



REPLACE – Making heating and cooling for European consumers efficient, economically resilient, clean and climate-friendly

Dear Sir or Madam,
Dear interested parties,

“keeping the heat on in times of crisis” was the motto of the REPLACE final conference in Brussels and online, 21. March 2023. The project has supported households in eight European countries to replace their inefficient heating and cooling systems with climate-friendly ones since 2019. During implementation, it faced first Corona and then the energy crisis. As Karlis Goldstein from the Estonian Ministry of Economic Affairs and Communications remarked in his key note speech: “We didn’t expect that we would find ourselves in the current context geopolitically and also in terms of the energy transition. ... if we would only start now to think about the solutions, then we would have wasted a couple of good years. I’m very grateful for the REPLACE project team for all their effort. And it is indeed timely to look into the results of their work.”

In the newsletter you will find an **overview of the final conference’s topics as well as links to the presentations and video recordings**, e.g.

- Key note speech: Vision of the future heating (and cooling) sector in the EU – The now and tomorrow of Heating & Cooling
- Contributions from Bioenergy Europe, European Heat Pump Association and Energy Cities on the role of bioheat, heat pumps and local heating networks in the heat transition
- Objectives and crisis related obstacles ahead for the heat transition in Europe
- Solutions from the REPLACE project – four regions present their REPLACE campaigns
- Panel discussion: How can the residential heat transition in Europe be implemented?

Goldstein in his speech called the REPLACE website a “treasure trove for those who want to replace inefficient heating and cooling systems.” If you are interested in the practice-oriented

REPLACE handbooks, the heating system matrices, REPLACE calculator, best practice examples or reports, please take a look at www.replace-project.eu .

Yours

Team REPLACE

Topics at the REPLACE final conference



In his introductory speech, Herbert Tretter (Austrian Energy Agency) presented the **framework conditions for the REPLACE project and for replacements in Europe**: what are the challenges (high share of final energy consumption, high share of fossil systems, poor energy efficiency), how has REPLACE promoted replacements (tools, information material) and what role have local working groups played in planning and implementing the REPLACE campaigns in the nine project regions.

Learn more in the [ppt](#) or in the [video recording](#) (18min).



In his inspiring key note speech, Karlis Goldstein (Ministry of Economic Affairs and Communications, Estonia) presented **the now and tomorrow of heating and cooling**. Besides the European context, Goldstein addressed the vectors for climate-friendly heating and cooling (e.g. planning, electrification, storage) and presented what is needed to unlock the potential of heating and cooling, fairness being the most critical point for societal benefit. Further topics were waste heat as renewable energy, the importance of converting stereotypes about fossil and renewable systems to become more energy independent, and the need for a business case for climate-friendly heating and cooling to make it convenient for many people.

Learn more in the [ppt](#) or in the [video recording](#) (19min).



Bioenergy as a sustainable enabler of the heat transition in Europe was the topic of the presentation by Manolis Karampinis (Bioenergy Europe). Karampinis depicted bioheat in the EU framework (bioenergy is the largest contributor to the renewable heat sector in Europe), the need to replace many inefficient appliances e.g. for lower costs and less risk to human health, the role of pellet appliances in a smooth energy transition and the need for clear and consistent policies and government support for the mass switch to renewable appliances. Karampinis answered the question about sufficient bioheat for the transition positively stating that e.g. most of the material is sawdust, and other materials like olive stones can be used.

Learn more in the [ppt](#) or in the [video recording](#) (25min).



Representing the European Heat Pump Association, Jozefien Vanbecelaere presented **heat pumps in domestic heating**. After a look at the market growth of heat pumps (2022 tipping point of the sector e.g. due to the Russian invasion in Ukraine, the EU's REPowerEU Plan), the focus was on the question if heat pumps can deliver and what can drive the use of heat pumps in all households (Vanbecelaere e.g. presented a list of ongoing legislation in the EU, and highlighted skills as a crucial aspect). Learn more in the [ppt](#) or [video recording](#) (16 min).



Amélie Ancelle (Energy Cities) introduced **the role district heating can play at the local level to accelerate the decarbonisation of heating systems**. Together with 7 cities, Energy Cities is implementing The Decarb City Pipes 2050 project. The cities involved are Bilbao, Bratislava, Dublin, Munich, Rotterdam, Vienna, and Winterthur, which want to use district heating as a key enabler for decarbonisation by 2050. In the project, the cities develop a decarbonisation strategy, consider multilevel aspects (EU and national policies, but also local ones), build-up planning and implementation capacity in each city and learn from each other.

Learn more in the [ppt](#) (including links to draft recommendations, guidance for cities, heating and cooling plans) or in the [video recording](#) (20 min).



The presentation by Dražen Balić (Energy Institute Hrvoje Požar, Croatia) dealt with **objectives and crisis-related obstacles ahead for the heat transition in Europe**. After objectives such as the European Green Deal, the RED II Directive and the REPowerEU Plan, Balić presented the current status with regard to reducing dependence on fossil fuels and the development of wholesale market prices for energy in Europe. His presentation also addressed global challenges (e.g. the climate crisis, fuel disruptions), barriers to the transition (e.g. technology maturity barriers, market maturity barriers) and solutions (e.g. strong regulatory framework, heat planning and citizen involvement). Learn more in the [ppt](#) or in the [video recording](#) (17 min).



In the conference's **solutions session**, Stefan Drexelmeier (Energiewende Oberland, Germany) presented **Local biomass district heating networks – regional heating heroes to answer the lack of installers**. Drexelmeier depicted the situation in the Bavarian Oberland region (high subsidies since 2020, more than 1000 missing installers), the historical rooting of the first local heating networks since 2010 and the initiation of new “village heating systems” through the REPLACE project. Drexelmeier also explained in his presentation how a village heating system is implemented (technical part, site search, business model, information events).

Learn more in the [ppt](#) or in the [video recording](#) (27 min).

The One-Stop-Shop for boiler replacement – a promising concept from Austria for Europe? was presented by Herbert Tretter (Austrian Energy Agency). His presentation first dealt with the reasons for a One-Stop-Shop (e.g. heating replacement is not an attractive matter but often an emergency, elder people shy away from implementing major measures) as well as the goals of making heating replacement as simple, fast and sustainable as possible. Tretter also presented the development path of the One-Stop-Shop up to the finished online platform. What the suppliers in the One-Stop-Shop commit to (15 mandatory services of basic all-in-one package), what advantages the platform has for both industry and households and what opportunity it offers as quality assurance in connection with subsidies was also part of the presentation.



Learn more in the [ppt](#) or in the [video recording](#) (23 min).

Gasper Stegnar (Jožef Stefan Institute, Slovenia) presented **how cooperation between several organisations for a common goal can have great potential**: REPLACE campaigns and materials are now anchored at national level in Slovenia. Stegnar outlined the preparatory work (initial ideas for REPLACE campaigns, selection and formation of a Local Working Group, preparation of a media campaign), and the Local Working Group's proactive role in planning and implementing the campaigns. Stegnar also provided an insight into the implementation of the REPLACE campaigns including a "systematic educational process" for households.



Learn more in the [ppt](#) or [video recording](#) (18 min).

In her presentation **Promoting renewable heating in South Eastern Europe – Best of Bosnia and Herzegovina**, Sadžida Hafizović (ENOVA) first introduced the current state of the heating sector and the challenges (e.g. outdated infrastructure, coal as a primary source for heating). Afterwards, the focus was on how REPLACE addressed the challenges and the cooperation with the Local Working Group to develop and implement an appropriate strategy. As some of the most successful campaigns, Hafizović presented information hubs that reached over 1000 end consumers, techno-feasibility studies and the support of pioneers. How the REPLACE team supports the strategy development to reduce coal and solid fuels in Sarajevo Canton was also part of the presentation.



Learn more in the [ppt](#) or in the [video recording](#) (22 min).



In the final **panel discussion**, moderator Dominik Rutz (WIP Renewable Energies) focused on **how the residential heat transition in Europe can be implemented**. The representative of the European Heat Pump Association, Jozefien Vanbecelaere, mentioned standardisation and plug and play systems to make the installation of heat pumps easier and cheaper. Manolis Karampinis from Bioenergy Europe argued that the renewable aspect of bioheat needs to be better recognised and to enable users to safely invest in bioheat. Francisco Puente (ESCAN) from the REPLACE region in Spain emphasized that there is no one solution for all buildings, but the heating technology has to be adapted to the situation, climate, etc. Angel Nikolaev (BSERC) from Bulgaria pointed out the challenge that in his low-income region there are no subsidies for climate-friendly heating systems or renewable fuels. For the future, he sees mainly heat pumps and some efficient pellet boilers in the Rhodope Mountains. For North Macedonia, Natasha Markovska (SDEWES) wished for a heating and cooling map analogous to the Decarb City Pipes 2050 project, which, in a country wide version, could serve as a planning basis on which all stakeholders can work together to achieve carbon neutral heating and cooling.

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The REPLACE team at the final conference in Brussels, March 2023. Copyright: EWO

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