the geothermal sector until 2020, has been published

The technological challenges for an accelerated deployment of geothermal heating & cooling across Europe are to develop innovative solutions especially for refurbishing existing buildings, but also for zero and plus energy buildings, as the system is easier to install and more efficient at low temperature for both heating & cooling. Secondly, to develop geothermal District Heating (DH) systems in dense urban areas at low temperature with emphasis in the deployment of Enhanced Geothermal Systems. Finally, the third goal is to contribute to the decarbonisation of the industry by providing competitive solutions for heating & cooling.

Geothermal Heating and Cooling can supply energy at high and low temperatures at different loads. By 2020 the installed geothermal capacity will be around 40GWth, or 10Mtoe. The roadmap looks at the different uses of both shallow and deep geothermal resources and the key performance indicators and cost reduction of both. The implementation of research measures for all relevant geothermal technologies is detailed from 2013-2020. The final chapter is dedicated to financing, which looks at both private and public funding needs and the interaction between the two, as well as European policy measures.

Successful second H2020 Information session

On 16 June the geothermal panel organised a webinar on the funding opportunities for geothermal under the Horizon 2020 programme. During the workshop, participants heard from the EC about calls 2014&2015 and were given feedback from the first calls, which closed earlier this year. Two presentations discussed the specific opportunities for shallow and deep geothermal, and a practical guide to completing the application was given. The session closed with an update on the work of the RHC platform and the GT panel, after which several participants presented their work and project ideas.

The next specific calls for geothermal under the H2020 programme are:

 Deep geothermal energy: Development of new technologies and concepts for geothermal energy'

Deadline: (first stage) 03/09/2014, (second stage) 03/03/2015

and

 'Shallow geothermal energy: Improved vertical borehole drilling technologies to enhance safety and reduce costs'

Deadline: 10/09/2014

The presentations are available in the members' section of the RHC website.



News from the Biomass Technology Panel

In May, the Biomass Panel saw the Biomass Technology Roadmap published in time to be distributed at the Annual Event of the RHC-Platform.

The Roadmap outlines the actions and investments needed until 2020 to implement the Strategic Research Priorities of the Biomass Panel. The focus of the Biomass Roadmap is on ensuring the commercial availability of reliable, cost-competitive and environmentally friendly biomass heating and cooling solutions for different types of customers.

The document was well received at the annual event, and has also been featured recently in the latest edition BE-Sustainable magazine, as well as in the June issue of the VGB Power Tech Journal. Following this publication, the Biomass Panel also contributed heavily Common Implementation to the Roadmap for Renewable Heating and Cooling Technologies. The Common Roadmap describes the top priority research themes and value chains with the highest impact on Europe's societal challenges up to 2020.

The Secretariat would like to offer our sincerest thanks to all who gave us their time to contribute to this document, and in particular to our authors: Walter Haslinger, Eija Alakangas and Panagiotis Grammelis. We greatly appreciate your continued commitment to the work of the Panel.

May also saw us hold the annual meeting of the Biomass Panel. Members of the panel joined us in Brussels to discuss our recent activities and the next steps of the Platform. Additionally, Mr. Erich Naegele, of DG RTD, joined to present and take questions on the Horizon 2020 programme and the opportunities for Biomass and the Renewable Heating and Cooling Sector in general.

Finally, as we move on to the next stages of the RHC-Platform, the

Biomass Panel took the first steps in electing the new Steering Committee that will lead the Platform over the next few years. Members will be added to the Committee over the next months, but those who have already been elected are:

- Eija Alakangas (VTT IG1 leader),
- Walter Haslinger (Bioenergy 2020+ -IG2 leader),
- Alexander Weissinger (KWB IG2 leader),
- Panagiotis Grammelis (CERTH IG3 leader),
- Per Kallner (Vattenfall IG3 leader),
- Rainer Janssen (WIP Renewable Energies - IG4 leader),
- Claes Tullin (SP Technical Research Institute of Sweden),
- Janet Witt (DBFZ),
- Az-Eddine Khalfi (EIFER),
- Christian Grangé (De Smet Engineers & Contractors),
- Álvaro Ramírez-Gómez (Universidad Politécnica de Madrid),
- Øyvind Skreiberg (SINTEF Energy Research),
- Myrsini Christou (CRES),
- Margarita de Gregorio (BIOPLAT),
- Jean-Bernard Michel (University of Applied Sciences Western Switzerland).

A warm congratulations to all, and we look forward to a fruitful collaboration once again in the coming years.



News from the Crosscutting Technology Panel

The Cross-Cutting Panel, as the rest of Platform, is going through a the transition phase and it is currently revising the way it operates. Besides, the panel continues to direct its efforts towards strengthening relations with the industry players, including SMEs. If, as industry member particularly interested in Cross - Cutting technologies, you would like to play a more active role in this panel, please flag your availability sending a short email by to provaggi@eurec.be . We will then contact you and discuss in which way you would like to become more engaged in the panel.

Similarly, we are trying to involve investment bodies and institutional investors in our panel (and in our Platform too). Should you be aware of an investor who you would like to be associated to the work of the Platform, please write to us at the same abovementioned email address and we shall get back to you.

Upon request from the European Commission, we updated our contribution to the European Strategic Energy Technology Plan (SET-Plan) Integrated Roadmap with significant inputs in Part I (Energy Efficiency) where we are the main drafters but also in Part III (Cities, Communities & Market Uptake).

During the RHC event, Simon Pezzutto, EURAC Research, spoke on behalf of the Panel during the morning and Paul Voss, Managing Director of Euroheat & Power shared his thoughts in the policy debate on EU action on Renewable Heating and Cooling.

In the Common Implementation Roadmap on Renewable Heating and Cooling technologies, our panel plays a very important role. For example, in Chapter 3, the other three Panels described how they see their links to the Cross-Cutting Technologies. You are all invited to read it.

2030 Reasons to Integrate Renewable Heating and Cooling:

Innovation, Technology Development, and Market Uptake

On 22 May 2014, the RHC-Platform held its annual event, the 5th in a successful series of events dating back to the inaugural edition in 2010. The event was organised in two parts: a consultation forum in the morning and a high-level policy event in the afternoon. The morning forum was dedicated to the recently published Common Implementation Roadmap for Renewable Heating and Cooling Technologies, presenting the draft document to the relevant stakeholders. In the afternoon, a more political theme was adopted, as the role of RHC in the



transformation of the energy system was discussed with industry representatives and policy makers, with a particular focus on the implementation of the current legislation and the European Commission's proposal for a 2030 climate and energy framework.

The event was opened by Mr Gerhard Stryi-Hipp, President of the RHC-Platform, who welcomed the guests to the representative office of his home state of Baden Wurttenburg. Mr Stryi-Hipp called on the decision makers to increase the budget for R&D and provide a stronger policy for RHC market deployment, based on ambitious goals for 2030.

Mr Paul Verhoef, Head of Unit for Renewable Energy Sources at DG-RTD, then took the floor and thanked the RHC-Platform for its work over the last five years, stressing that the Platform has been very effective in integrating the different RHC sectors. Mr Verhoef confirmed that the Commission was there to help and support the sector to achieve its goal in meeting Europe's heating and cooling needs.

Consulting the sector and its stakeholders

Following the opening addresses, also including that of Mr Johannes Jung, Director of the Representation of Baden-Württemberg to the EU, the focus turned to the Common Implementation Roadmap for Renewable Heating and Cooling Technologies. Javier Urchueguía, lead author of the document and Chairman of the Geothermal Technology Panel, gave a general overview of the document. He explained that the roadmap aims to guide towards strengthening the RHC potential for industrial leadership, by substantially increasing supply, accelerating decarbonisation, avoiding imports, and developing smarter, more competitive and integrated systems.

The discussion that ensued highlighted the great potential for cooperation that exists between the RHC sector and the building sector. The possibility may be there to develop a real action plan in this respect, and efforts should be made to cooperate to fast-track the implementation of the roadmap. It was also noted that the RHC sector shares many challenges with the Smart Cities initiative, and that all sectors active in the district should look to find common ground and work together. The solutions that are found can contribute greatly to meeting energy efficiency targets.

From Technology to Policy

Niels Anger, of DG Energy's energy policy directorate, addressed the Commission's 2030 proposal, noting that the framework put forward will focus on sustainability, security of supply, investor certainty, and competitiveness. He acknowledged the need for an ambitious proposal, highlighting that ambition will bring a reduction in the external fuel bill, local health benefits, and the creation of GDP and employment. A decision can be expected from the European Council in October.

Mr Theo Christopoulos, Energy Attaché at the Permanent Representation of Greece to the European Union, then gave some feedback from the Greek Presidency of the EU. Reporting on the Energy Ministers' discussion on the 2030 framework, Mr Chistopoulos informed the attendees that the basic principles on governance have been agreed. In general, there is a desire for flexibility to be given to Member States to define for themselves a low carbon roadmap, as long as it is compatible with the common targets.

Following the update of the Greek Presidency, Ms Kristine Kozlova, of DG Energy, Renewables, Research and Innovation, and Energy Efficiency Directorate, spoke on the implementation of the Renewable Energy Directive, showing where targets have and have not been met. With an overall positive picture, Ms Kozlova stated that the favourable trends towards renewables should continue with a need now for Member States to maintain the promotion of RES and indeed RHC, highlighting their potential at local level.

AEBIOM's Policy Director, Fanny-Pomme Langue, spoke on behalf of the Renewable Heating and Cooling associations. Ms Langue stressed that there are Biomass, Geothermal, Solar Thermal and Cross-Cutting Technologies available and ready to meet Europe's heating and cooling needs. Nevertheless, there is a need for stronger EU actions to reduce energy dependency; provide affordable prices to consumers and industry; create jobs and competition; reduce pollution and GHG emissions; and to meet the Renewable Energy Targets. With regard to the deployment of the RHC-Platform technologies, Ms Langue added that there is a need to assess the current lack of a pan-European binding obligation to include renewable energy systems in new buildings. Additionally, the current 1.7% rate of building renovation in Europe is very low, and there is now an opportunity with the review of the Energy Efficiency Directive to set up an EU strategy to renovate existing buildings.



The event closed with an excellent discussion moderated by Fiona Harvey, environment journalist for UK newspaper The Guardian, during which all the main points raised were debated by an impressive line-up of panellists. Burkhard Sanner, (EGEC President), Paul Voss (Managing Director, Euroheat and Power), Rainer Ortmann (Bosch Thermotechnik), Nigel Cotton (ESTIF) and Kristine Kozlova (DG Energy). There was full agreement that Renewable Heating and Cooling offers an effective and dependable solution to increase the security of our energy supply and reduce our dependency on foreign sources in a sustainable way. With Heating and Cooling being a sector in which a transition to 100% renewables is certainly achievable, it is surely time for decision makers to facilitate this by increasing the budget for R&D, and strengthening the policy for market deployment by setting ambitious 2030 goals.

The RHC-Platform at Intersolar Europe 2014

On Thursday 5 June, during this year's edition of Intersolar Europe, the world's largest exhibition for the solar industry; ESTIF organised, on its stand, a public presentation on the RHC-Platform.





Gerhard Stryi-Hipp, President of the RHC-Platform and Chairman of the European Solar Thermal Panel, first introduced the mission and work of the Renewable Heating and Cooling Platform.

He then continued with an in-depth presentation of the recently published Solar Heating and Cooling Technology Roadmap.

This document presents the key research and innovation actions, up to 2020, to develop not only the technological, but also the market potential of the solar thermal energy.

The presentation was followed by a short questions and answers session.

Call for proposals on low carbon energy related research and development projects- Next Project submission deadline: 22 September 2014



is a cluster of the EUREKA network, a decentralized intergovernmental initiative created to enhance European competitiveness by supporting businesses, research centres and universities taking part in transnational projects

This applies to all innovative energy technologies that will:

- reduce the carbon footprint of energy production and use
- develop new technologies for energy such as solar, wind, biomass, geothermal, energy efficiency, etc.

EUROGIA2020 has now, announced its latest call (CALL 03) for the submission of transnational low-carbon energy related research and development projects.

The process is one of continuous submission with four cut-off dates per year and the next cut-off date is 22 September 2014.

The projects submitted in the preliminary project outline (PO) format will be reviewed by the EUROGIA technical committee on 9 October 2014 in Brussels and necessary feedback will be provided to move to the full proposal stage. The technical committee consists of representatives from European national funding agencies, research universities and industrial organizations.

Applicable conditions and details of the submission process can be found at <u>www.eurogia.com</u>

Or by contacting the EUROGIA2020 Secretariat, <u>contact@eurogia.com</u>,

Save the dates - World Sustainable Energy Days 2015

The World Sustainable Energy Days (WSED), a large annual conference in the field of energy efficiency and renewable energy, is going to take place in Wels (Austria) from 25 to 27 February 2015.

In 2014, it attracted more than 750 participants from 59 countries. The WSED has been presenting the work and solutions brought forth by the world's leading experts for the last 20 years.

The Young Researchers' Conference (WSED next) is dedicated to presenting the work of young researchers in the fields of biomass and energy efficiency in buildings. Contributions from young researchers and professionals (born after 1979) are selected by a high-level scientific committee and invited to share their work. The organisers cover the costs of accommodation, meals, participation and local transport for up to 60 selected participants.

Moreover, the conference's two most outstanding contributions are honoured with the awards "Best Young Researcher: Energy Efficiency" and "Best Young Researcher: Biomass" and receive 1000 Euros each in prize money.

The Call for Papers is open until 10 October.

Further information can be found at www.wsednext.eu.



Publisher



European Technology Platform



RHC-ETP Platform Secretariat

c/o EUREC Renewable Energy House Rue d'Arlon 63-67 B-1040 Brussels

Belgium Tel: +32 2 546 1940

Fax : +32 2 546 1934 Email: info@rhc-platform.org

Website: www.rhc-platform.org