



THE FUTURE OF LIQUID HEATING FUELS

Putting the Pieces Together

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Renewable Liquid fuel in Heating

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Background information

- In Finland, we have 130 000 detached houses with oil heating
- 600 000 detached houses with electric heating
- 70 000 detached houses with district heating
- 140 000 detached houses with groundsource- or air to water heat pump

Renewable heating oil available from the beginning of 2021

- In Finland there is distribution obligation 3% of the energy content of fuel oil must be renewable 2021 and year 2028 10%
- Field test have been made 2008-2010
- In tests were 30 houses 15 tested with FAME and 15 with HVO
- 2021 renewable heating oil is 100% HVO

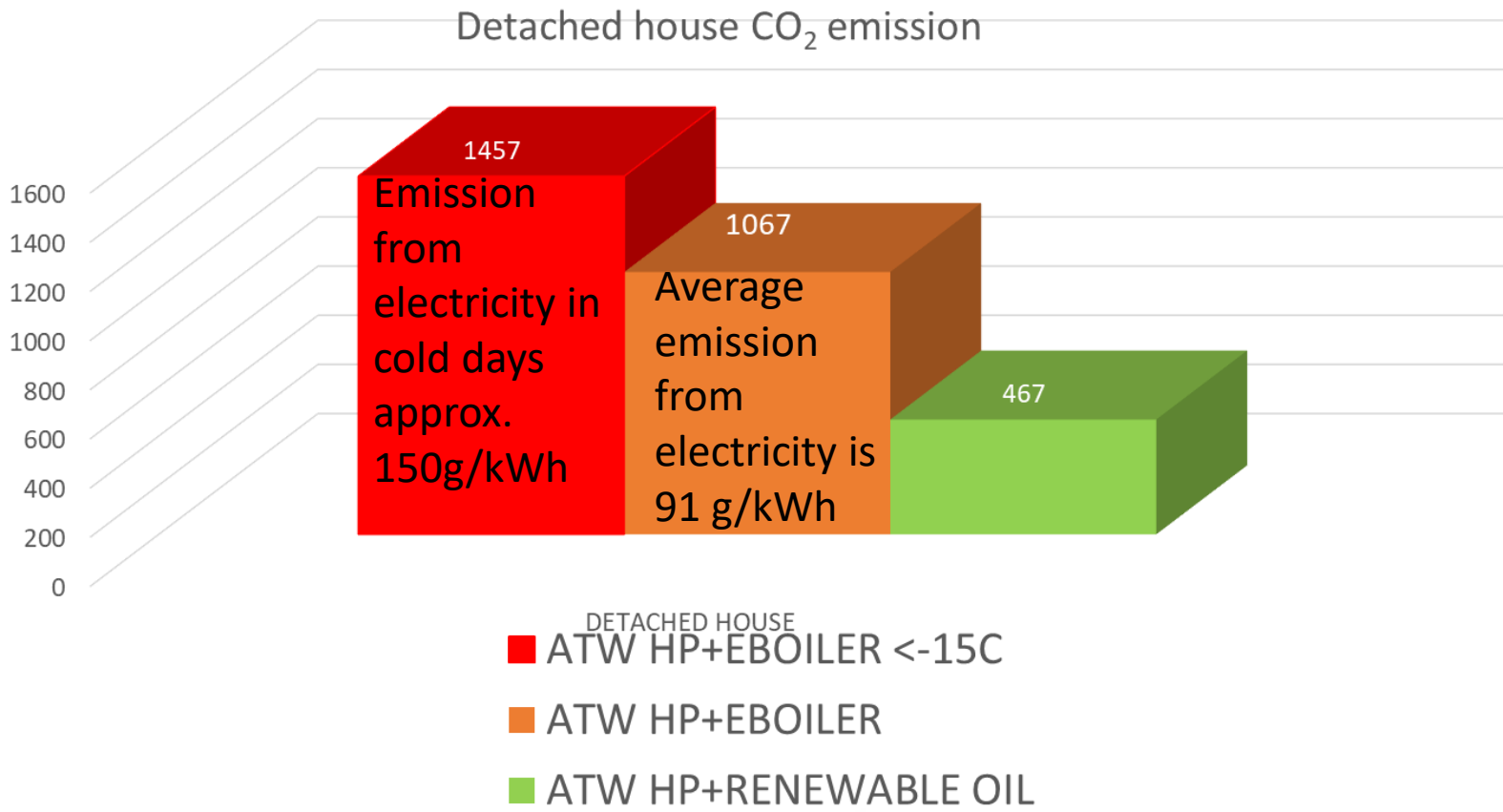


Recommended maintenance before using a renewable

- **Clean the tank**
- **Service the burner**
- **Check the suitability of the renewable for the burner**
- **100% HVO shelf life is equivalent to fossil oil**

Why we prefer hybrid?

There is a limited amount of renewable heating oil available, hybrid systems could be the solution.



Average energy demand is 22 000 kWh
Heat pump produces 70%
Electric or oilboiler 30%

