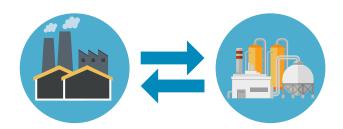


CASE WATCH 08: INDUSTRIAL HEAT NETWORKS

Optimise heat use in process industry via heat networks in industrial clusters.

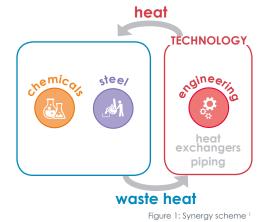
Increase energy efficiency by cross-sector collaboration in industrial heat networks.



CASCADING OUR HEAT

KEY INSIGHTS

- reduce energy intensity
- reduce CO₂ emissions
- reduce primary heat sources
- integrate sites & clusters



CROSS-SECTOR COLLABORATION

Energy-intensive industries have a high potential to exchange waste heat in industrial clusters.

Industrial clusters have a growing demand for heat exchange with regional networks.

Optimisation scenarios for Chemicals + Steel 100% - 90% - 80% - 70% - 60% - 50% business single site symbiosis (including long pipelines losses)

Figure 2: Cross-sector potential ¹

SUSTAINABILITY IMPACT

Wins for industry

> overall gains: 0-15 €/MWh exchanged (depending on distance)¹

Environmental gains

> primary energy savings: 10-30 MW/typical steel or chemicals plant¹

Wins for society

- > public health benefits due to energy reuse
- > improved community relations in regional clusters
-) job creation and new skills development

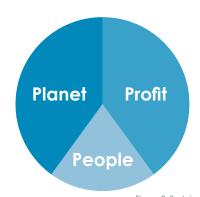
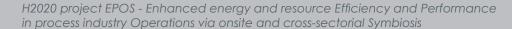


Figure 3: Sustainability ¹







CASE WATCH 08: INDUSTRIAL HEAT NETWORKS

REFERENCES

 H2020: EPOS project. 2015 – 19. https://www.spire2030.eu/epos

