Climate Transparency

COMPARING G20 CLIMATE ACTION: MITIGATION

PARIS AGREEMENT

Hold the increase in the global average temperature to well below 2°C above pre-industrial levels and pursue efforts to limit the temperature increase to 1.5°C above pre-industrial levels, recognising that this would significantly reduce the risks and impacts of climate change.

THE G20 ARE NOT ON TRACK FOR A 1.5°C WORLD

1.5°C

The 2015 **NDCs would lead to 2.7°C** or higher global temperature increases

Global net CO_2 emissions need to be 45% below 2010 levels by 2030 and reach net-zero by 2050

G20 members **need to update NDC targets** to reflect highest possible ambition in 2020/21

G20 TRENDS SHOW PROGRESS IN KEY SECTORS

G20 Emissions Intensity of the Power Sector 2014-2019 (CO_2 emissions per kWh – % change)

IDN	KOR	SAU	TUR	MEX	RUS	FRA	ZAF	G20	AUS	CHN	CAN	ITA	JPN	IND	ARG	USA	EU	GER	BRA	UK
10%	0%	-2%	-3%	-4%	-7%	-7%	-10%	-10%	-11%	-11%	-12%	-12%	-14%	-16%	-18%	-18%	-21%	-23%	-47%	-51%

G20 Growth in Share of Renewables in Power Generation (incl. large hydro) 2014-2019 (% change)

ITA	ARG	CAN	MEX	IDN	RUS	BRA	CHN	EU	G20	FRA	IND	AUS	USA	JPN	GER	TUR	UK	KOR	ZAF	SAU
-5%	3%	3%	3%	8%	8%	14%	16%	19%	20%	21%	27%	30%	37%	45%	48%	77%	85%	107%	158%	1521%

G20 Transport Emissions per capita (exl. aviation) 2013-2018 (tCO_2e/capita – % change)

TUR	IND	CHN	KOR	EU	G20	GER	USA	AUS	UK	IDN	FRA	MEX	JPN	ITA	CAN	RUS	ARG	ZAF	BRA	SAU
38%	26%	23%	14%	7%	6%	4%	4%	2%	2%	2%	-2%	-3%	-5%	-5%	-5%	-6%	-6%	-6%	-11%	-25%

G20 Aviation Emissions per capita 2012-2017 (tCO_2e/capita – % change)

TUR	CHN	IND	ARG	SAU	MEX	KOR	ZAF	IDN	G20	USA	JPN	EU	AUS	GER	ITA	CAN	UK	FRA	BRA	RUS
232%	59%	38%	34%	33%	29%	28%	27%	27%	19%	17%	14%	13%	11%	10%	10%	3%	1%	0%	-13%	-23%

G20 Building Sector Emissions per capita 2014-2019 (tCO_2e/capita – % change)

CHN	RUS	IDN	KOR	IND	G20	TUR	FRA	ZAF	ITA	JPN	MEX	CAN	AUS	EU	SAU	USA	ARG	GER	UK	BRA
34%	17%	14%	9%	9%	2%	-1%	-1%	-1%	-3%	-4%	-6%	-8%	-11%	-11%	-12%	-13%	-17%	-17%	-27%	-37%

G20 Emissions Intensity of Industry 2011-2016 (tCO_2e/USD 2015 GVA – % change)

ARG	BRA	SAU	RUS	ZAF	IDN	CAN	MEX	GER	FRA	G20	KOR	IND	EU	USA	JPN	TUR	AUS	ITA	CHN	UK
16%	11%	6%	4%	1%	-1%	-10%	-10%	-10%	-10%	-12%	-12%	-12%	-15%	-16%	-17%	-18%	-20%	-20%	-28%	-29%

2019 TURNING POINTS

CO_2 energy-related emissions down 0.1% in 2019

- Carbon-intensity of primary energy supply **-0.8%**
- Coal consumption **-2%**
- CO_2 emissions from the power sector **-2.4%**
- **27%** of power generated from RE, compared to 25% in 2018
- Energy-related CO_2 emissions from the agriculture sector **-0.5%**

2019 STICKING POINTS

Fossil fuels still 81.5% of primary energy | transport, industry, and building sectors require more urgent action

- Consumption grew in Gas **+3%** and Oil **+1%**
- CO_2 emissions from the transport sector **+1.5%**
- CO_2 emissions from the building sector **+0.9%** in 2019
- CO_2 emissions from the industry sector **+1.2%**

KEY POLICY OPPORTUNITIES FOR ENHANCED MITIGATION

Countries scoring: Low Medium High Frontrunner

RENEWABLE ENERGY: POWER GENERATION MUST BE DECARBONISED BY 2050
Brazil, Germany, and the UK have ambitious renewable energy policies but no G20 member has 1.5°C compatible targets. Australia, Mexico, USA, and Canada do not have policies in place to increase renewables.

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COAL PHASE-OUT: COAL USE NEEDS TO PEAK IN 2020, THEN PHASE OUT RAPIDLY
Canada, France, Italy, and the UK have 1.5°C compatible coal phase-out dates targets (by 2030 or earlier), Germany follows with a phase out date of 2038.

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FOSSIL FUEL CAR PHASE-OUT: LAST FOSSIL FUEL CAR TO BE SOLD IN 2035
The UK is in the process of setting a 2030 target for the last sale of a fossil fuel car, followed by Canada and France with a 2040 target, and Japan 2050. Australia and Russia have no policies in place.

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HEAVY-DUTY VEHICLE DECARBONISATION: SWITCH TO LOW-CARBON FUELS BY 2050
No countries have ambitious policies for decarbonising heavy-duty vehicles.

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MODAL SHIFTING (GROUND) TRANSPORT: SWITCH TO LOW-CARBON ALTERNATIVES
No countries have ambitious policies with long-term strategies for modal shifting in ground transport. Australia has no policies in place.

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NEAR-ZERO ENERGY NEW BUILDINGS: NEAR-ZERO BY 2020 (OECD) & 2025 (NON-OECD)
France, Italy, and Germany are frontrunners (1.5°C compatible policies) and 7 G20 countries have high ambition policies in place. Only Russia and Argentina have no policies.

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RETROFIT EXISTING BUILDINGS: ANNUAL RENOVATION RATE OF 5% (OECD) & 3% (NON-OECD) BY 2020
No G20 countries have 1.5°C compatible policies for retrofitting existing buildings. The EU, Germany, and France are leading with high ambition policies.

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INDUSTRY ENERGY EFFICIENCY: EFFIECIENY POLICES ACROSS INDUSTRY
Italy and Japan are frontrunners. Germany and India follow with high ambition policies.

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(NET) DEFORESTATION: ZERO DEFORESTATION BY 2020S & INCREASING FOREST COVERAGE
China, EU, and Mexico have the most ambitious policies but not yet 1.5°C compatible.

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