

## Energy emissions on decline as renewables grow across G20 Recovery spending for coal, oil and gas risks reversing positive pre-COVID trends

As the world's leading economies are directing trillions of dollars towards COVID-19 recovery packages, a significant proportion is going to fossil fuel industries without climate conditions, risking clean energy opportunities in the coming decade. This is one of the key findings of the 2020 Climate Transparency Report, an annual collaboration between 14 think tanks and NGOs across G20 countries. The 2020 edition assesses the climate performance of G20 countries and includes analysis of the emissions impacts of the COVID-19 crisis and governments' responses.

2019 has seen a remarkable departure from the long-term growth trend in energy-related emissions and a stable expansion of renewables in the G20. But researchers caution that by providing unconditional support to fossil fuels, governments recovery responses risk reversing, instead of locking in, positive pre-COVID trends.

At least 19 of the G20 countries have chosen to provide financial support to their domestic oil, coal and/or gas sectors and 14 countries bailed out their national airline companies without climate conditions attached. Only four G20 countries provided more funding to green sectors compared to fossil fuel or other emissions-intensive industries.

"The recovery packages can solve the climate crisis or make it worse," says Dr. Charlene Watson of the Overseas Development Institute. "Some G20 members like the EU, France or Germany are setting mostly a good example for building more resilient economies whilst shielding themselves against the accelerating climate impacts. Others direct too much support to fossil fuels, putting at risk positive recent developments."

### Key figures:

- In 2019, **energy-related CO<sub>2</sub> emissions** declined in G20 countries for the first time due to climate policies rather than due to external shocks (such as the 2008/09 financial crisis), namely by 0.1%, down from a 1.9% growth in 2018.
- Due to the impacts of the pandemic, G20 energy-related CO<sub>2</sub> emissions are projected to be 7.5% lower by the end of 2020 compared with 2019. Most notably, **global aviation emissions** collapsed this year.
- The share of **renewable energy in power generation** increased in 19 of the G20 countries in 2019, accounting for 27% of power generation in the G20. It is projected to continue increasing in all G20 countries and will likely make up almost 28% of power generation in 2020.
- **Coal consumption** decreased by 2%. Notably, only five G20 members have set targets to phase out coal.
- Growth in **building emissions** slowed in 2019 (+0.9%) compared to 2018 (+3.2%).
- Emissions in **transport** (+1.5%) and **industry** (+1.2%) both saw continued growth in the G20 in 2019.

"Before the pandemic hit, results of climate action were coming to fruition in some energy-related sectors and the crisis consolidated those trends in the majority of the G20 countries," says Jorge Villarreal of Iniciativa Climática de México. "But without further climate action these effects will be temporary and concentrations of CO<sub>2</sub> in the atmosphere continue to rise. The political choices in the coming months will determine whether G20 countries manage to sustainably bend the emissions curve."

With China, South Africa, Japan and South Korea the most recent to join the race to carbon neutrality by mid century, the report finds that the momentum behind tougher climate targets among the world's largest emitters is building. However, short-term policy frameworks and investments are not yet consistent with long-term plans.

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This is despite the fact that climate-related weather extremes such as heat waves, wildfires and flooding will become more severe in G20 countries as global warming approaches the 1.5°C mark. Among G20 members, Australia, Brazil, France, Italy, Mexico, Turkey, India, Saudi Arabia and South Africa risk greater exposure to climate-related impacts compared to global projections at 1.5°C.

The analysis also identifies critical differences in how governments are responding to the decarbonisation challenge. For instance, Japan, France, the UK and Canada all set target dates for phasing out fossil fuel cars, while in comparison, the Trump administration rolled back regulations aimed at reducing transport emissions. While 18 of the G20 countries are in the process of or have already implemented carbon-pricing schemes, Australia and India have no such plans. Further, while Canada, France, and the UK have introduced fully restricted public financing for coal, China, India, Indonesia, Russia and South Africa have no restrictions in place.

“We urgently need more ambition and leadership from the world’s biggest economies - and emitters - at the upcoming G20 Summit and next year’s UN Climate Conference” says Catrina Godinho from the HUMBOLDT-VIADRINA Governance Platform. “The US election result offers some hope for international climate politics, but all G20 countries will need to do their part.”

“The country profiles show what the G20 countries did - or did not do - in 2019 to protect the climate,” says Dr. Kim Coetzee of Climate Analytics. “Now governments must align current policies, investments and recovery efforts with their long-term emissions goals. This report enables leaders to take a broader view and to find inspiration and impetus to decarbonize the sectors where they risk being left behind.”

This year’s report analyses G20 countries’ performance across 100 indicators of climate adaptation, mitigation and finance. The 6<sup>th</sup> annual review by Climate Transparency includes an additional chapter dedicated to G20 government responses to the COVID-19 crisis and the latest emissions data and projections for 2020. The G20 represent 75% of global greenhouse gas emissions.

### **Media contacts:**

#### **Europe:**

- Stefan Küper, Germanwatch, +49 151 252 110 72, [kueper@germanwatch.org](mailto:kueper@germanwatch.org) (based in Germany)
- Ela Smith, Climate Analytics, +49 152 56124061, [ela.smith@climateanalytics.org](mailto:ela.smith@climateanalytics.org) (based in Germany)
- Aleksandra Zebrowska, HUMBOLDT-VIADRINA Governance Platform, +49 176 341 656 67, [azebrowska@governance-platform.org](mailto:azebrowska@governance-platform.org) (based in Germany)

#### **Africa:**

- Catrina Laura Godinho, HUMBOLDT-VIADRINA Governance Platform, +27 82 33 62 004, [cgodinho@governance-platform.org](mailto:cgodinho@governance-platform.org) (based in South Africa)

#### **Americas:**

- Alvaro Umaña, Co-Chair of Climate Transparency and Former Minister of Environment and Energy of Costa Rica, +1 301 537 5244, [alvaro.umana@gmail.com](mailto:alvaro.umana@gmail.com) (based in the US)
- Enrique Maurtua Konstantinidis, Fundación Ambiente y Recursos Naturales (FARN), +54 911 4070 0397, [prensa@farn.org.ar](mailto:prensa@farn.org.ar) (based in Argentina)

#### **Asia:**

- Gandabhaskara Saputra, Institute for Essential Service Reform, +62 21 22 32 30 69, [ganda@iesr.or.id](mailto:ganda@iesr.or.id) (based in Indonesia)

#### **Australia:**

- Matthew Hilton, +61 423 106 247, [matthew.hilton@gscnetwork.org](mailto:matthew.hilton@gscnetwork.org) (based in Australia)

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### **Notes to Editors**

Please find below a summary of key findings as well as a list of country spokespeople, contacts and quotes.

The summary report, in-depth country profiles for all G20 members and a technical note on data sources and methodology can be downloaded here after the embargo lifts:

<https://www.climate-transparency.org/q20-climate-performance/the-climate-transparency-report-2020>

### **About Climate Transparency**

Climate Transparency is a global partnership of 14 think tanks and NGOs that brings together experts from the majority of G20 countries. Our mission is to encourage ambitious climate action in the G20 countries: we inform policy makers and stimulate national debate.

### **About the Climate Transparency Report**

The Climate Transparency Report (previously known as „Brown to Green Report“) is the world’s most comprehensive annual review of G20 countries’ climate action and their transition to a net zero emissions economy. The independent, in-depth assessment draws on the latest analysis of international renowned data sets such as the OECD, World Bank, CAT and IEA, as well as qualitative data from leading global experts in the field.

The review is based on 100 indicators for adaptation, mitigation and finance compared against 1.5°C global benchmarks and aims to make good practices and gaps transparent. The summary report and 20 country profiles allow the report to be a clear reference tool for decision makers.

This year’s report consists of two parts: the annual policy assessment based on data of the previous year(s) is complemented by an analysis of the impacts of the COVID-19 crisis and recovery efforts on countries’ climate ambition.

## **Climate Transparency Report 2020: Key findings at a glance**

**COVID-19 impact on emissions:** G20 CO<sub>2</sub> emissions are projected to decrease by 7.5% in 2020

### **G20 recovery spending: too much support for fossil fuels**

- **18** G20 countries are providing some support to **green industries** (except *Saudi Arabia* and *Russia*)
- **10** G20 countries are providing support to the domestic **coal sector**
- **10** countries are providing support to the **gas sector**
- **9** countries are providing support to the **oil sector**
- **14** countries bailed out their **national airline companies** without conditions attached (only *France* has included conditions to its bailout)
- **7** countries are providing support to the **automobile industry** without conditions attached (only *Germany* and *France* are providing support with environmental conditions attached)

### **Vulnerability:** G20 COUNTRIES ARE EXPERIENCING THE IMPACTS OF CLIMATE CHANGE

- Between 1999 & 2018, G20 countries lost about **220,000 lives & USD 2.6tn** to extreme weather events
- **More severe impacts (compared to other countries)** are projected at 1.5°C for *Australia, Brazil, France, India, Indonesia, Italy, Mexico, Turkey, Saudi Arabia, and South Africa*

**Adaptation (2019): 19** G20 countries have **adaptation plans** (except *Saudi Arabia*)

**Mitigation (2019): the G20 are not on track for a 1.5°C world**

- **CO<sub>2</sub> energy-related emissions down 0.1% in 2019**
  - carbon-intensity of primary energy supply -0.8%
  - coal consumption -2%
  - CO<sub>2</sub> emissions from the power sector -2.4%
  - 27% of power generated from renewables, compared to 25% in 2018
  - CO<sub>2</sub> emissions from the building sector +0.9% in 2019
  - energy-related CO<sub>2</sub> emissions from the agriculture sector -0.5%
- **Fossil fuels still 81.5% of primary energy**
  - Consumption grows in Gas +3% and Oil +1%
  - CO<sub>2</sub> emissions from the transport sector +1.5%
  - CO<sub>2</sub> emissions from the industry sector +1.2%
- **Policy leaders and laggards**
  - **Renewable energy:** No country has 1.5°C aligned renewable energy targets. 16 G20 members have policies to increase renewable generation (except *Australia, Mexico, USA and Canada*)
  - **Coal:** Only *Canada, France, Italy*, and the *UK* have 1.5°C compatible coal phase out dates, 10 countries have policies in place to reduce coal consumption.
  - **Transport:** The *UK, Canada, Japan and France* have targets to phase out fossil fuel cars, *Australia* and *Russia* have no policies in place to reduce emissions from passenger vehicles. No countries have ambitious policies for decarbonising heavy-duty vehicles.
  - **Buildings:** *France, Italy and Germany* have 1.5°C compatible policies in place for new zero-energy buildings. *Russia* and *Argentina* do not have any policies in this area. No country has 1.5 compatible policies for retrofitting buildings.
  - **Energy efficiency:** *Italy* and *Japan* are frontrunners, *Germany* and *India* follow with high ambition policies.
  - **Deforestation:** *China, EU* and *Mexico* have the most ambitious policies but none of them are 1.5°C compatible.

**Finance (2019): G20 members are making progress on mitigating climate-related financial risks**

- **Financial policies:** 17 G20 countries have initiated discussions or are already implementing some form of green finance principles (except *India, Saudi Arabia* and *South Korea*)
- **Fossil fuel subsidies:** G20 countries directed USD 130bn in subsidies to coal, oil, and gas in 2019 (excluding *Saudi Arabia, Turkey* and the *UK*)
- **Carbon pricing:** 18 G20 countries implementing explicit carbon-pricing schemes (except *India* and *Australia*) but carbon prices remain lower than required to align with Paris goals
- **Public finance:** 13 G20 countries partially or fully restrict coal finance (except *China, India, Indonesia, Russia* and *South Africa*); 17 G20 members have no restrictions for oil & gas finance

## Spokespeople/partner quotes

<p><b>Alvaro Umaña</b>, Co-Chair of Climate Transparency</p> <p><u>Contact information:</u> +1 301 537 5244 <a href="mailto:alvaro.umana@gmail.com">alvaro.umana@gmail.com</a> Spanish, English, Portuguese</p>	<p>“The Climate Transparency Report contains brand new information on greenhouse gas emissions in 2020 and it highlights key elements of recovery programs, focusing on whether they support climate action or not.”</p>
<p><b>Prof. Dr. Peter Eigen</b>, Co-Chair of Climate Transparency</p> <p><u>Contact information:</u> +49 172 305 9009 <a href="mailto:peigen@transparency.org">peigen@transparency.org</a> German, English</p>	<p>“Transparency is an essential element of the Paris Agreement. Now, at this crucial time, when countries update their NDCs, their clarity and transparency need to be ensured. For the first time, the 2020 Climate Transparency Report contains recommendation how updated NDCs can be more transparent.”</p>
<p><b>Catrina Laura Godinho</b>, Project Coordinator of Climate Transparency HUMBOLDT-VIADRINA Governance Platform</p> <p><u>Contact information:</u> +27 82 33 62 004 <a href="mailto:cgodinho@governance-platform.org">cgodinho@governance-platform.org</a> English</p>	<p>“We urgently need more ambition and leadership from the world’s biggest economies - and emitters - at the upcoming G20 Summit and next year’s UN Climate Conference. The US election result offers some hope for international climate politics, but all G20 countries will need to do their part.” (In the Press Release)</p>
<p><b>Dr. Kim Coetzee</b>, Climate Policy Analyst, Climate Analytics</p> <p><u>Contact information:</u> +27 82 89 85 059 <a href="mailto:kim.coetzee@climateanalytics.org">kim.coetzee@climateanalytics.org</a> English</p>	<p>“The country profiles show what the G20 countries did - or did not do - in 2019 to protect the climate. Now governments must align current policies, investments and recovery efforts with their long-term emissions goals. This report enables leaders to take a broader view and to find inspiration and impetus to decarbonize the sectors where they risk being left behind.” (In the Press Release)</p>
<p><b>Dr. Charlene Watson</b>, Research Associate, Overseas Development Institute (ODI)</p> <p><u>Contact information:</u> <a href="mailto:c.watson@odi.org.uk">c.watson@odi.org.uk</a> English</p>	<p>“The recovery packages can solve the climate crisis or make it worse. Some G20 members like the EU, France or Germany are setting mostly a good example for building more resilient economies whilst shielding themselves against the accelerating climate impacts. Others direct too much support to fossil fuels, putting at risk positive recent developments.” (In the Press Release)</p>
<p><b>Pascal Charriau</b>, CEO, Enerdata</p> <p><u>Contact information:</u> +33 4 76 41 43 72 <a href="mailto:pascal.charriau@enerdata.net">pascal.charriau@enerdata.net</a> French, English, Czech and Spanish</p>	<p>“This report provides an independent analysis based on a robust methodology and a wide variety of sources. It also presents fresh information on 2020 emissions. Decreases in emissions this year are mostly due to the economic crisis and the lockdown. Quickly, strong policies are needed to avoid a strong rebound effect in the coming years.”</p>

<p><b>Argentina:</b>  <b>Enrique Maurtua Konstantinidis,</b>  Fundación Ambiente y Recursos Naturales (FARN)</p> <p><u>Contact information:</u>  +54 911 4070 0397  <a href="mailto:prensa@farn.org.ar">prensa@farn.org.ar</a>  Spanish, English</p>	<p>“In Argentina, the government did not introduce any ‘green’ measures in its recovery stimulus plans. On the opposite, it continues to strongly subsidize fossil fuels, such as gas. In order to ensure a sustainable recovery, the focus needs to be put on green energy infrastructure and the shift to a sustainable land use.”</p>
<p><b>Australia:</b>  <b>Bill Hare,</b> Climate Analytics</p> <p><u>Contact information:</u>  +61 468 372 179  <a href="mailto:bill.hare@climateanalytics.org">bill.hare@climateanalytics.org</a>  English</p>	<p>“Australia scores badly compared with its G20 partners on many levels: its emissions per capita are three times the G20 average, and fossil fuels make up 93% of its energy mix, one of the G20's highest. It also ranks fourth highest in the G20 for economic losses from increasing climate impacts, such as bushfires. The Australian Government has few policies to address these issues, and its international reputation is at stake.”</p>
<p><b>Brazil:</b>  <b>William Wills,</b>  CentroClima/COPPE/UFRJ</p> <p><u>Contact information:</u>  +55 21 998719827  <a href="mailto:climatetransparency@lima.coppe.ufrj.br">climatetransparency@lima.coppe.ufrj.br</a>  Portuguese, English</p>	<p>“From 2012 to 2019 the level of deforestation in Brazil grew by 122%. If deforestation gets out of control NDC goals won't be met. The country should urgently reinstate and strengthen policies on monitoring and preventing illegal deforestation.”</p>
<p><b>China:</b>  <b>Dr. Jiang Kejun,</b> Energy Research Institute</p> <p><u>Contact information:</u>  +86 138 0119 9951  <a href="mailto:kjiang2015@163.com">kjiang2015@163.com</a>  Chinese, English</p>	<p>“China recently announced that it is aiming for being carbon neutral before 2060. This is a positive sign for the G20 countries as well as for the international global community. Now, this ambitious and achievable goal needs to be reflected in the long-awaited updated NDC of China.”</p>
<p><b>France:</b></p> <p><u>Contact information:</u>  Press Officer: Brigitte Bejean, IDDRI  +33 6 03 26 93 57  <a href="mailto:brigitte.bejean@iddri.org">brigitte.bejean@iddri.org</a>  French, English</p>	<p>“The French recovery plan makes a significant contribution to the ecological transition (€32 billion out of the €100 billion), and focuses on key sectors, like the energy renovation of buildings and railways. Despite these improvements, that could have a positive impact on the middle term, the country is likely to miss its national GHG emissions reduction and 2022 renewable target. The detail of the recovery plan and the implementation modalities will be absolutely crucial to make sure that France's objectives can be effectively achieved.”</p>
<p><b>Germany:</b>  <b>Jan Burck,</b> Germanwatch</p>	<p>“In July 2020 Germany enshrined in law that coal should be phased out by 2038. That is too late for the climate and the country should phase out coal before 2030. In parallel, Germany needs to create favourable conditions for investments in renewables and establish</p>

<p><u>Contact information:</u> +49 177 888 9286, <a href="mailto:burck@germanwatch.org">burck@germanwatch.org</a> German, English</p>	<p>a carbon floor price for the EU emissions trading scheme.”</p>
<p><b>India:</b> <b>R R Rashmi</b>, The Energy and Resources Institute (TERI)</p> <p><u>Contact information:</u> Thomas Spencer +91 877 94 89 229 <a href="mailto:thomas.spencer@iddri.org">thomas.spencer@iddri.org</a> French, German, English</p>	<p>“India’s transport sector currently accounts for 14% of its energy related CO<sub>2</sub> emissions. As car ownership grows, India should quickly increase the share of EVs and invest in sustainable urban public transport.”</p>
<p><b>Indonesia:</b> <b>Fabby Tumiwa</b>, Institute for Essential Service Reform (IESR)</p> <p><u>Contact information:</u> +62 811 949 759 <a href="mailto:fabby@iesr.or.id">fabby@iesr.or.id</a> Bahasa, English</p>	<p>“Indonesia is the only country in the G20, where the emissions intensity increased between 2014 and 2019. The country should rapidly increase the usage of renewables, speed up its coal phase-out and increase energy efficiency.”</p>
<p><b>Japan:</b> <b>Dr. Kentaro Tamura</b>, Institute for Global Environmental Strategies (IGES)</p> <p><u>Contact information:</u> +81 46 855 3700 <a href="mailto:tamura@iges.or.jp">tamura@iges.or.jp</a> Japanese, English</p>	<p>“Japan has so far been then only G20 country, which has submitted a new NDC, although without increasing its target. The recent announcements on carbon neutrality in 2050 is much more ambitious and will hopefully encourage other countries to follow.”</p>
<p><b>Mexico:</b> <b>Jorge Villarreal</b>, Iniciativa Climática de México (ICM)</p> <p><u>Contact information:</u> +521 (55) 34557805, <a href="mailto:jorge.villarreal@iniciativaclimatica.org">jorge.villarreal@iniciativaclimatica.org</a> Spanish, English</p>	<p>“Before the pandemic hit, results of climate action were coming to fruition in some energy-related sectors and the crisis consolidated those trends in the majority of the G20 countries. But without further climate action these effects will be temporary and concentrations of CO<sub>2</sub> in the atmosphere continue to rise. The political choices in the coming months will determine whether G20 countries manage to sustainably bend the emissions curve.” (In the Press Release)</p>
<p><b>South Africa:</b> <b>Bryce McCall</b>, Energy Systems Research Group, University of Cape Town</p> <p><u>Contact information:</u> <a href="mailto:bryce.mccall@uct.ac.za">bryce.mccall@uct.ac.za</a> English</p>	<p>“South Africa has announced that the first renewable energy auctions since 2015 will be launched by the end of 2020. As the most coal dependent country in the G20, this is a positive signal of progress on plans for a sevenfold increase in renewable capacity by 2030 and towards rapid GHG emissions reductions thereafter.”</p>
<p><b>South Korea:</b> <b>Joojin Kim</b>, Managing Director, Solutions for Our Climate</p>	<p>“Emissions from South Korea's latest domestic and overseas coal power projects would dwarf the emissions reductions made by its US\$63bn Green New Deal. To make a truly green recovery, South Korea needs to stop the construction of new coal and</p>

<p><u>Contact information:</u> +82-10-8788-1988 <a href="mailto:joojin.kim@forourclimate.org">joojin.kim@forourclimate.org</a> Korean, English</p>	<p>combined gas power plants, lift renewable energy barriers to replace fossil fuel power, and end its role as a major public fossil fuel financier.”</p>
<p><b>Christiana Figueres</b> Founding Partner, Global Optimism and former Executive Secretary, UNFCCC</p>	<p>“The consequences of climate change can already be felt. We need to prepare and take decisive action now. The Climate Transparency Report names adaptation measures that are needed and what countries should include in their plans.”</p>
<p><b>Prof. Joseph Stiglitz</b> Nobel laureate economist, Columbia University</p>	<p>“The post-corona recovery packages can lead to a greener and more just world. Unfortunately, many do not live up to that aspiration. The Climate Transparency Report provides an excellent overview of the recovery programs with good examples as well as missed chances.”</p>
<p><b>Laurence Tubiana</b> CEO European Climate Foundation</p>	<p>“We are at a crossroads: one road leads to climate crisis with extreme heat, fires and flooding increasingly impacting G20 countries, the other to a resilient, sustainable and inclusive future for all. G20 leaders need to reaffirm their commitment to the right course. The Climate Transparency Report identifies clear opportunities for the G20 to enhance climate ambition on the road to COP26 and to align their financial systems with the Paris goals and the SDGs.”</p>
<p><b>Nicole Becker</b> Jovenes por el Clima, Argentina</p>	<p>“Climate crisis is already here and countries need to do much more to fight it. The future is now or there is no future. The Climate Transparency Report clearly shows what each country should do, so if you still do not know, which actions are necessary, you must read it, there is no excuses!”</p>
<p><b>Tasneem Essop</b> Executive Director of Climate Action Network-International</p>	<p>“The G20 represents some of the highest emitting countries in the world. They therefore have a responsibility to lead with ambitious climate action. The Climate Transparency Report not only helps these countries understand how much more they need to do, but also helps citizens in holding these governments accountable for implementing the Paris Agreement.”</p>