

# Industrial processes

The potential to decarbonize the industry

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# The pressure to act increases ...



**Ecological sustainability** (e.g.: COP21 - Paris Agreement)



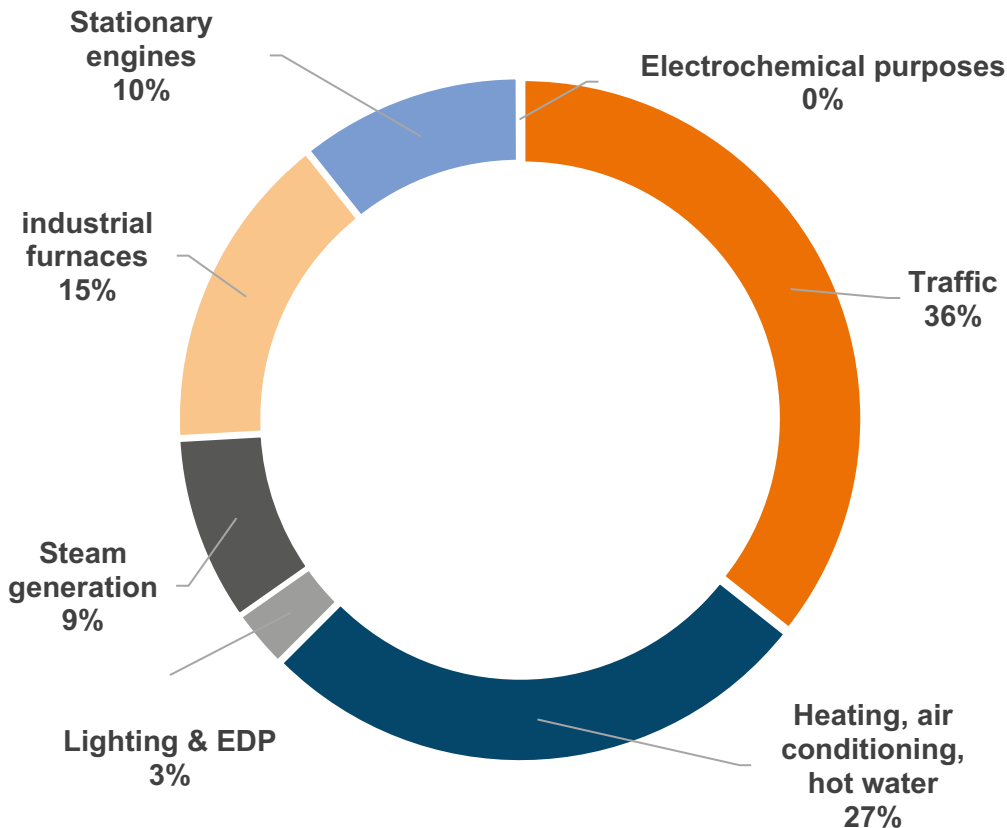
**Economic sustainability** (e.g.: U.N. SDG's, de-investment ("Carbon bubble", green finance, EU taxonomy for sustainable finance)



**Social sustainability** (e.g.: #fridaysforfuture, #flightshame, R20)

# Energy consumption according to purpose

## Final energy consumption according to purpose



- The typical energy usages in the industry (stationary engines, industrial furnaces, steam generation) makes up a good third of the final energy consumption.
- 27% of the final energy used is consumed in the area of room heating and hot water.
- With 3% of total energy consumption, the proportion of EDP (electronic data processing) and lighting is rather low.

- Technologies for heat production, conversion, storage and recovery
- Key technologies "Made in Austria" → added value
  - enables and helps secure the industrial location of Austria in a new energy system
- Project (e.g.):
  - "Gmunden High Temperature Link" (waste heat utilization by high-temperature heat pumps, CO2 savings of up to 4000 tons per year)

# Questions to be dealt with

## **Scope**

- Which potentials are available?
- How difficult is it to lift these potentials?
- Can general recommendations for individual sectors be derived from this? Diffusion of innovations in the market?
- What are the challenges? (technical, economic, legal)
- How can individual challenges be overcome?

## **Methods**

- Literature research, expert talks

## **Schedule**

- The plan is to complete the project by the end of 2019.

# Thank you for your attention

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