Replace Your Heating System Calculator



Supportive energy advise tool

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

Herbert Tretter, Karina Knaus Austrian Energy Agency

Disclaimer: The views expressed in this presentation are the sole responsibility of the author and do not necessarily reflect the views of the REPLACE consortium



This project has received funding from the European Union's Horizon 2020 Research and innovation programme under grant agreement No 847087.





Objective

- Give orientation and enable **informed decisions** in the **residential heating sector** (end consumers, investors, owners etc.)
- **Replacement** of an existing, old
 - fuel oil
 - natural gas
 - coal or log-wood
- heating system (boiler or ovens; depending on region)
- by new, clean and climate-friendly solutions.







Scope

- When looking for a new heating system, there are **many things to consider**:
 - What technologies and fuels are available?
 - Which **subsidy programs** can be taken into account, how does the affect costs?
 - What about the **cost of heating** when I look at **more than just** the **initial cost**?
- This calculator gives **answers based on annual full costs**.
- Should enable to find the best solution for ones house
 - e.g. together with your energy consultant or your installer.







Dissemination

- REPLACE your Heating System Calculator
 - free of charge "energy advise" tool
 - <u>energieinstitut.at/tools/Replace</u>
- White-label tool option; Businesses, installers, energy advisers, municipal energy offices etc. can integrate the Calculator via a frame into their own website or place a link to the Calculators landing page on the own website.
 - Please <u>contact</u> your national REPLACE project partner
- The calculator will be **hosted until 30.11.2025.**









Features

- Based on the Austrian klimaaktiv <u>Hexit calculator</u> (of the Ministry for Climate Action).
- The **calculator is tailored** to the situation
 - in 8 European target regions (AT, BiH, DE, BG, ES, HR, MK, SL) and
- works in 7 languages (incl. EN for every region)
- features technical and economical default values
 - applying to heating system renovations in residential buildings,
 - ranging from single-family houses to
 - block of flats with up to 20,000 l/a heating oil equivalent (i.e. 20 MWh/a).







Results

- Annual full heating costs, i.e.
 - full cost comparison of the
 - annuity of reference investment,
 - service and maintenance, fuel and CO2 costs
 - any subsidies available in the 8 target regions (if any) are considered.
- Annual cost savings and annual CO2 emissions avoided
 - compared to existing heating system.







The way it works – the user can easily define

Step 1

- the actual energy consumption of the heated building
- the type of existing heat delivery and hot water preparation system

Step 2

- the possibility of a connection to a local or district heating network
- the availability of a solid biomass fuel storage room
- the accessibility with a wood pellets lorry

Step 3 = results, i.e. techno-economical comparison of green alternatives









Features

- Assists end consumers, intermediaries (like installers, energy advisers etc.) and investors by a
 - Quick mode (3 Steps)
 - Professional mode;
 - in step 3 (results) actual project-specific cost values are considered
- Further information like **technology factsheets**, (regional) **best practice examples** and **useful contacts** for boiler and oven replacements are provided, etc.







Demonstration by an example

• <u>energieinstitut.at/tools/Replace</u>







Herbert Tretter

Österreichische Energieagentur - Austrian Energy Agency

<u>herbert.tretter@energyagency.at</u> T. +43 (0)1 586 15 24 - 0

Mariahilfer Straße 136 | 1150 Vienna | Austria

www.energyagency.at





Further info: www.replace-project.eu



linkedin.com/company/H2020 Replace

twitter.com/H2020Replace



facebook.com/H2020Replace



This project receives funding from the European Union's Horizon2020 research and innovation programme under grant agreement No. 847087. Any communication activity related to the action reflects only the author's view. The European Union and its Climate, Infrastructure and Environment Executive Agency (CINEA) are not responsible for any use that may be made of the information any communication activity contains.

