# WHAT IS HEAT RECOVERY?

Heat recovery is the process of using waste heat from industrial processes that would otherwise have been lost. Recovered heat is used to increase the temperature of water—conventionally heated by a fuel-powered boiler or furnace—before it is fed into an industrial process or a district heating grid.



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#### WHAT ARE THE BENEFITS OF THE ENERGY SAVINGS ACHIEVED?

Heat recovery reduces greenhouse gas emissions and fuel costs. When recovered heat is fed into district heating grids, heating efficiency improves and emissions in urban areas decrease due to centralised heat production. District heating is also considered a very comfortable heating solution for residents, as no yearly service is required.



## WHAT ARE THE ENERGY SAVINGS OPPORTUNITIES?

The potential for energy savings in the case of on-site industrial heat recovery is very high. There is also the possibility to account for recovered heat that is fed into district heating grids by comparing the efficiency of district heating systems with those of less efficient heating technologies which would have otherwise been used.



### WHAT MAKES CALCULATING ENERGY SAVINGS CHALLENGING?

Drawing a line between final energy savings and final energy consumption is quite challenging. When excess heat from industry is recovered and integrated into district heating, it is tricky to evaluate energy savings, and a one-size-fits-all solution is not applicable as heat recovery takes place in various industries.



# WHAT IS NEEDED TO IMPROVE ENERGY SAVINGS CALCULATIONS?

A good understanding of both technical processes and the Energy Efficiency Directive framework is needed to correctly calculate savings. Clear explanations of how to define baselines and system boundaries, how to prepare a measurement concept and how to account for influential factors like varying production levels are also needed for improvement.



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