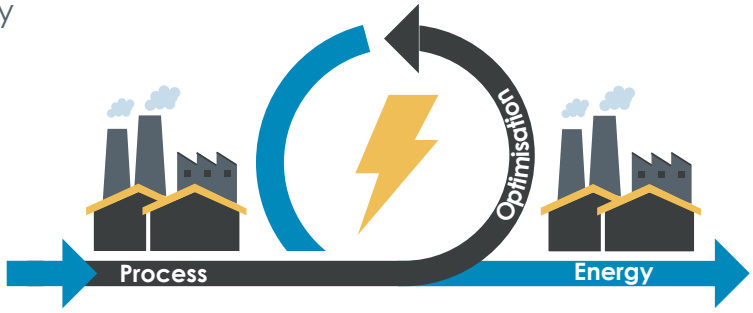
CASE WATCH 04 : ENERGY OPTIMISATION

Optimise energy use in process industry and seek synergies with other process industries.

Reduce primary resources by increasing energy efficiency onsite and in industrial clusters.



GROWING OUR EFFICIENCY

KEY INSIGHTS

- reduce energy intensity
- optimise energy use
- reduce CO_2 emissions
- integrate sites & clusters

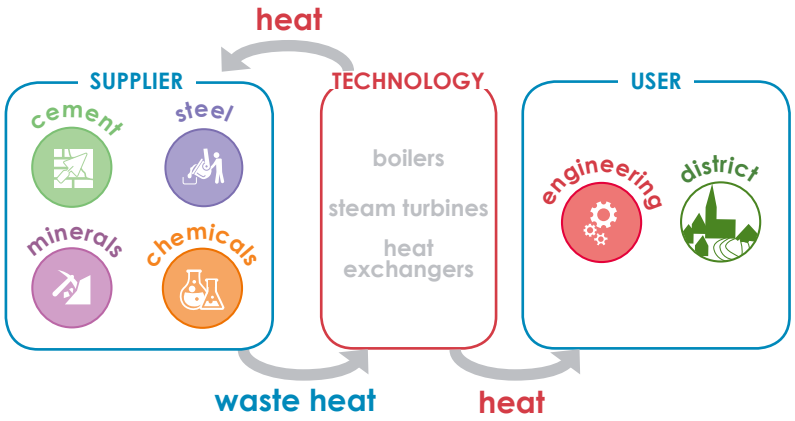


Figure 1: Synergy scheme [1]

CROSS-SECTOR COLLABORATION

Energy-intensive industries have a high potential to recover and reuse waste energy in regional clusters.

Energy-intensive industries can valorise waste energy in regional clusters, esp. in chemical and steel sectors.

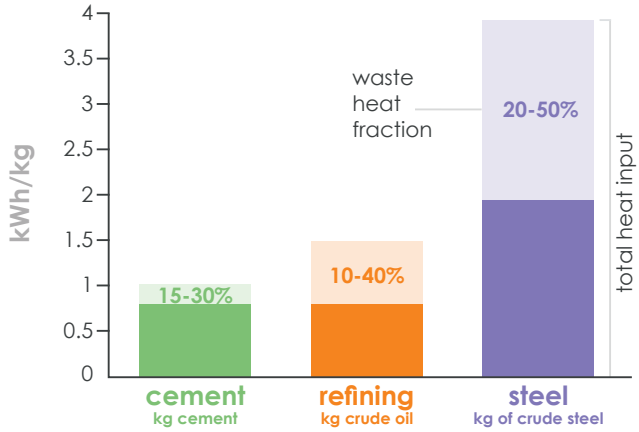


Figure 2: Waste heat potential per sector [1,2,3,4]

SUSTAINABILITY IMPACT

Wins for industry
- for suppliers: 40-80% heat recovery potential[1]
- for industry: 5-10% heat input reduction[1]

Environmental gains
- primary energy savings: 80-150 kWh electricity produced/ton steel produced[1,5]

Wins for society
- public health benefits due to energy reuse
- improved business relations in regional clusters
- job creation and new skills development[5]

Figure 3: Sustainability [1]

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