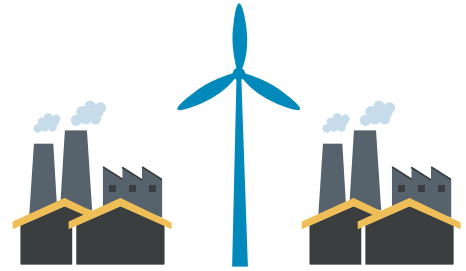


CASE WATCH 05 : WIND POWER COGENERATION

Jointly invest in wind power generation for shared use of renewable electricity in industry and communities.

Increase renewable electricity use by jointly investing in wind turbines.



TAPPING INTO RENEWABLES

KEY INSIGHTS

- use renewable electricity
- reduce CO₂ emissions
- integrate sites and clusters

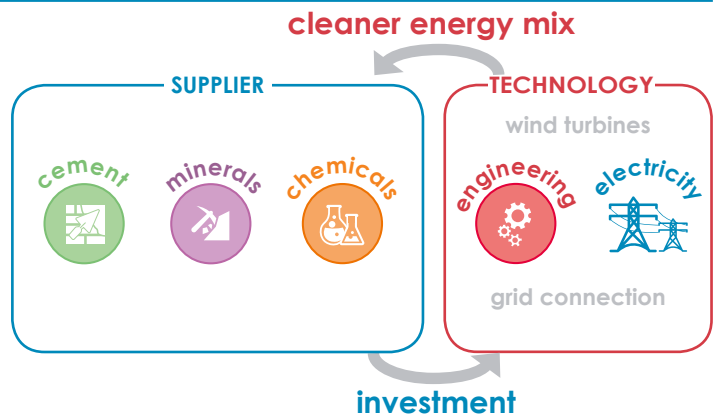


Figure 1: Synergy scheme ¹

CROSS-SECTOR COLLABORATION

Process industries in certain regions have a high interest in sourcing renewable electricity.

Electricity-intensive industries have a growing demand for renewable power.

Electricity input needed per sector

80-100 kWh/ton crude oil
2.5 Mton site
45 MW capacity

100-150 kWh/ton mineral
0.3 Mton site
7 MW capacity
depends on the grinding size

120-130 kWh/ton cement
0.9 Mton site
25 MW capacity

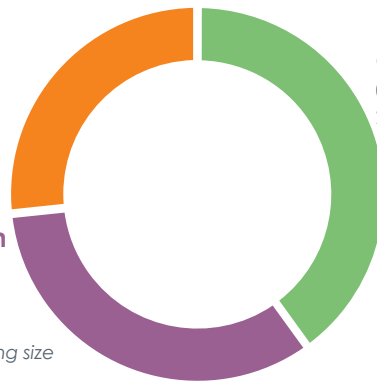


Figure 2: Cross-sector potential ^{1,2,3}

SUSTAINABILITY IMPACT

Wins for industry

> for industry: 20-50% ROI and lower OPEX⁶

Environmental gains

> CO₂ emission reduction:
10-20 kton CO₂/y (10 MW wind farm)^{2,4}

Wins for society

> public health benefits due to renewable energies⁵
> community integration through PPP investment
> job creation and new skills development¹

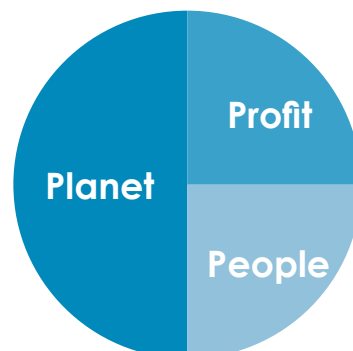


Figure 3: Sustainability ¹

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