European Technology and Innovation Platform on Renewable Heating and Cooling - Geothermal Panel -

15th Feb 2019
Geothermal Panel Activities 2018

➢ Election of the new SC (3 Industry + 2 Academic): January 2018, first meeting & election chairman on 2nd of March 2018

Members (2018-2020) are: Stefano Bonduà (University of Bologna), Riccardo Pasquali (Terra GeoServ Ltd), Attila Kujbus (Geothermal Express Ltd.), Javier Urchueguia (Universidad Politécnica de Valencia), Luc Pockele (R.E.D. Srl).

Chairman: Javier Urchueguia (Universidad Politécnica de Valencia) - Spain

Vice-Chairman: Luc Pockele (R.E.D. Srl) - Italy
Geothermal Panel Activities 2018

➢ SET plan TWG on deep geothermal: adoption & publication of the implementation plan: January 2018 endorsed by SET Plan Steering Committee

➢ Geothermal inputs to SET-Plan actions 1 + 2, to action 5 (EE), to action 6 (industry), to action 4 (SNET)

➢ Update the implementation roadmap (RHC tender), Further define our KPIs

➢ Answer to the consultation of ETIP-DG on its SRA for deep geothermal
New activities 2019

➢ Propose new topics for H2020-WP2020 on technologies and market uptake

➢ Panel meeting on 15th of february at Geotherm Offenburg 2019

➢ Prepare inputs for Horizon Europe: WP 2021-2022
  • Updated Vision for the geothermal heat sector to 2050: To be prepared in parallel with RHC Vision. The work should be finalized in one year (by the end of 2020 at the latest).
  • Research and innovation priorities on geothermal h&c: Inputs for Horizon Europe: by summer 2019
  • Deployment and implementation strategy: End 2019-2020
Main Deliverables of RHC-ETP and Geothermal Panel (First ToR)

- **Vision**
- **Strategic Research Agenda**
- **Common Roadmap**

**RHC-ETP**
- 2009: Vision
- 2010: Strategic Research Agenda
- 2011: Common Roadmap

**Geothermal Panel**
- 2009: Vision
- 2010: Strategic Research Agenda
- 2011: Implement / Roadmap

**R&D**
- **FP7**
- **Horizon 2020**
- **New ToR**

[www.rhc-platform.org](http://www.rhc-platform.org)
Main Deliverables of RHC-ETIP and GT Panel (Second ToR)

<table>
<thead>
<tr>
<th>Year</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>2014</td>
<td>New ToR</td>
</tr>
<tr>
<td>2015</td>
<td></td>
</tr>
<tr>
<td>2016</td>
<td></td>
</tr>
<tr>
<td>2017</td>
<td></td>
</tr>
<tr>
<td>2018</td>
<td></td>
</tr>
<tr>
<td>2019</td>
<td>End ToR</td>
</tr>
</tbody>
</table>

Implementation

- Revision of implementation

SET Plan activity

- Integrated SET plan
- Declaration of Intents & targets
- Temporary Working Group Deep Geothermal
- Temporary Working Group on EE, Industry, SNET

R&D

- WP 2014-16
- WP 2016–18
- WP 2018-20

Horizon 2020
The new RHC ETIP scenario and structure with HWGs

• Since 2016 the role for the RHC-Platform has been extended:
  – Market aspects are included in the ToR
  – Integration is more and more in the focus
  – Calls are increasingly unspecific about which technology is to be favoured
  – The demand side comes into the foreground
### Vision for the RHC-sector towards 2050

<table>
<thead>
<tr>
<th>Vision</th>
<th>Solar thermal</th>
<th>Biomass</th>
<th>Geothermal</th>
<th>Heat pumps</th>
<th>DHC &amp; TES</th>
</tr>
</thead>
<tbody>
<tr>
<td>100% RHC individual residential buildings</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td></td>
<td></td>
</tr>
<tr>
<td>100% RHC districts</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td></td>
<td></td>
</tr>
<tr>
<td>100% RHC cities</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td></td>
<td></td>
</tr>
<tr>
<td>100% RHC industry</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

---

**Stakeholders’ group**

- Deep Geothermal
- Shallow Geothermal

**Horizontal Working Groups**

(on challenges)
The new HWG and Geothermal Panel members participation in the future activities of the most relevant HWGs.

<table>
<thead>
<tr>
<th>HWG 100% RE cities</th>
<th>M1</th>
<th>M2</th>
<th>M3</th>
<th>M4</th>
<th>M5</th>
<th>M6</th>
<th>M7</th>
<th>M8</th>
<th>M9</th>
<th>M10</th>
<th>M11</th>
<th>M12</th>
</tr>
</thead>
<tbody>
<tr>
<td>HWG Vision</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HWG 100% industry</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HWG 100% RE district HC</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HWG 100% sub-urban areas</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- First meeting to decide on document structure and content (including input needed from other HWGs)
- Second meeting to prepare first messages to be included in the Vision
- Third meeting/call to finalise first messages to be included in the Vision
- Second meeting to discuss inputs prepared by other HWGs and distribute drafting of chapters of the Vision
- Third call to discuss draft
- Final meeting to finalise Vision

Geothermal delegates nominated:
Cities (Ric), Buildings (Robert), Industry (Luc), District & sub-urban (Attila), Vision (Javier)

EGEC will also cover all HWGs as secretariat
Strategic documents of the RHC-ETIP

- **Updated Vision for the RHC-sector to 2050**
  - To be prepared by the HWG on Vision. The work should be finalized in one year (by the end of 2019).

- **Research and innovation priorities**
  - in 2020

- **Deployment and implementation strategy**
  - In 2020-2021
Thank you for your attention!