

MAKING NET-ZERO, 1.5°C-ALIGNED ALUMINIUM POSSIBLE

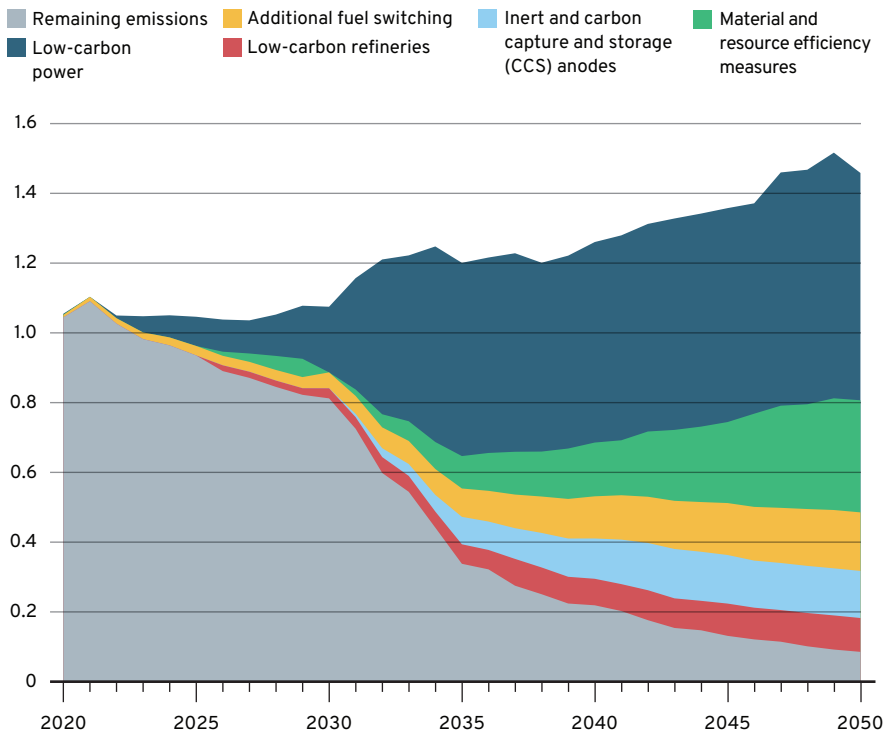


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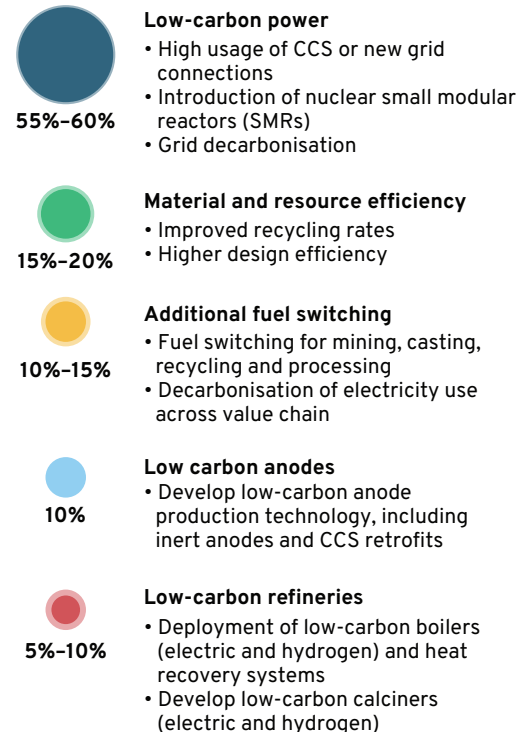


1 The solution: Low carbon power is vital

Emissions pathways, Gt CO₂e/y



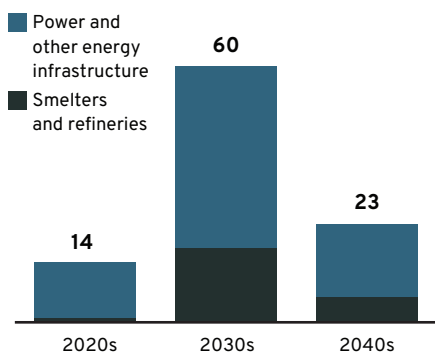
% of cumulative reduction, 2022-50



2 What it will take

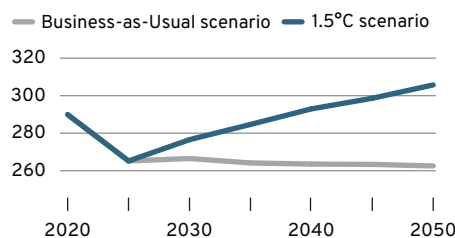
Investment for a net zero primary sector, annual capital investment, in billion US\$

75% of investments required for electricity production and upstream infrastructure

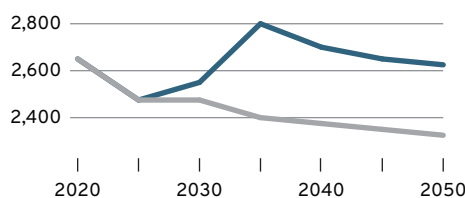


Note: Compared to regular investments of \$9 billion-\$15 billion per year (in a Business-as-Usual future)

Green premium, levelised cost of alumina, \$/tonne of alumina

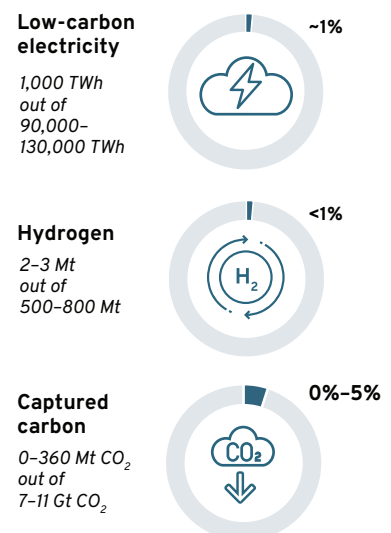


Levelised cost of aluminium, in \$/tonne of aluminium

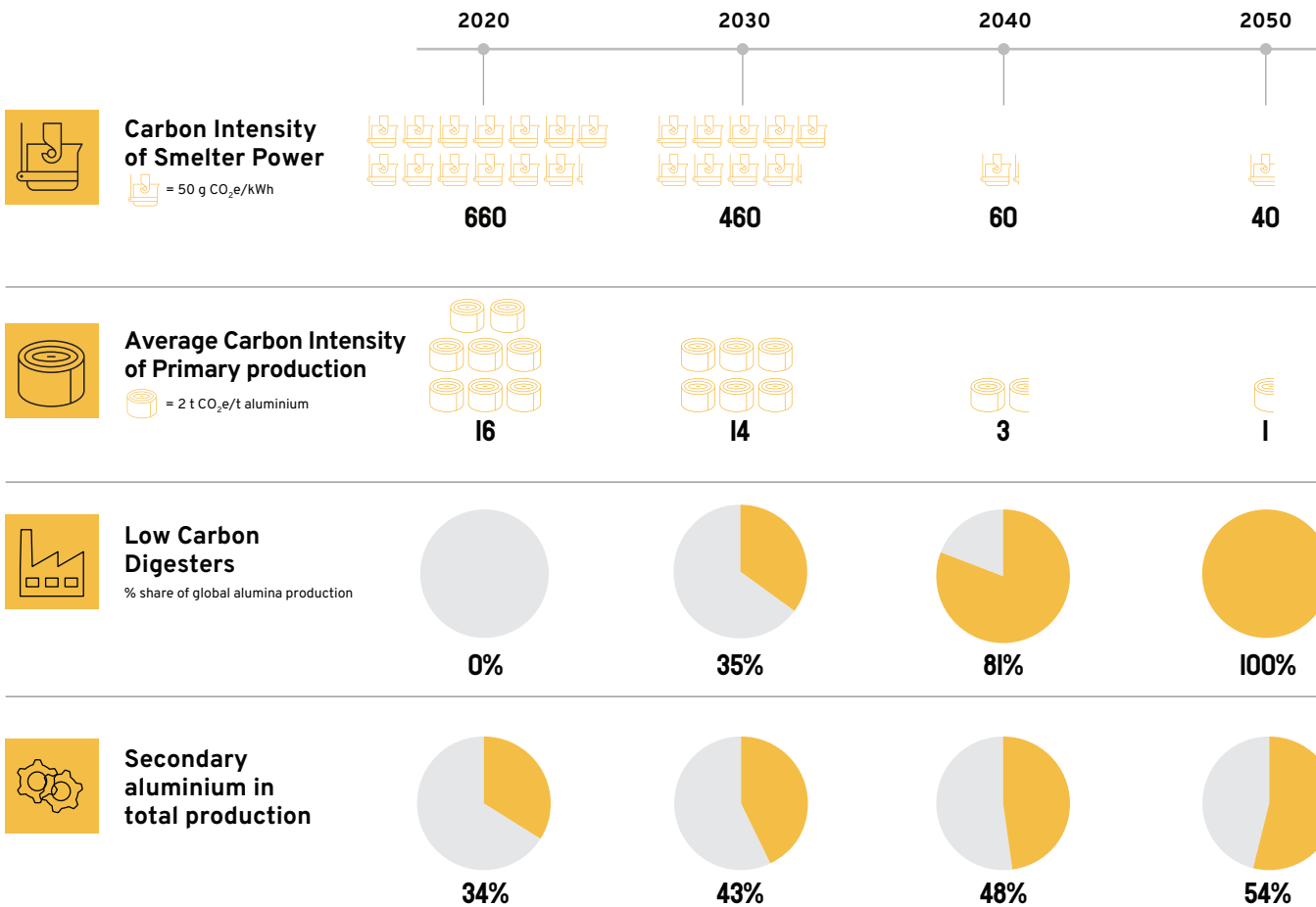


Note: Values are weighted by production type.

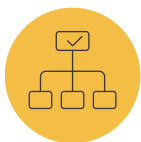
Resource requirements, share of global demand by 2050



3 Key milestones



4 Priorities for this decade



INDUSTRY ACTION TO BOOST SUPPLY

- Invest in **RD&D** for low-TRL technologies in refineries and anodes starting their roll out by the end of the decade
- Develop **site-specific decarbonisation of power**, particularly focusing on decarbonisation power over the next decade



ALUMINIUM DEMAND

- Key users of aluminium to commit to **buying low-carbon products** with a green premium
- Work with government and secondary producers to increase efficient aluminium use and recycling



FINANCE ACTION

- Mobilise capital across the electricity and aluminium sector in integrated projects
- Establish **climate-aligned investment principles** for near-zero emissions aluminium production



GOVERNMENT ACTION

- Reduce cost differential between low-carbon and fossil-based-aluminium, e.g., by carbon pricing
- Use **government procurement** levers to support the development of a market for low carbon aluminium
- Work with producers and regulators to integrate aluminium smelters into electricity, CCS, and hydrogen grids