

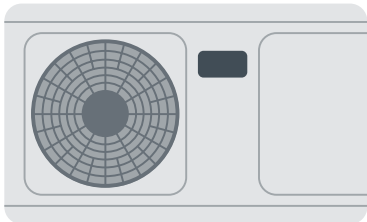
# In 2050, it will be **50% cheaper** for a single family home in Germany to use renewable electricity in **heat pumps** vs. renewable electrolysis hydrogen in a **boiler**.

December, 2050

Single-family household  
XXXXXX XXX  
XXXXXX Germany

## Annual Energy Cost: Heat Pump

Heat Pump Installation (Annuitized).....	€225
Maintenance.....	€12
Cost of Renewable Electricity..... (Wind and Solar Energy)	€530
<b>Total .....</b>	<b>€767</b>



December, 2050

Single-family household  
XXXXXXX XXX  
XXXXXX Germany

## Annual Energy Cost: Hydrogen Boiler

Boiler Installation (Annuitized).....	€49
Maintenance.....	€98
Cost of Renewable Electrolysis..... Hydrogen (from Wind and Solar Energy)	€1267
<b>Total .....</b>	<b>€1415</b>

