

# Energy efficiency potential in data centers

Data centers account for as much as 20% of the world's energy use, and 7% of the world's CO<sub>2</sub> emissions.

More than 35% of a data center's energy consumption comes from cooling the servers.

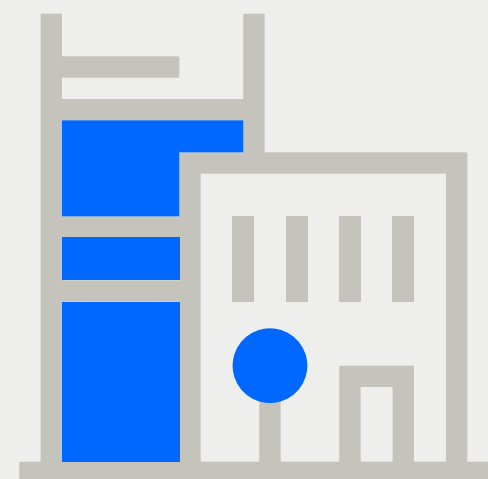


## Alfa Laval's contribution

### Yearly new installations

Every year, new Alfa Laval plate heat exchangers enable free cooling, reducing CO<sub>2</sub> emissions by 33,000 tonnes by saving 144 GWh of energy. That is enough energy to heat:

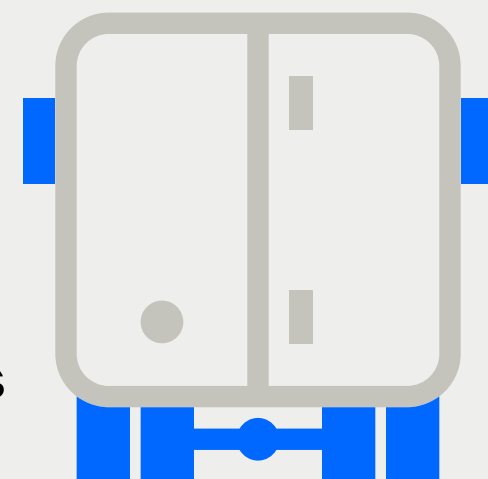
**10,000**  
American homes



### Total installed base

Annually, Alfa Laval heat exchangers provide a total of 530 GWh of energy savings through free cooling in data centers, reducing CO<sub>2</sub> emissions by 120,000 tonnes. to the amount of CO<sub>2</sub> emitted annually from:

**1,400**  
Heavy trucks



### Service potential

If all plate heat exchangers in the data center industry were serviced to optimize heat transfer efficiency, energy consumption could be reduced by 300 GWh per year, saving 86,000 tonnes of CO<sub>2</sub> – the same as the emissions from:

**280**  
Flights between  
London – Shanghai



### Imagine if...

...by 2030, all data centers utilized the waste heat from the servers. That would reduce CO<sub>2</sub> emissions by 680 million tonnes every year, while saving a combined 3,000 TWh. The energy recovered is enough to heat:

**300 million**  
European homes

