Climate Transparency

CLIMATE TRANSPARENCY REPORT AND INDONESIA PROFILE 2021

Jakarta, 28 October 2021

Climate Transparency

This Highlights Report is part of the Climate Transparency Report 2021. Find the G20 country profiles at **www.climate-transparency.org**

Climate Transparency is a global partnership with a shared mission to stimulate a "race to the top" in climate action in G20 countries through enhanced transparency.

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CLIMATE AMBITION: RAISED AMBITION, BUT THE G20 IS NOT ON TRACK FOR A 1.5°C WORLD

G20 members need to urgently strengthen climate action

RAISED AMBITION REDUCING THE GAP: NET ZERO TARGETS

	Law	Policy Document	No target
Net zero target covers all GHGs	Canada, EU, France, Japan, UK	USA, China (2060)	Australia, India, Mexico, Russia, Saudi Arabia, Turkey
No detail in net zero target on which GHGs are covered	Germany (2045), South Korea	Argentina, Brazil, Italy, South Africa, Indonesia (2060)	

No international offsets* Unclear or undecided International offsets* included

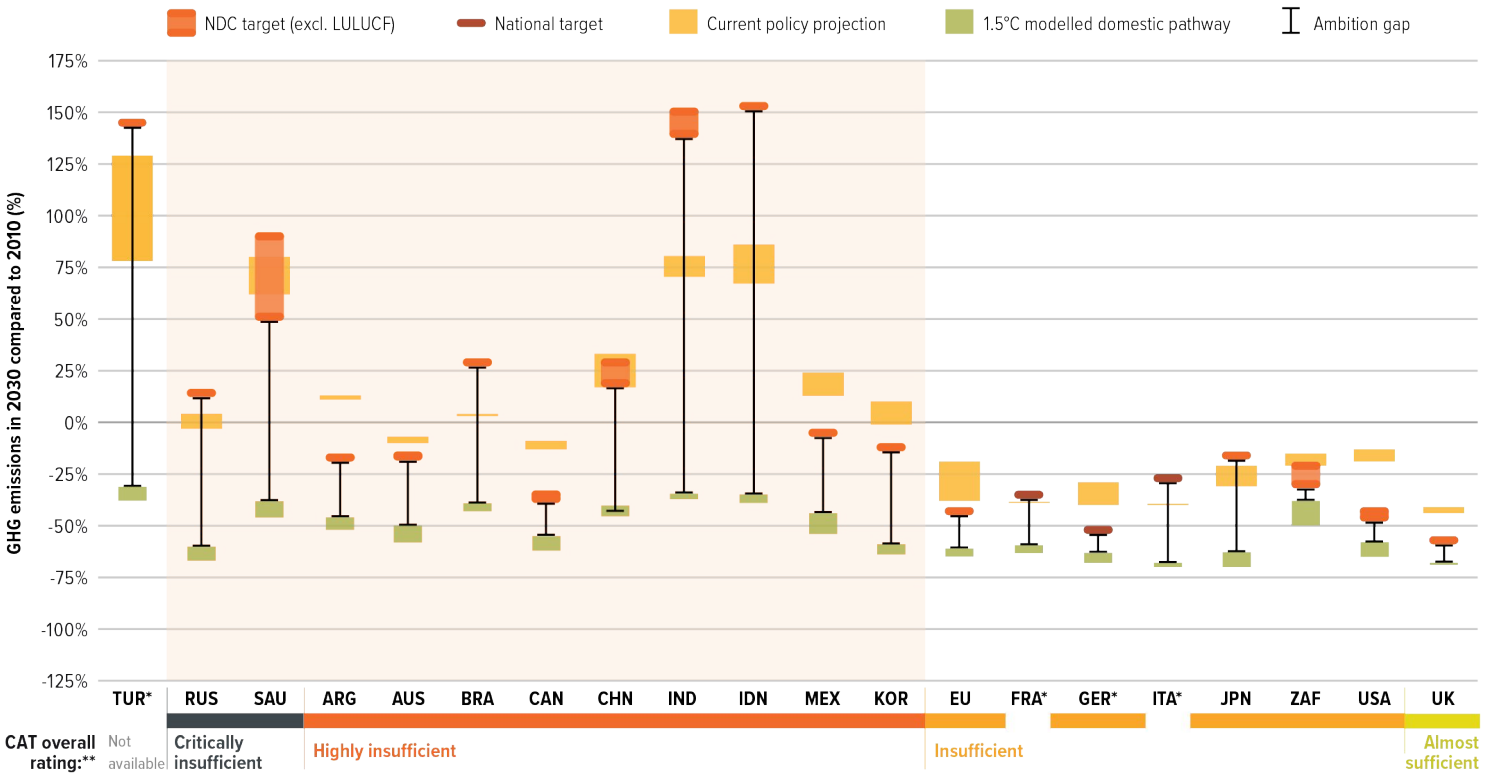
*Reductions or removals outside of own borders. Note: 11 of the G20 members have a net zero target year of 2050, excl. China, Germany, and Indonesia.

By August 2021, 14 G20 members have submitted net zero targets (61% of global GHGs).

Seven G20 members have enshrined their target in law (14% of global GHGs).

More ambitious near-term targets are needed to reach mid-century net zero targets.

BUT THE G20 IS NOT YET ALIGNED WITH A 1.5C PATHWAY



**France, Italy, and Germany - 'national targets'.*

The `Ambition gap' is the gap between the NDC and the 1.5°C compatible range as modelled by the 1.5°C National Pathways Explorer and derived from eleven global models of the IPCC special report on 1.5°C. More detail at http://1p5ndc-pathways.climateanalytics.org/about/

The CAT rating here is a new overall rating that combines several separately rated elements of policies and actions, domestic and internationally supported targets, `fair-share' target and contribution to climate finance. Detailed assessments and explanation of methodology at http://www.climateactiontracker.org/countries

All NDC announcements assessed by April 2021 leave a significant **emissions gap of around 23 GTCO2e** from a 1.5ºC pathway, leading to a 2.4ºC world in 2100.

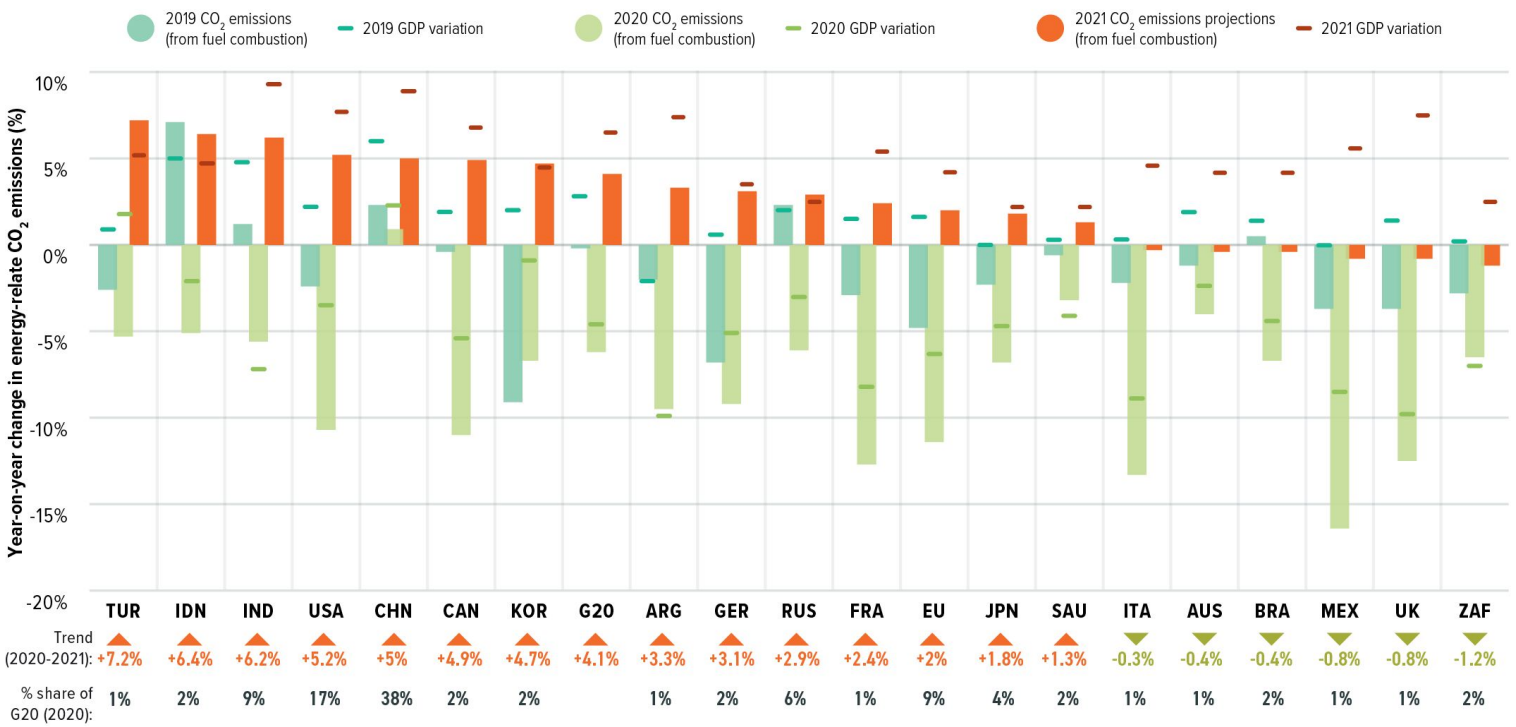
If the G20 aligned targets and policies with 1.5ºC pathways, this gap could be reduced by 64% and temperatures could be limited to 1.7C.

Most G20 members fall into the **'highly insufficient'** or **'critically insufficient'** group of CAT's new rating system.

HIGHER TEMPERATURES INCREASE CLIMATE RISK

Even if we meet 1.5°C, and certainly if we exceed it, **the G20 will be exposed to even greater than-average weather- and climate-related impacts** such as severe water scarcity or droughts, more days with extreme high temperatures and agricultural impacts

BUT CO2 EMISSIONS ARE REBOUNDING TO PEAK LEVELS

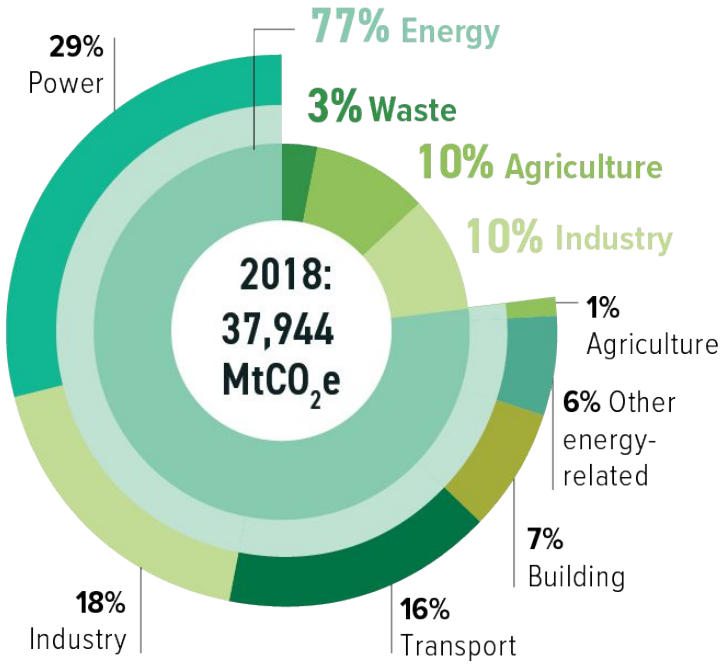


In 2020, CO_2 emissions declined by 6%. In 2021, they are however projected to rebound by 4% across the G20.

In OECD G20 members, the rebound will not fully offset the decline, despite the USA's significant rebound of 5%.

In non-OECD G20 members, 2019 emissions levels, however, will be exceeded in **Argentina, China, India and Indonesia** – these countries accounted for almost half of the G20's energy related CO_2 emissions in 2020.

DEEP AND FAST EMISSIONS CUTS REQUIRED ACROSS ALL SECTORS

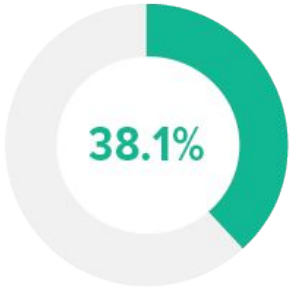


The power generation, industry and transport sectors produce the majority of GHG emissions in the G20.

The transformation of all sectors is pivotal to achieving net zero CO_2 emissions by around 2050 as well as decreases in all GHG emissions rapidly thereafter, including actions to maintain and expand critical global carbon sinks such as forests.

POWER: COAL PHASE-OUT URGENT WHILST RENEWABLES GROW THROUGH THE PANDEMIC

G20 energy-related CO_2 emissions – power sector (2020)



Annual Growth rate:

-5.3% in 2020

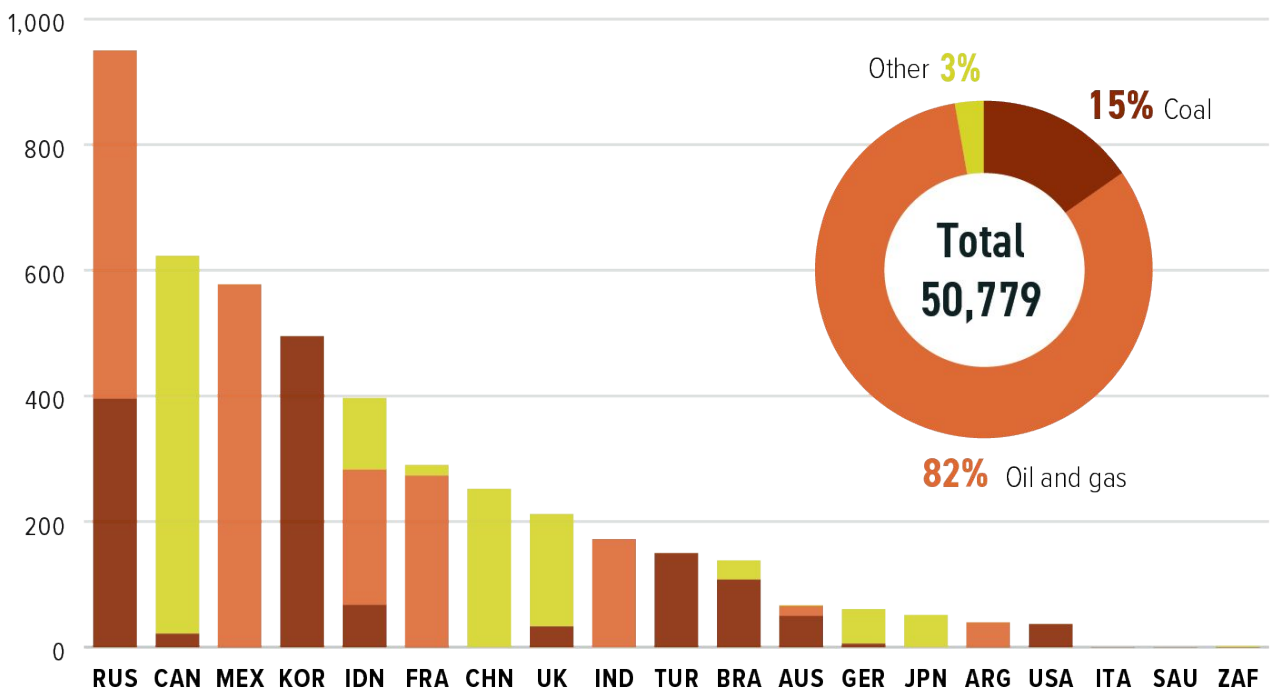
-1.9% in 2019

+1.3% 2009-2018

In 2020, CO_2 emissions in the power sector **decreased by 5%** due to reduced energy demand during the pandemic. However, emissions are **projected to rebound by 5%** in 2021, compared to 2020, due to demand for coal, oil and gas returning to ”normal”.

The G20's emissions intensity has been decreasing from 2015-2020, but G20 members including Australia, China, India, Indonesia, Saudi Arabia and South Africa registered above G20 average levels in 2020.

PUBLIC FINANCE FOR FOSSIL FUELS



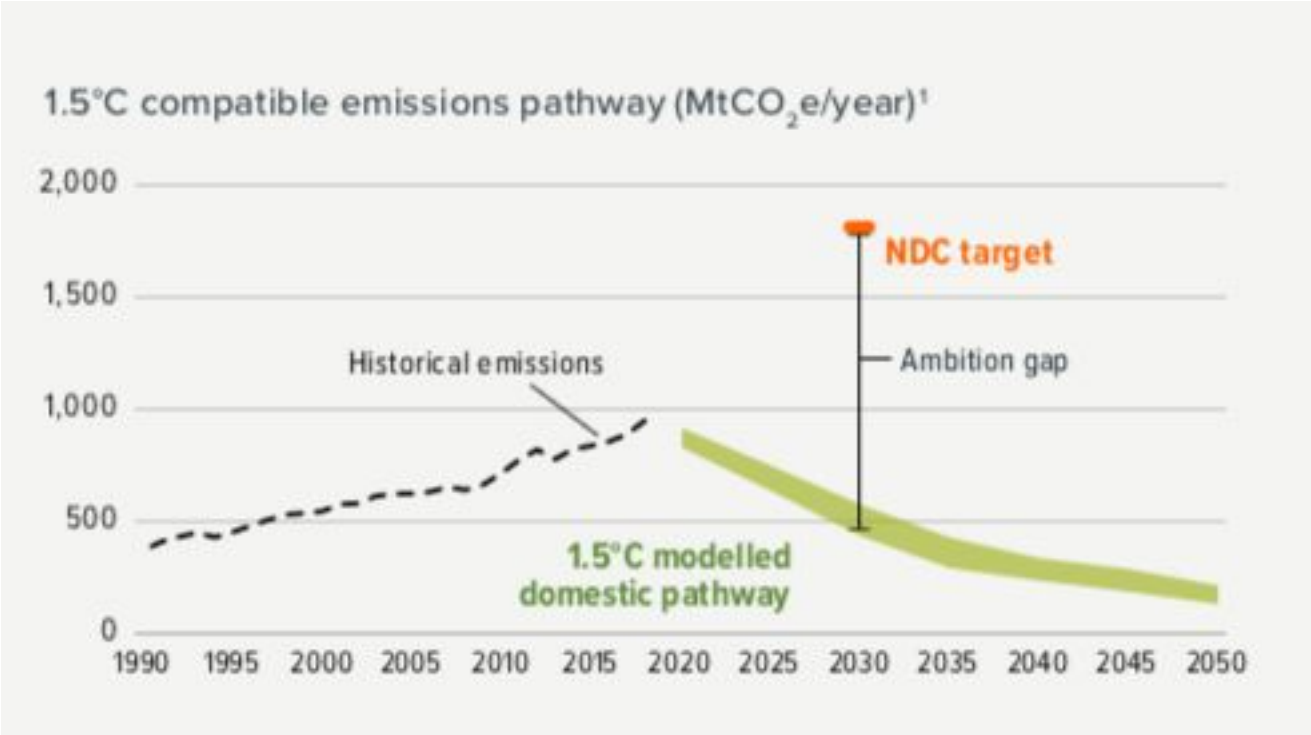
INTERNATIONAL PUBLIC FINANCE FOR FOSSIL FUELS CONTINUES

During 2018-19, G20 members provided USD 50.7bn per year of public finance for fossil fuels. Over three-quarters of this financing was for oil and gas. The highest providers of public finance were Japan (USD 10.3bn/yr), China (just over USD 8bn/yr), and Korea (just under USD 8bn/yr).

INTERNATIONAL CLIMATE FINANCE IS STILL LACKING

At the G7 Summit in July 2021, the USA, the UK, Canada, France, Germany, Italy and Japan reaffirmed their commitment to the USD 100bn through 2025. **Yet many estimates suggest we are still falling short of the target and countries are not doing their 'fair-share'.**

INDONESIA NOT ON TRACK FOR A 1.5°C WORLD



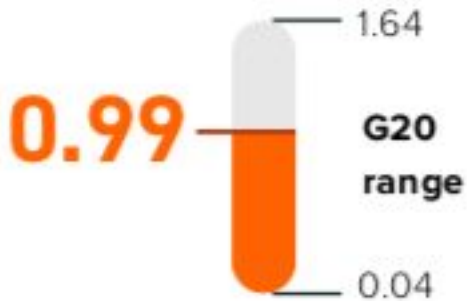
Indonesia's unconditional NDC target would **increase emissions to 535% above 1990 levels**, or approximately 1,817 MtCO2e, by 2030.

To keep below the 1.5℃ temperature limit, **Indonesia's 2030 emissions would need to be around 461 MtCO2e** (or 61% above 1990 levels), an ambition gap of 1,168 MtCO2e.

SOCIO-ECONOMIC CONTEXT

Death rate attributable to air pollution

Ambient air pollution attributable death rate per 1,000 population per year, age standardised in 2019



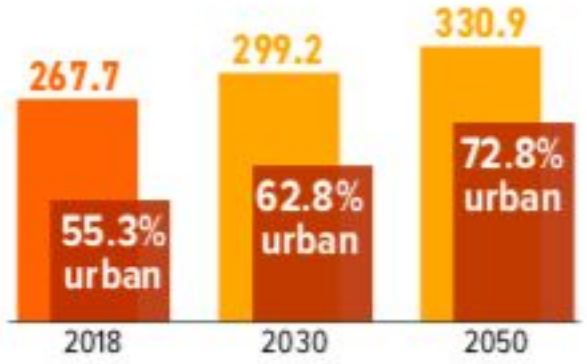
Over 168,300 people die in Indonesia every year as a result of outdoor air pollution due to stroke, heart disease, lung cancer and chronic respiratory diseases. Compared to total population, this is still one of the lower levels in the G20.

Institute for Health Metrics and Evaluation, 2020

This source differs from the source used in last year's profiles and, therefore, the data are not comparable.

Population and urbanisation projections

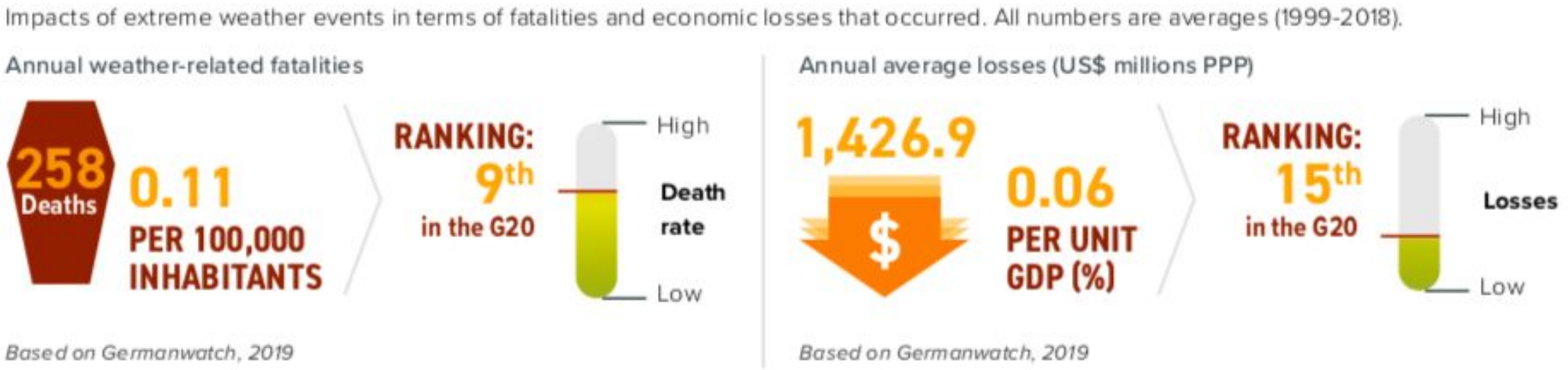
(in millions)



Indonesia's population is projected to increase by 24% by 2050, and become more urbanised.

United Nations, 2019; United Nations, 2018

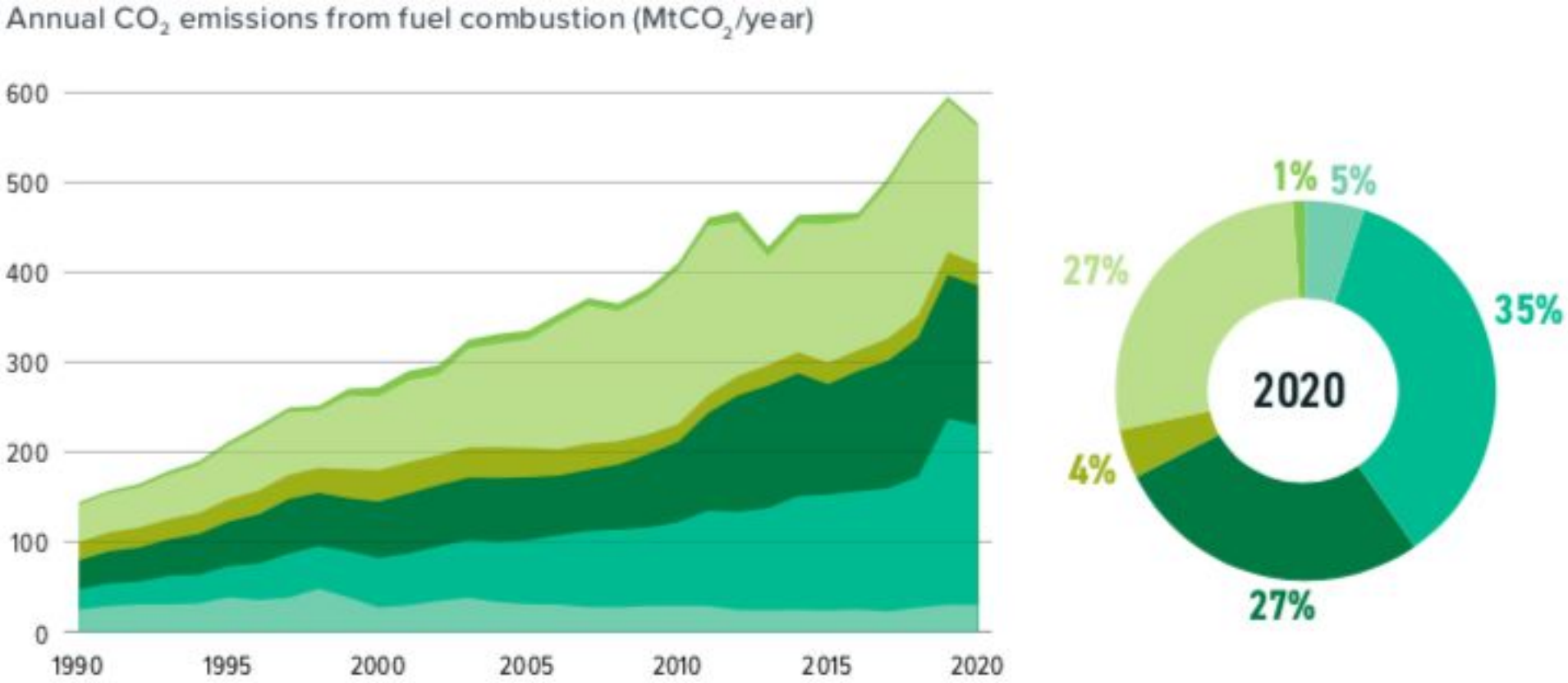
INDONESIA IS VULNERABLE TO THE ADVERSE IMPACTS OF CLIMATE CHANGE



Rice production is particularly vulnerable to climate change as global changes in El Niño patterns are likely to impact the onset and length of the wet season.

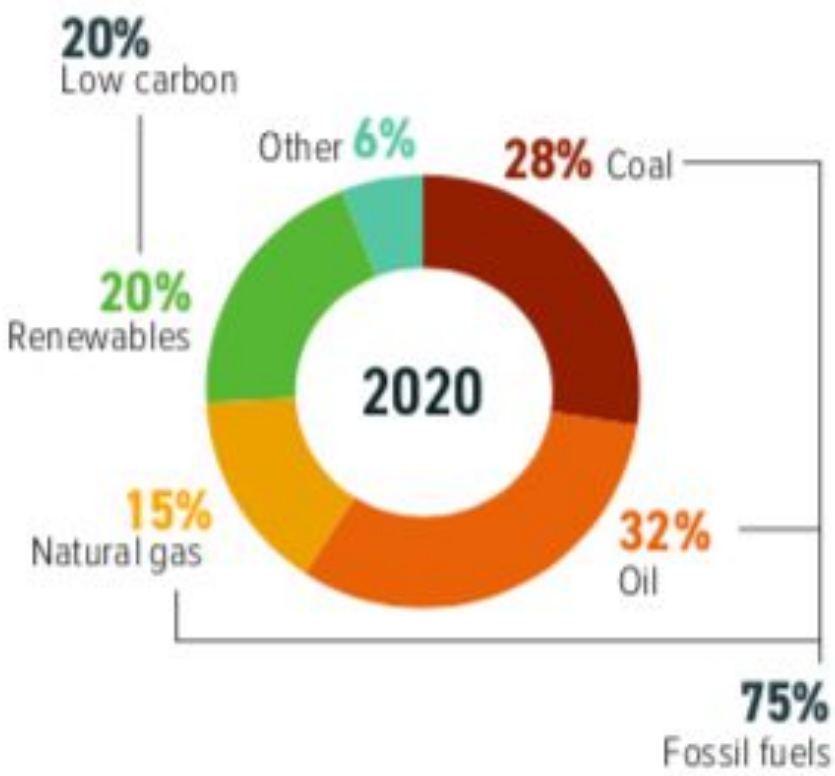
A World Bank global risk analysis ranks Indonesia as twelfth out of 35 countries facing a relatively high mortality risk, with **high exposure to flooding, and extreme heat.**

GHG EMISSIONS HAVE INCREASED BY 157% BETWEEN 1990-2018, CONTRIBUTED BY FUEL COMBUSTION



The largest driver of overall GHG emissions are CO2 emissions from fuel combustion. In Indonesia, emissions have increased significantly since 1990, reaching a high of 620 MtCO2 in 2018. The power sector is, at 35% the largest contributor, followed by transport and industry at 27% each.

ENERGY MIX IS STILL DOMINATED BY FOSSIL FUEL



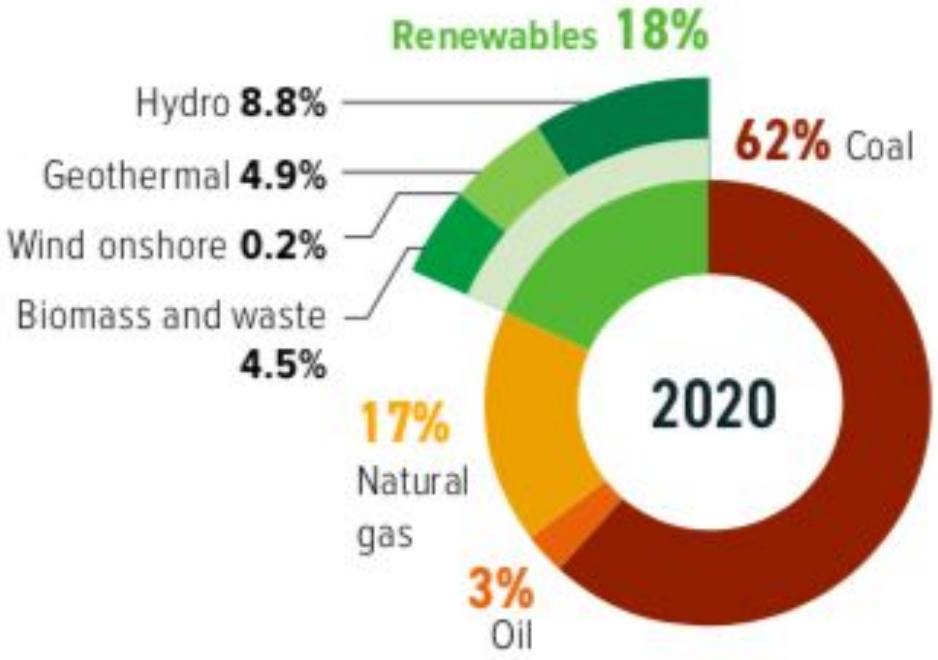
Fossil fuels (oil, coal, and gas) make up 75% of the Indonesia energy mix, which is lower the G20 average of 82%.

Although the share of total fossil fuels in the energy mix is decreasing slowly, **coal remains the predominant fossil fuel in the mix** and, as a share thereof, has continued to increase.

The share of fossil fuels globally needs to fall to 67% of global total primary energy by 2030 and to 33% by 2050, and to substantially lower levels without carbon capture and storage (CCS).

Renewables (excl. traditional residential use of biomass) account for 20% of the energy supply.

ELECTRICITY GENERATION MIX IS DOMINATED BY COAL



Indonesia **generated 82% of its electricity from fossil fuels in 2020.** Indonesia's power mix is dominated by coal (62%)

The share of renewable energy in Indonesia's power sector has been increasing, accounting for approximately 18% of the power mix in 2020 but below the G20 average of 29%.

Worldwide, coal use for power generation needs to peak by 2020, and between 2030 and 2040, all the regions of the world need to phase out coal-fired power generation.

Electrification of the transport sector is needed to reduce emissions

Emissions from transport account for 27% of Indonesia's energy related CO2 emissions as the sector was dominated by fossil fuels in 2019. **Biofuels (7%) is the only fuel in the energy mix for transport, other than oil.**

The share of low-carbon fuels in the transport fuel mix globally must increase to **between 40% and 60% by 2040** and **70% to 95% by 2050.**

KEY OPPORTUNITIES FOR RAISING CLIMATE AMBITIONS

Phasing out fossil fuel subsidies will help it expedite the energy transition.

Scaling up the use of electric vehicles (EVs) and sustainable biofuels.

To achieve carbon neutrality, the share of renewables in the primary energy mix must be dramatically increased.

Click and Find the Climate Transparency Report 2021 and Indonesia Profile at

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