

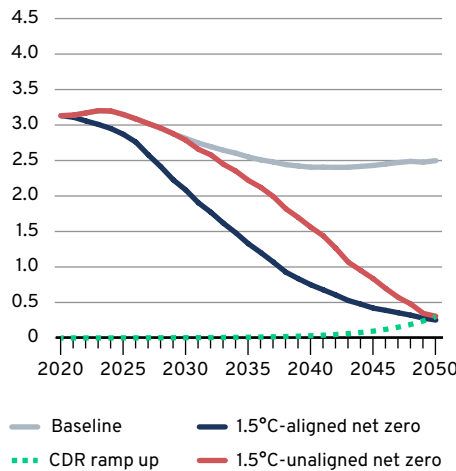
MAKING NET-ZERO, 1.5°C-ALIGNED STEEL POSSIBLE



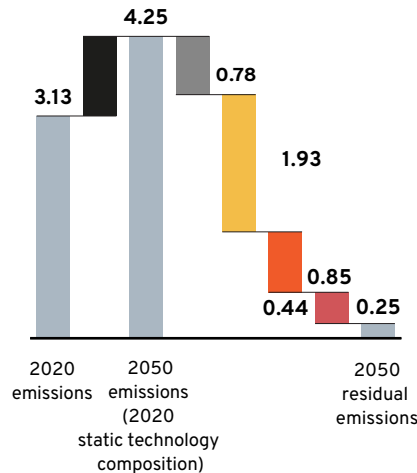
MAKING NET-ZERO, 1.5°C-ALIGNED STEEL POSSIBLE

1 The solutions: Scrap-based steelmaking, near-zero-emissions ironmaking, and carbon capture are the main decarbonisation options

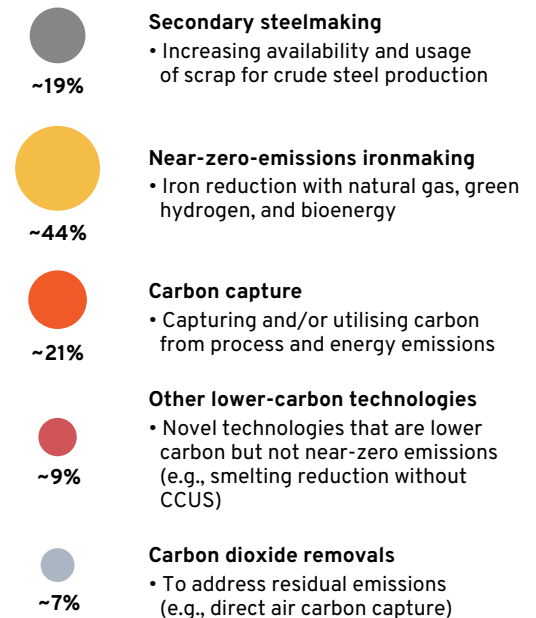
Annual CO₂ emissions (Scope 1 & 2), in Gt CO₂/y



Annual CO₂ emissions (Scope 1 & 2) reduction per decarbonisation lever, in Gt CO₂



% of cumulative reduction (2020–50)

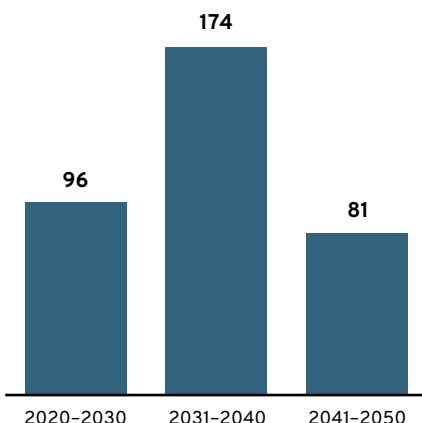


Cumulative CO₂ emissions (2020–2050): 47 Gt CO₂e (compared to 56 Gt sectoral carbon budget, 63 Gt from delayed action to net zero, and 84 Gt in Baseline scenario)

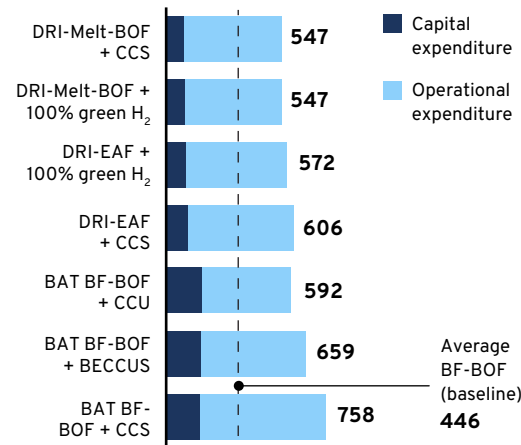
2 What it will take

Additional investments to get to net zero, additional annual capital investments (compared to a Baseline scenario), \$ billion

90%+ of investments required for supporting energy and carbon infrastructure



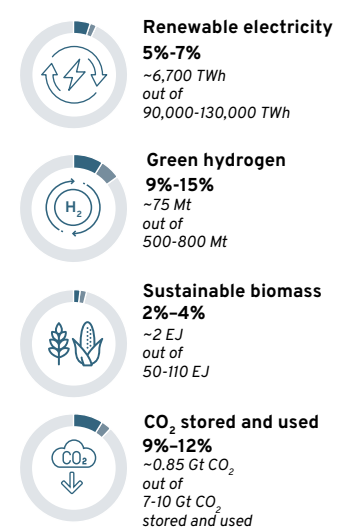
Additional production costs to get to net zero, levelised cost of steel in 2050, in \$/tonne of crude steel*



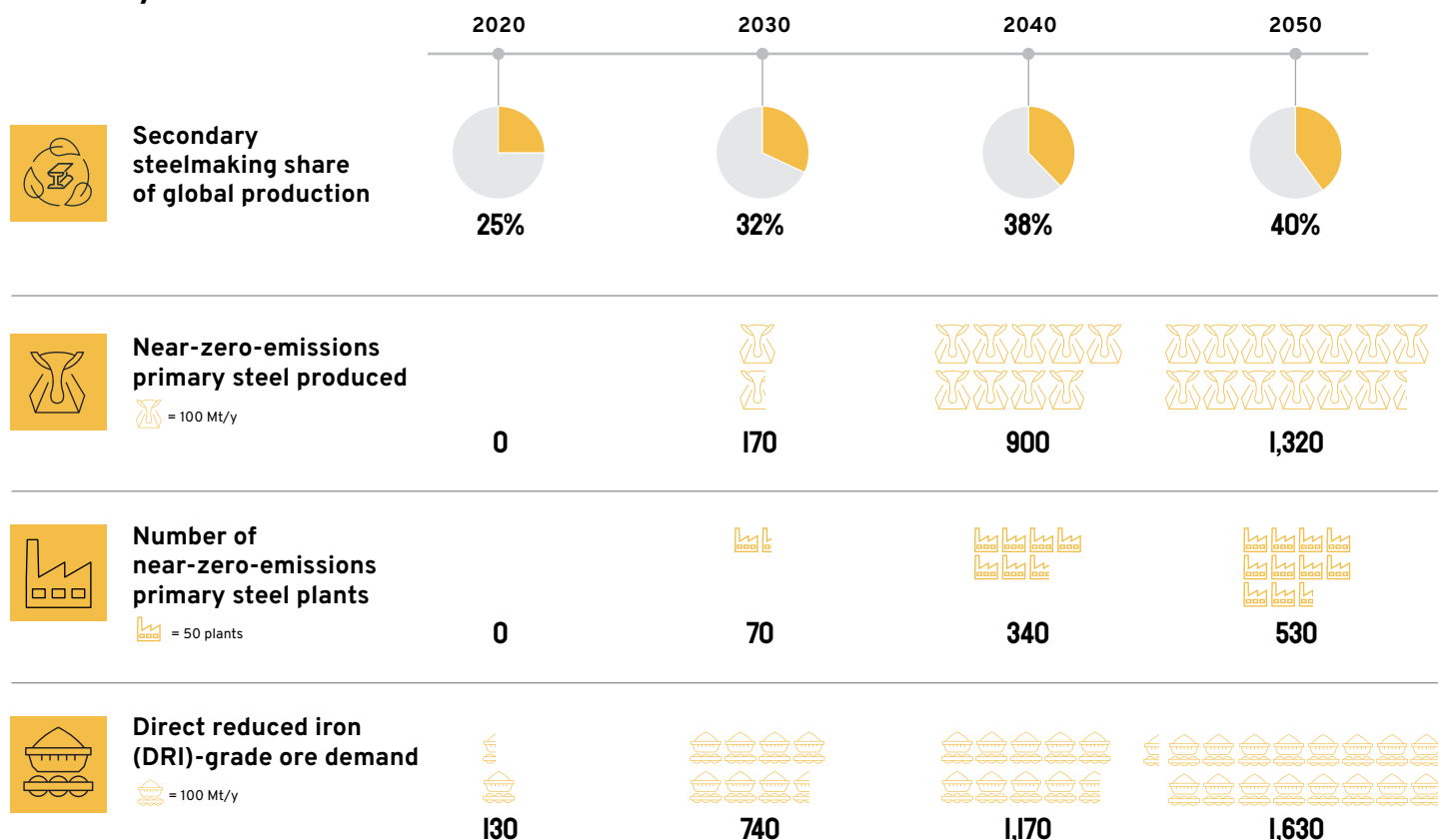
Despite higher production costs, impact on the cost of final consumer goods will be manageable (<3%).

* Assumes a greenfield plant with a production capacity of 2.5 Mt/y operating at 80% utilisation.

Resource requirements, share of annual global demand by 2050



3 Key milestones



4 Priorities for this decade



INDUSTRY ACTION TO BOOST SUPPLY AND INNOVATION

- **Projects:** Plan and deploy 70+ near-zero-emissions primary steel mills by 2030
- **Target setting:** Set robust emissions reduction targets that are 1.5°C-aligned
- **Industry consortia:** Forge new partnerships across the steel value chain and upstream energy system
- **Common policy position:** Set out a joint high-ambition position to policymakers that reflects the role of international steel producers with assets in multiple geographies



INDUSTRY ACTION TO BOOST DEMAND

- **Green premiums:** Agree to long-term offtake with a green premium that is proportional to production cost increment and associated risks for both supplier and buyer, particularly with the automotive, renewable energy, and white goods sectors



FINANCE ACTION

- **Capital allocation:** Provide sufficient capital to enable at least \$100 billion of additional investment in low-emissions steelmaking (and supporting infrastructure) each year until 2030
- **Business case innovation:** Codevelop strategies to manage the market, credit, liquidity, operational, and policy risks for first-of-a-kind (Foak) projects
- **Investment principles:** Implement 1.5°C-aligned investment principles and plan and support a moratorium of steel investment that is not aligned with such principles from 2030



GOVERNMENT ACTION

- **Level playing field:** Establish an international forum/alliance to debate and resolve the issue of how to create a level playing field and create markets for low- and near-zero-emissions steel production
- **Definitions:** Develop stable and ambitious trade- and transaction-grade standards for near-zero-emissions steel production
- **Regulatory reforms:** Accelerate and improve permitting procedure for steel and supporting infrastructure
- **Investment:** Combine concessional, blended finance, credit and loan guarantees, and CAPEX grants for Foak commercial-scale projects
- **Infrastructure:** Coordinate plans and strategies for necessary infrastructure and raw materials