CARBON EMISSIONS MISSION POSSIBLE

WELL BELOW 2°C

To limit global warming to well below 2°C and as close as possible to 1.5°C, the world must reach net-zero CO₂ emissions by mid-century.

NET-ZERO CO, BY MID-CENTURY

THE BIGGEST CHALLENGE IN MEETING THE PARIS AGREEMENT LIES IN THE MAJOR HARDER-TO-ABATE SECTORS

HEAVY INDUSTRY



CEMENT





of total annual carbon emissions energy and industry...

10GtCO₂ 30%

HEAVY-DUTY TRANSPORT



HEAVY ROAD TRANSPORT





...and their share of remaining emissions will grow as other sectors, like power, buildings and light-duty transport get decarbonized.

REACHING NET-ZERO CO, EMISSIONS FROM HARDER-TO-ABATE SECTORS BY MID-CENTURY IS POSSIBLE

TECHNICALLY

Technologies are commercially ready or at research phase.





ECONOMICALLY

It will cost less than 0.5% of global GDP.

THERE ARE THREE MAIN ROUTES TO DECARBONIZATION



REDUCING DEMAND FOR CARBON-INTENSIVE PRODUCTS & SERVICES

Potential reduction of CO, emissions from:









circular economy

modal shifts + logistics efficiency

4 MAIN DECARBONIZATION TECHNOLOGIES:

DEPLOYING DECARBONIZATION





CARBON CAPTURE



TECHNOLOGIES ACROSS ALL SECTORS



prioritized and tightly regulated use, progressively focused on aviation and

BIOMASS

combined with use or storage: essential but limited role (5-8 GtCO, per annum)

major role, leading to a 7-11x demand increase, achievable through three production routes



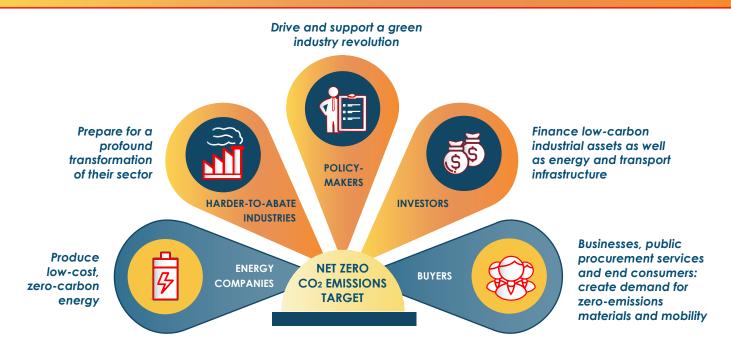
massive electrification, leading to a power demand increase by 4-6x

plastics feedstock

WINNING THE CLIMATE WAR

With immediate collective action, reaching net-zero CO₂ emissions from harder-to-abate sectors of the economy – in heavy industry and heavy-duty transport – is technically and economically feasible.

OUR RESPECTIVE RESPONSIBILITIES



CHANGE DRIVER

WHO

WHAT

SET AMBITIOUS
CARBON-INTENSITY TARGETS



Enforce tight carbon-intensity mandates on industrial processes, heavy-duty transport and the carbon content of consumer products.

2 PUT A PRICE ON CARBON



Pursue international agreements while setting prices which are differentiated by sector, domestic, downstream & defined in advance.

3 SHIFT FROM A LINEAR TO A CIRCULAR ECONOMY





Increase collaboration across the value chain to improve materials efficiency and recycling, supported by tight regulation.

4. INVEST IN GREEN INDUSTRY







Invest in and support R&D projects and commercial deployment of decarbonization technologies for harder-to-abate sectors.

CREATE DEMAND FOR GREEN PRODUCTS AND SERVICES



Make voluntary commitments to "green purchasing" of e.g. trucks, flights, industrial components, building materials.







Drive down the cost and ramp up production of zero-carbon power, zero-carbon hydrogen and truly sustainable bioenergy.