# Key Mitigation Options to Close the Global 2030 Ambition and Action Gap

#### **Publication**

Report

### Citation

Fuentes Hutfilter, U.; Attard, M.; Wilson, R.; Ganti, G; Fyson, C.; Duwe, M.; Böttcher, H. (2020). Background Paper: Key mitigation options to close the global 2030 ambition and action gap. CLIMATE CHANGE 27/2020. German Environment Agency, Dessau-Roßlau.

Achieving the Paris Agreement Long-term temperature goal (PA LTTG) requires closing the 2030 ambition and action gap between emissions levels consistent with the Paris Agreement and emissions levels projected with current targets and policies. G20 countries have a crucial role to play in realising increased climate policy ambition, given their economic power and prosperity, as well as their influence on investments, technology deployment and financial flows. This briefing paper provides an overview of mitigation options that have been analysed in recent literature and that can contribute to closing the emissions gap in 2030. This provides the basis to identify key policy areas and promising options for intergovernmental cooperation between the G20 nations, as well as possibly other relevant actors.

# Language

**English** 

## **Authorship**

### **Matthias Duwe**

Ursula Fuentes Hutfilter (Climate Analytics Australia)
Marie-Camille Attard (Climate Analytics)
Ryan Wilson (Climate Analytics)
Gaurav Ganti (Climate Analytics)
Claire Fyson (Climate Analytics)
Hannes Böttcher (Öko-Institut)

## **Funding**

German Environment Agency (UBA), Germany

## **Published by**

German Environment Agency (UBA), Germany

### Year

#### **Dimension**

28 pp.

#### ISSN

1862-4804

## **Project**

Accelerating Global Climate Action before 2030

## **Project ID**

3590

#### Table of contents

- 1 Introduction
- 2 Mitigation pathways in line with the Paris Agreement
- 3 Mitigation measures for key transformational strategies
- 3.1 Strategies for transformational change
- 3.2 Decarbonising energy systems: Sectoral and cross-sectoral mitigation options
- 3.2.1 Electrification and sector coupling
- 3.2.2 Power generation: benchmarks for renewable energy uptake and fossil fuel phase out
- 3.2.3 Fossil Fuel Production: Closing the production gap
- 3.2.4 Decarbonise transport: reduce demand, enable modal shift, emissions standards and electrification
- 3.2.5 Move to (near) zero emissions buildings: Efficiency and Renewable energy
- 3.2.6 Industry: Energy and material efficiency and decarbonisation
- 3.3 Land use: stopping deforestation, managing competing demands
- 3.3.1 Agriculture: Supply side and demand side measures
- 3.3.2 Land management: Reducing emissions from deforestation and land degradation
- 4 Role of G20 and multilateral cooperation
- 4.1 Ambition gap in G20 countries
- 4.2 How to close the ambition gap in G20 countries? Recommendations
- 4.2.1 Energy: Phasing out fossil fuels and accelerating renewable energy uptake

- 4.2.2 Transport: Strengthening standards and banning internal combustion engine vehicles
- 4.2.3 Buildings: G20 countries can lead towards zero emissions buildings
- 4.2.4 Industry: G20 countries can lead on transformational approaches to net zero emissions
- 4.2.5 Agriculture: G20 countries are key for demand and supply side mitigation
- 4.2.6 Land management: G20 countries need to address drivers for deforestation and degradation 4.3 Options for Multilateral Cooperation
- 4.4 Summary: overview of key mitigation options to close the global 2030 gap relevant for G20 countries
- 5 Conclusions

# Keywords

Climate
Climate Foreign Policy
Foreign Policy
climate diplomacy, Paris Agreement, G20, G7, energy transition

**Source URL:** https://www.ecologic.eu/17619