An Action Plan for Solving Our Climate Crisis Now

What we need to do to get to net zero emissions—and how we can do it in time.

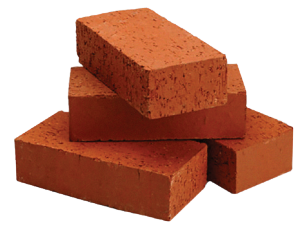
1 Electrify Transportation

2 Decarbonize The Grid

3 Fix Food

4 Protect Nature

5 Clean Up Industry



6 Remove Carbon

7 Win Politics And Policy

8 Turn Movements Into Action

9 Innovate!

10 Invest!

Get the book and take action to cut carbon emissions by visiting speedandscale.com.

Speed & Scale

An Action Plan for Solving Our Climate Crisis Now

10 objectives and 55 key results to get to net zero emissions by 2050.

Learn more about our OKRs at speedandscale.com.

S&S

Solutions

1 Electrify Transportation

Reduce 8 gigatons of transportation emissions to 2 gigatons by 2050.

KR 1.1 Price
EVs achieve price-performance parity with new combustion-engine vehicles in the U.S. by 2024 ($35K), and in India and China by 2030 ($11K).

KR 1.2 Cars
One of two new personal vehicles purchased worldwide are EVs by 2030, 95% by 2040.

KR 1.3 Buses and Trucks
All new buses are electric by 2025 and 30% of medium and heavy trucks purchased are zero-emission vehicles by 2030, 95% of trucks by 2045.

KR 1.4 Miles
50% of the miles driven (2-wheelers, 3-wheelers, cars, buses, and trucks) on the world's roads are electric by 2040, 95% by 2050.
↓ 5 Gt

KR 1.5 Planes
20% of miles flown use low-carbon fuel by 2025; 40% of miles flown are carbon-neutral by 2040.
↓ 0.3 Gt

KR 1.6 Maritime
Shift all new construction to "zero-ready" ships by 2030.
↓ 0.6 Gt

2 Decarbonize The Grid

Reduce 24 gigatons of global electricity and heating emissions to 3 gigatons by 2050.

KR 2.1 Zero Emissions
50% of electricity is from zero-emissions sources by 2025, 90% by 2035 (from 38% in 2020).*
↓ 16.5 Gt

KR 2.2 Solar and Wind
Solar and wind are cheaper to build and operate than emitting sources in 100% of countries by 2025 (up from 67% in 2020).

KR 2.3 Storage
Electricity storage is below $50 per kWh for short duration (4–24 hours) by 2025, $10 per kWh for long duration (14–30 days) by 2030.

KR 2.4 Coal and Gas
No new coal or gas plants after 2021; existing plants to retire or zero out emissions by 2025 for coal and by 2035 for gas.*

KR 2.5 Methane Emissions
Eliminate leaks, venting, and most flaring from coal, oil, and gas sites by 2025.
↓ 3 Gt

KR 2.6 Heating and Cooking
Cut gas and oil for heating and cooking in half by 2040.*
↓ 1.5 Gt

KR 2.7 Clean Economy
Reduce reliance on fossil fuels and increase energy efficiency to quadruple clean energy productivity rate (GDP ÷ fossil fuel consumption) by 2035.

**This is the timeline for developed countries. For developing countries, this key result is expected to take more time (5-10 years).*

3 Fix Food

Reduce agricultural emissions from 9 gigatons to 2 gigatons by 2050.

KR 3.1 Farm Soils
Improve soil health through practices that increase carbon content in topsoils to a minimum of 3%.
↓ 2 Gt

KR 3.2 Fertilizers
Stop the overuse of nitrogen-based fertilizers and develop greener alternatives to cut emissions in half by 2050.
↓ 0.5 Gt

KR 3.3 Consumption
Promote lower-emissions proteins, cutting annual consumption of beef and dairy 25% by 2030, 50% by 2050.
↓ 3 Gt

KR 3.4 Rice
Reduce methane and nitrous oxide from rice farming by 50% by 2050.
↓ 0.5 Gt

KR 3.5 Food Waste
Lower the food waste ratio from 33% of all food produced to 10%.
↓ 1 G

4 Protect Nature

Go from 6 gigatons of emissions to -1 gigatons by 2050.

KR 4.1 Forests
Achieve net-zero deforestation by 2030; end destructive practices and logging in primary forests.
↓ 6 Gt

KR 4.2 Oceans
Eliminate deep-sea bottom trawling and protect at least 30% of oceans by 2030, 50% by 2050.
↓ 1 Gt

KR 4.3 Lands
Expand protected land from 15% today to 30% by 2030, 50% by 2050.

5 Clean Up Industry

Reduce 12 gigatons of industrial emissions to 4 gigatons by 2050.

KR 5.1 Steel
Reduce total carbon intensity of steel production 50% by 2030, 90% by 2040.
↓ 3 Gt

KR 5.2 Cement
Reduce total carbon intensity of cement production 25% by 2030, 90% by 2040.
↓ 2 Gt

KR 5.3 Other Industries
Reduce emissions from other industrial sources (i.e., plastics, chemicals, paper, aluminum, glass, apparel) 80% by 2050.
↓ 2 Gt

6 Remove Carbon

Remove 10 gigatons of carbon dioxide per year.

KR 6.1 Nature-Based Removal
Remove at least 1 gigaton per year by 2025, 3 gigatons by 2030, and 5 gigatons by 2040.
↓ 5 Gt

KR 6.2 Engineered Removal
Remove at least 1 gigaton per year by 2030, 3 gigatons by 2040, and 5 gigatons by 2050.
↓ 5 Gt

Accelerants

7 Win Politics and Policy

KR 7.1 Commitments
Each country enacts a national commitment to reach net-zero emissions by 2050, and gets at least halfway there by 2030*.

KR 7.1.1 Power
Set an electricity sector requirement to cut emissions 50% by 2025, 80% by 2030, 90% by 2035, and 100% by 2040.

KR 7.1.2 Transportation
Decarbonize all new cars, buses, and trucks by 2035; freight ships by 2030; semi trucks by 2045; and make 40% of flights carbon neutral by 2040.

KR 7.1.3 Buildings
Enforce zero-emissions buildings standards for new residential by 2025, commercial by 2030, and prohibit sales of nonelectric equipment by 2030.

KR 7.1.4 Industry
Phase out fossil fuel use for industrial processes at least halfway by 2040, and completely by 2050.

KR 7.1.5 Carbon Labeling
Require emissions-footprint labels on all goods.

KR 7.1.6 Leaks
Control flaring, prohibit venting, and mandate prompt capping of methane leaks.

KR 7.2 Subsidies
End direct and indirect subsidies to fossil fuel companies and for harmful agricultural practices.

KR 7.3 Price on Carbon
Set national prices on greenhouse gases at a minimum of $55 per ton, rising 5% annually.*

KR 7.4 Global Bans
Prohibit HFCs as refrigerants and ban single-use plastics for all nonmedical purposes.

KR 7.5 Government R&D
Double (at minimum) public investment into research and development; increase it fivefold in the United States.

**This is the timeline for developed countries. For developing countries, this key result is expected to take more time (5-10 years).*

8 Turn Movements Into Action

KR 8.1 Voters
The climate crisis is a top-two voting issue in the twenty top-emitting countries by 2025.

KR 8.2 Government
A majority of government officials—elected or appointed—will support the drive to net zero.

KR 8.3 Business
100% of Fortune Global 500 companies commit immediately to reach net zero by 2040.

KR 8.3.1 Transparency
100% of these companies publish transparency reports of their emissions by 2022.

KR 8.3.2 Operations
100% of these companies achieve net zero in their operations (electricity, vehicles, and buildings) by 2030.

KR 8.4 Education Equity
The world achieves universal primary and secondary education by 2040.

KR 8.5 Health Equity
Eliminate the gaps among racial and socio-economic groups in greenhouse gas-related mortality rates by 2040.

KR 8.6 Economic Equity
The global clean energy transition creates 65 million new jobs, equitably distributed and outpacing the loss of fossil-fuel jobs

9 Innovate!

KR 9.1 Batteries
Produce 10,000 GWh of batteries yearly at less than $80 per kWh by 2035.

KR 9.2 Electricity
Cost of zero-emission baseload power reaches $0.02 per kWh, with peak-demand power reaching $0.08 per kWh by 2030.

KR 9.3 Green Hydrogen
Cost of producing hydrogen from zero-emissions sources drops to $2.0 per kg by 2030, $1.0 per kg by 2040.

KR 9.4 Carbon Removal
Cost of engineered carbon dioxide removal falls to $100 per ton by 2030, $50 per ton by 2040.

KR 9.5 Carbon-Neutral Fuels
Cost of synthetic fuel drops to $2.50 per gallon for jet fuel and $3.50 for gasoline by 2035.

10 Invest!

KR 10.1 Financial Incentives
Increase global government subsidies and support for clean energy from $128 billion to $600 billion.

KR 10.2 Government R&D
Increase public-sector funding of energy R&D from $7.8 billion to $40 billion a year in the U.S.; other countries should aim to triple current funding.

KR 10.3 Venture Capital
Expand investment of capital into private companies from $13.6 billion to $50 billion per year.

KR 10.4 Project Financing
Increase zero-emissions project financing from $300 billion to $1 trillion per year.

KR 10.5 Philanthropic Investing
Increase philanthropic dollars from $10 billion to $30 billion per year.