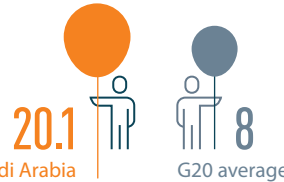


BROWN TO GREEN:

THE G20 TRANSITION TO A LOW-CARBON ECONOMY | 2018

SAUDI ARABIA

GREENHOUSE GAS (GHG) EMISSIONS
(INCL. FORESTRY) PER CAPITA
(tCO₂e/capita)



Data from 2015 | Source: PRIMAP 2018



The gap:

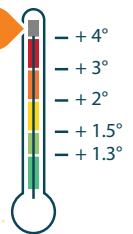
Is Saudi Arabia on track to stay below the Paris Agreement temperature limit?

Based on implemented policies, Saudi Arabia's GHG emissions are expected to increase to around 1.12 to 1.19 GtCO₂e by 2030 (excl. forestry). This emission pathway is not compatible with the Paris Agreement.¹

Saudi Arabia's NDC is not consistent with the Paris Agreement's temperature limit but would lead to a warming of more than 4°C.²

Saudi Arabia's sectoral policies still fall short of being consistent with the Paris Agreement, especially on renewables and the phase-out of fossil fuels.³

Current NDC²



Source: CAT 2018

Recent developments:

What has happened since the Paris conference?



In December 2017 Saudi Arabia announced it would slow down the fossil fuel subsidy phase-out to enhance the economy.



Through the National Renewable Energy Plan, Saudi Arabia is taking steps to expand renewable electricity generation. In 2017, it launched a US\$30bn to US\$50bn renewable energy tender programme.



In 2018, the government opened the market for imports of electric vehicles. Fuel economy standards apply to light-duty vehicles and are regularly updated.

Brown and green performance:

Where does Saudi Arabia lead or lag compared to G20 countries?

FOSSIL FUEL SUBSIDIES

Saudi Arabia's fossil fuel subsidies as share of GDP are well above G20 average

29.66 billion US\$
in 2016



G20 average: US\$ 7.87 bn

Data from 2016 | Source: OECD/IEA 2018

SHARE OF RENEWABLES IN POWER GENERATION (incl. large hydro)



G20 average: 24%

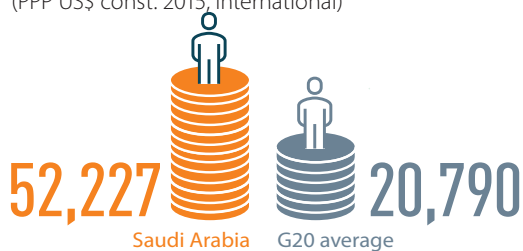
Data from 2017 | Source: Enerdata 2018

TRANSPORT EMISSIONS PER CAPITA (tCO₂/capita)



Data from 2017 | Source: Enerdata 2018

This country profile is part of the **Brown to Green 2018** report. The full report and other G20 country profiles can be downloaded at: <http://www.climate-transparency.org/g20-climate-performance/g20report2018>

BACKGROUND INDICATORS:
SAUDI ARABIAGDP PER CAPITA⁴
(PPP US\$ const. 2015, international)

Source: World Bank 2017

HUMAN DEVELOPMENT INDEX⁵

0.85



Data from 2017 | Source: UNDP 2018

SAUDI ARABIA'S EXPOSURE TO CLIMATE IMPACTS⁶

This indicator shows the extent to which human society and its supporting sectors are affected by the future changing climate conditions based on an approximately 2°C scenario. This sectoral exposure will be even higher given that the efforts depicted in current NDCs will lead to an approximately 3°C scenario.



FOOD



Projected climate impacts on cereal yields



Projected increase of food demand due to population growth



WATER



Projected climate impacts on annual run-off



Projected climate impacts on annual groundwater recharge



HEALTH



Projected climate impacts on a spread of malnutrition and diarrhoeal diseases



Projected climate impacts on spread of vector-borne diseases

ECOSYSTEM
SERVICE

Projected climate impacts on biomes occupying the countries



Projected climate impacts on marine biodiversity



HUMAN HABITAT



Projected climate impacts on frequency of high temperature periods



Projected climate impacts on frequency and severity of floods



INFRASTRUCTURE



Projected climate impacts on hydropower generation capacity



Proportion of coastline impacted by sea level rise

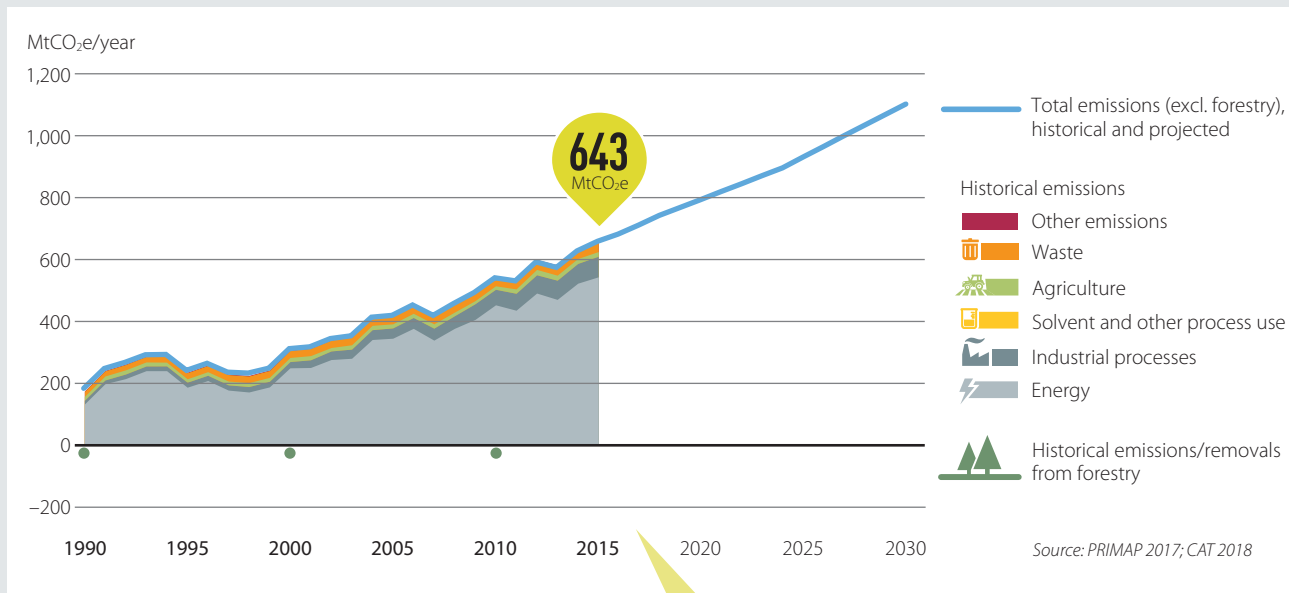


Own composition based on ND-GAIN 2017 (based on data for 2016)

GREENHOUSE GAS (GHG) EMISSIONS

SAUDI ARABIA

TOTAL GHG EMISSIONS ACROSS SECTORS⁷

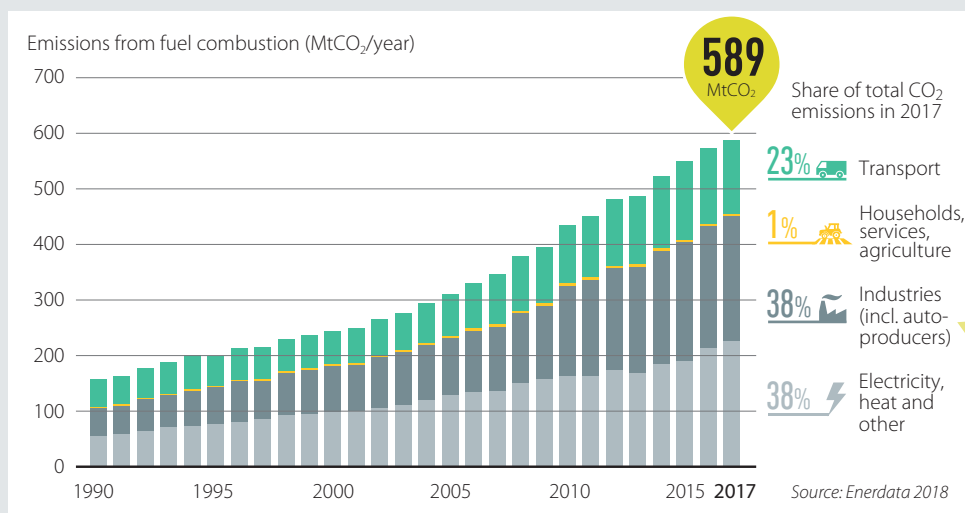


CCPI PERFORMANCE RATING OF GHG EMISSIONS PER CAPITA⁸



Saudi Arabia's emissions almost quadrupled between 1990 and 2015 (+276%) and the trend is expected to pick up speed towards 2030. Additionally, its GHG emissions per capita are one of the highest for all G20 countries (20 tCO₂e/capita). The energy sector contributes most to overall emissions.

ENERGY-RELATED CO₂ EMISSIONS⁹



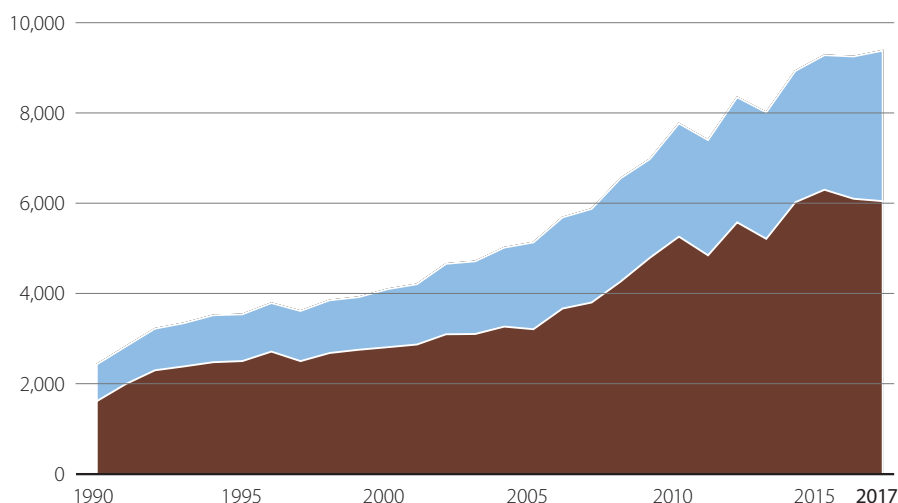
The largest contributor for overall GHG emissions are CO₂ emissions from energy. These have risen in Saudi Arabia by 22% (2012–2017), due to a steady increase in almost all sectors. Electricity, heat and industries make up the largest share.

DECARBONISATION

SAUDI ARABIA

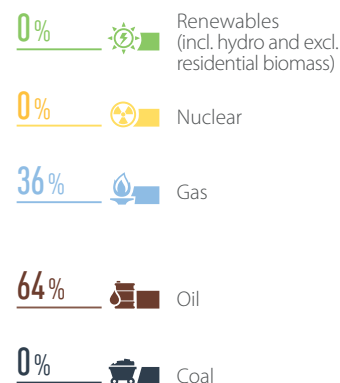
ENERGY MIX¹⁰

Total primary energy supply (PJ)



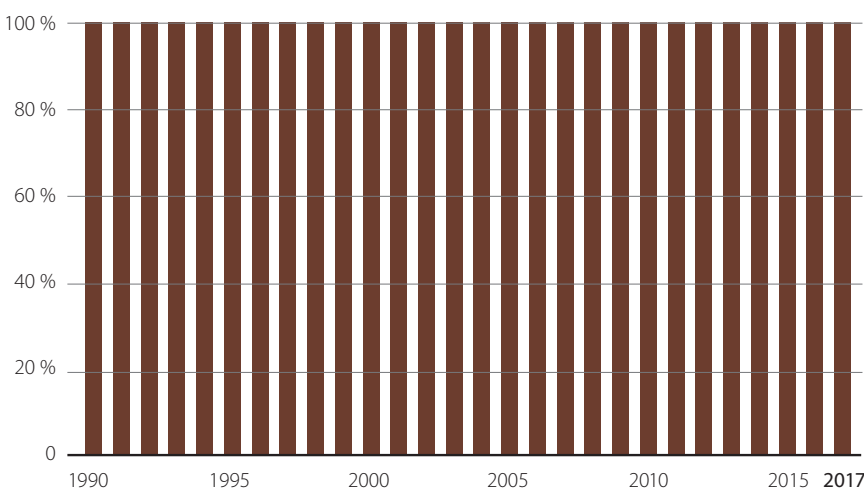
Source: Enerdata 2018

Share in 2017



SHARE OF FOSSIL FUELS AND 'ZERO-CARBON' FUELS IN ENERGY SUPPLY¹¹

Share of fossil, 'zero-carbon', new renewables and others in energy supply (%)



'ZERO-CARBON' SHARES



Source: Enerdata 2018

PERFORMANCE RATING OF SHARE OF FOSSIL FUELS¹²



Source: own evaluation

Zero-carbon fuels include nuclear, hydropower, new renewables. The share of zero-carbon fuels is almost 0%, as Saudi Arabia uses around 100% of fossil fuels for energy supply.

PERFORMANCE RATING OF SHARE OF ZERO-CARBON TECHNOLOGY¹²

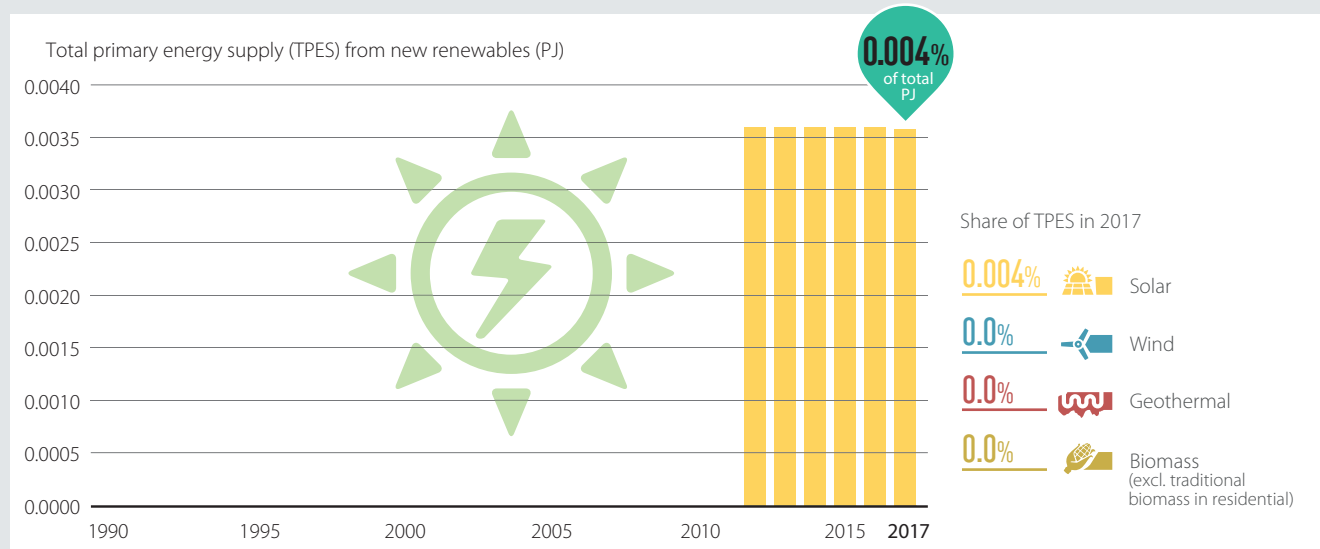


Source: own evaluation

DECARBONISATION

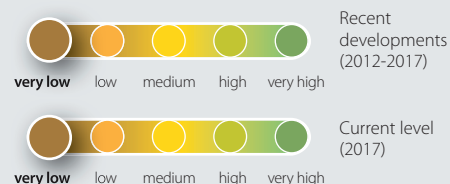
SAUDI ARABIA

NEW RENEWABLES¹³

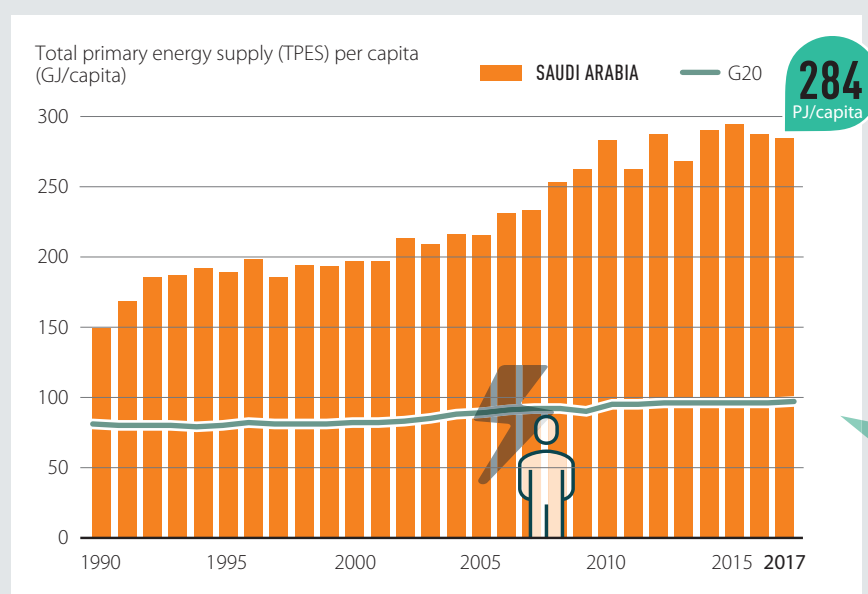


"New renewables" excludes unsustainable renewable sources such as large hydropower. The amount of energy from new renewable sources is negligible. The 0.004 PJ of new renewables in Saudi Arabia's energy supply is exclusively derived from solar energy.

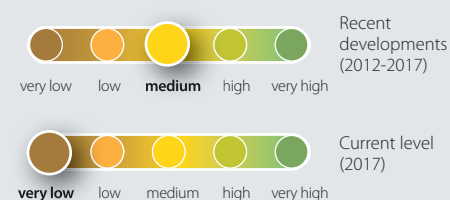
PERFORMANCE RATING OF NEW RENEWABLES¹²



ENERGY USE PER CAPITA¹⁴



PERFORMANCE RATING OF ENERGY USE PER CAPITA¹²

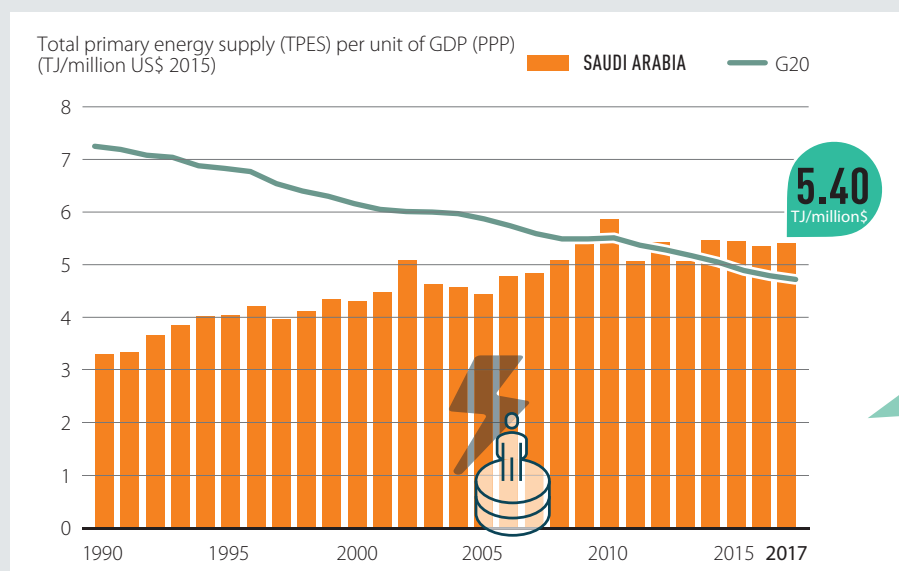


Energy use per capita increased by 91% between 1990 and 2017. Despite a slight decrease over 2012–2017, the level remains 2.8 times the G20 average.

DECARBONISATION

SAUDI ARABIA

ENERGY INTENSITY OF THE ECONOMY¹⁵



Source: Enerdata 2018

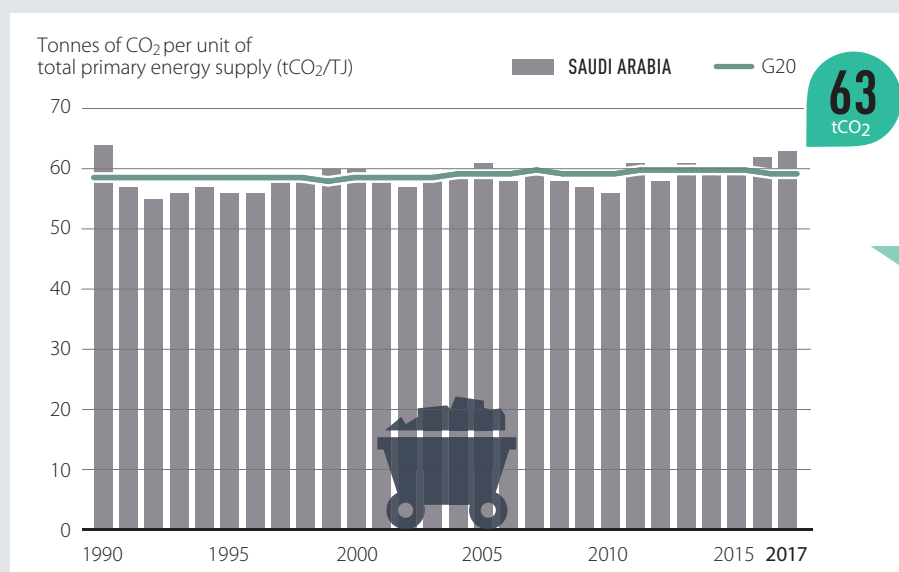
This indicator quantifies how much energy is used for each unit of GDP. Saudi Arabia's energy intensity, now above the G20 average, has increased by 64% (1990–2017) contrasting with a downward trend in the G20 average (-35%).

PERFORMANCE RATING OF ENERGY INTENSITY¹²



Source: own evaluation

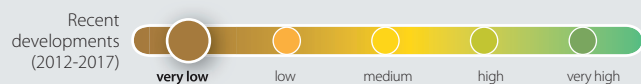
CARBON INTENSITY OF THE ENERGY SECTOR¹⁶



Source: Enerdata 2018

The carbon intensity of Saudi Arabia's energy sector has been relatively constant since 1990 and basically followed the development of the G20 average. However, in contrast to a decreasing trend in the G20 average over the past five years (-2%), the carbon intensity of Saudi Arabia has risen by 9%.

PERFORMANCE RATING OF CARBON INTENSITY¹²



Source: own evaluation

DECARBONISATION

SAUDI ARABIA

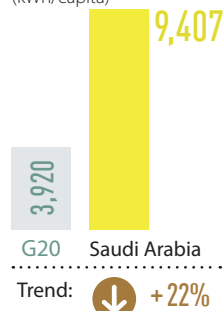
SECTOR-SPECIFIC INDICATORS

Legend for trend: negative positive

The trend number shows developments over the past five years, where data is available

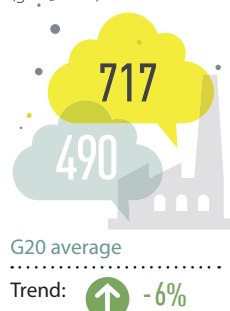
POWER SECTOR

ELECTRICITY DEMAND PER CAPITA
(kWh/capita)



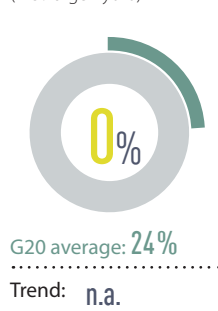
Data from 2017
Source: Enerdata 2018

EMISSIONS INTENSITY OF THE POWER SECTOR
(gCO₂/kWh)



Data from 2016
Source: Enerdata 2018

SHARE OF RENEWABLES IN POWER GENERATION
(incl. large hydro)



Data from 2017
Source: Enerdata 2018

SHARE OF POPULATION WITH ACCESS TO ELECTRICITY



Data from 2016
Source: World Bank 2018

SHARE OF POPULATION WITH BIOMASS DEPENDENCY



Data from 2014
Source: IEA 2016

TRANSPORT SECTOR

TRANSPORT EMISSIONS PER CAPITA
(tCO₂/capita)



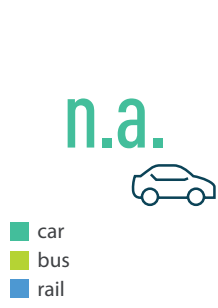
Data from 2017
Source: Enerdata 2018

MOTORISATION RATE
(Vehicles per 1000 inhabitants)



Data from 2005 | Source: Agora Verkehrswende 2018

PASSENGER TRANSPORT
(modal split in % of passenger-km)



Source: Agora Verkehrswende 2018

FREIGHT TRANSPORT
(modal split in % of tonne-km)



Source: Agora Verkehrswende 2018

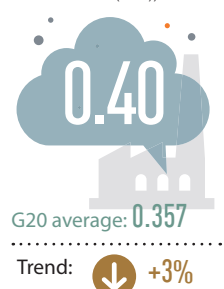
MARKET SHARE OF ELECTRIC VEHICLES IN NEW CAR SALES (%)



Data from 2017
Source: IEA 2018

INDUSTRY SECTOR

INDUSTRY EMISSIONS INTENSITY
(tCO₂e/thousand US\$2015 sectoral GDP (PPP))



Data from 2015
Source: PRIMAP 2018

BUILDING SECTOR

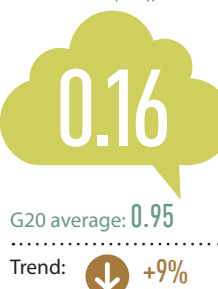
BUILDING EMISSIONS PER CAPITA
(tCO₂/capita)



Data from 2016
Source: Enerdata 2018

AGRICULTURE SECTOR

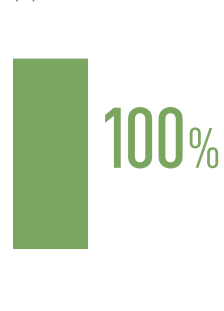
AGRICULTURE EMISSIONS INTENSITY
(tCO₂e/thousand US\$2015 sectoral GDP (PPP))



Data from 2015
Source: PRIMAP 2018

FOREST SECTOR

FOREST AREA COMPARED TO 1990 LEVEL (%)

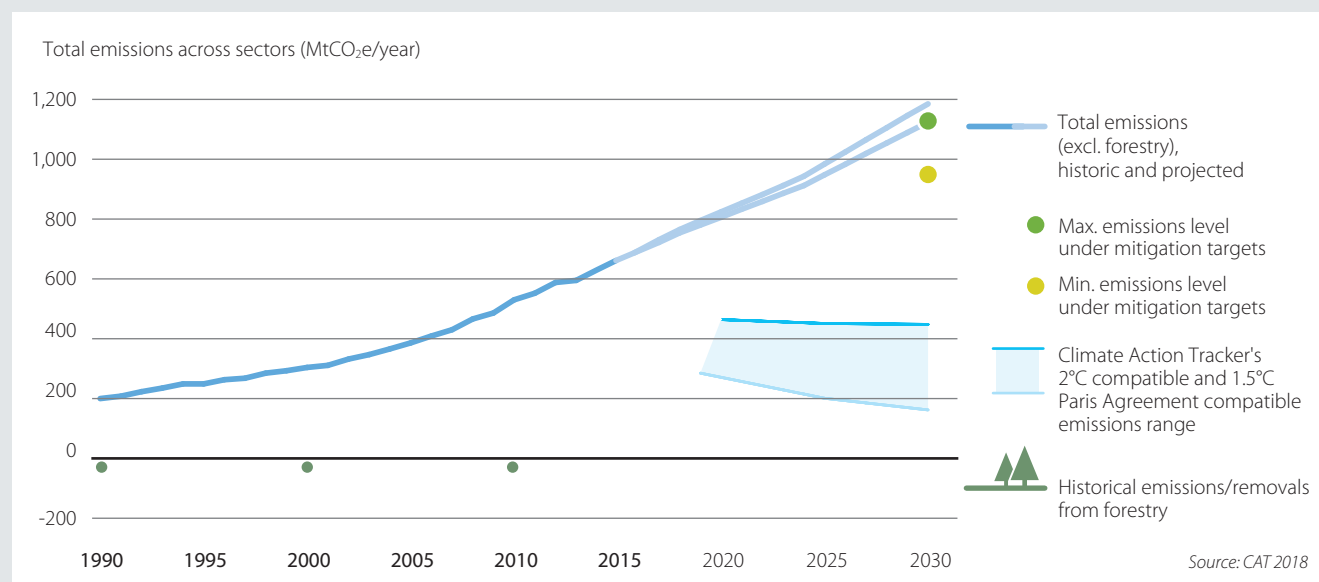


Data from 2015
Source: PRIMAP 2018

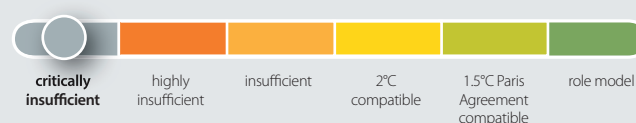


CLIMATE POLICY

SAUDI ARABIA

COMPATIBILITY OF CLIMATE TARGETS WITH THE PARIS AGREEMENT²

The CAT rates Saudi Arabia's NDC "critically insufficient", meaning the target is well beyond the fair range and not at all consistent with holding warming to below 2°C, let alone to 1.5°C as required by the Paris Agreement. Full implementation of current policies may help Saudi Arabia to achieve its very unambitious NDC target, but emissions are still expected to double in 2030 from 2014 levels. The pathway towards 2030 is unclear as the baseline for its NDC target has not yet been published.

CLIMATE ACTION TRACKER (CAT) EVALUATION OF NDC²

Source: CAT 2018

NATIONALLY DETERMINED CONTRIBUTION (NDC)

MITIGATION

Targets	<p>Overall targets</p> <p>Seeking to achieve mitigation co-benefits ambitions of up to 130 million tCO₂e avoided by 2030 annually through contributions to economic diversification and adaptation</p> <p>Coverage</p> <ul style="list-style-type: none"> Sectors covered: energy efficiency; renewable energies; carbon capture and utilisation/storage; utilisation of gas; methane recovery and flare minimisation GHG covered: Not specified Percentage of national emissions covered: Not specified
Actions	Actions specified (sectors: energy, industry, buildings, transport)

ADAPTATION

Targets	Not mentioned
Actions	Actions specified (sectors: water, biodiversity/ecosystems, agriculture, forestry, infrastructure)

FINANCE

Conditionality	NDC not conditional on international financial support
Investment needs	Not specified
Actions	Not mentioned
International market mechanisms	Not mentioned

Source: own compilation based on UNFCCC 2018





CLIMATE POLICY

SAUDI ARABIA

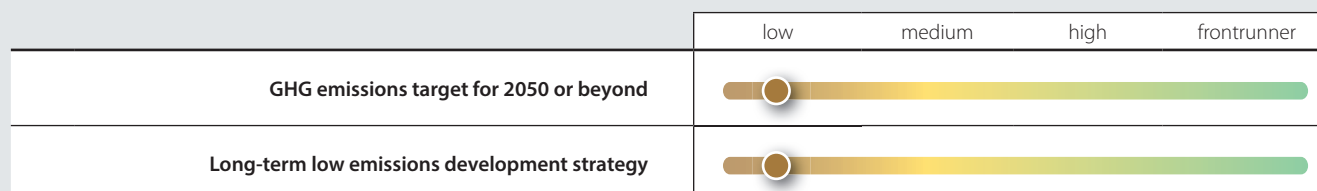
POLICY EVALUATION¹⁷

The ratings evaluate a selection of policies that are essential pre-conditions for the longer-term transformation required to meet the 1.5°C limit. They do not represent a complete picture of what is necessary.

Legend:

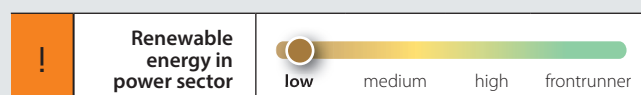
low No action**medium** Some action**high** Significant action and a long-term vision**frontrunner** Significant action, and a long-term vision that is compatible with 1.5°C

! most important measures based on share of emissions and political relevance



Saudi Arabia has not yet adopted a long-term low emission development strategy, nor a 2050 emission target.

POWER



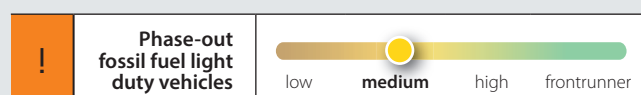
Saudi Arabia aims to source 10% of electricity from renewables by 2023, equalling an installed capacity of 9,500 MW. No longer-term plan exists. The government uses auctioning schemes to support the development of renewables.

Coal phase-out

not applicable

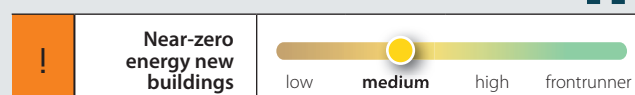
Saudi Arabia does not use coal for power generation.

TRANSPORT



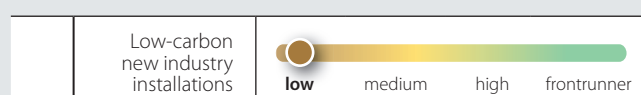
In 2018, the government opened the market for imports of electric vehicles. Fuel economy standards apply to light-duty vehicles and are regularly updated.

BUILDINGS



Since 2011, thermal insulation requirements apply to all new buildings.

INDUSTRY



No policies are in place to support energy efficiency in industry or to foster the use of low-carbon standards in new installations.

FORESTS



Forests cover less than 1% of Saudi Arabia's territory.

Source: own evaluation



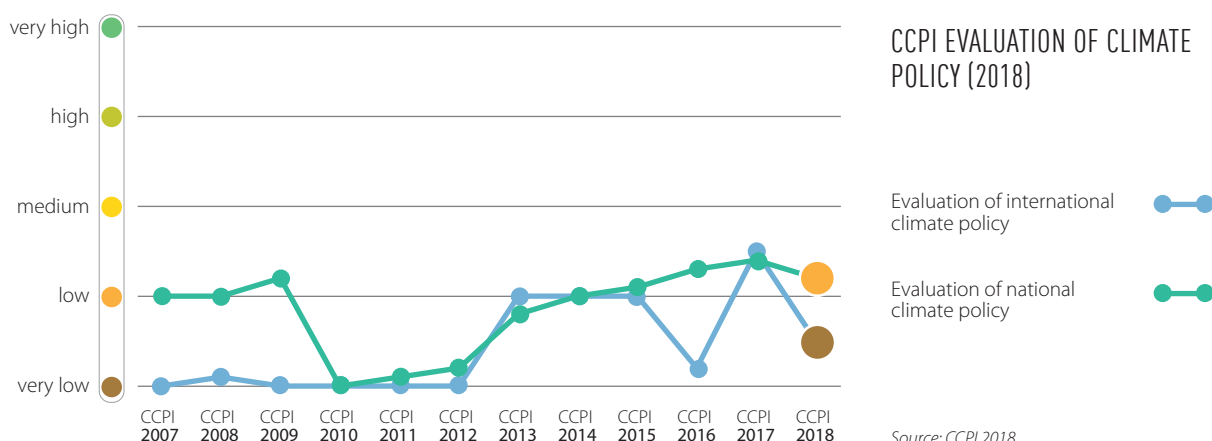


CLIMATE POLICY

SAUDI ARABIA

CCPI EXPERTS' POLICY EVALUATION¹⁸

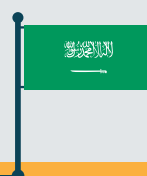
Experts criticise Saudi Arabia's general performance on climate change policies. The country lacks domestic policies and performs poorly in the international climate negotiations. Therefore Saudi Arabia's experts rate the country's national policy as low and its international performance as very low.

JUST TRANSITION¹⁹

Oil and gas have historically contributed more than half of Saudi Arabia's nominal GDP. The country's NDC prioritises diversifying its economy away from "heavy reliance on income generated from a single resource".

The "Saudi Vision 2030" was unveiled in 2016. It called for raising the share of non-oil exports from 16% to 50% of export value by 2030, as well as expanding the role of renewable energy in the Saudi energy system and localising the renewable energy and industrial equipment sectors.

Potential impacts on workers and communities in the oil and gas sector are not clear, with limited evidence of public discourse on just transitions in Saudi Arabia. However, the Vision had aimed for the creation of 1.2 million private sector jobs by 2020, and to cut unemployment from 11.6% to 9%. At the Bangkok Climate Conference 2018, Saudi Arabia described a just transition as "central to their ecological future".



FINANCING THE TRANSITION

SAUDI ARABIA

FINANCIAL POLICIES AND REGULATIONS

Through policy and regulation governments can overcome challenges to mobilising green finance, including: real and perceived risks, insufficient returns on investment, capacity and information gaps.

APPROACHES TO IMPLEMENTING THE RECOMMENDATIONS OF THE TASK FORCE ON CLIMATE-RELATED FINANCIAL DISCLOSURES (TCFD)²⁰

This indicator establishes the degree of government engagement with the recommendations of the G20 Financial Stability Board’s Task Force on Climate-Related Financial Disclosure.

No formal engagement with TCFD	Political and regulatory engagement	Formal engagement with private sector	Publication of guidance and action plans	Encoding into law

Source: CISL 2018

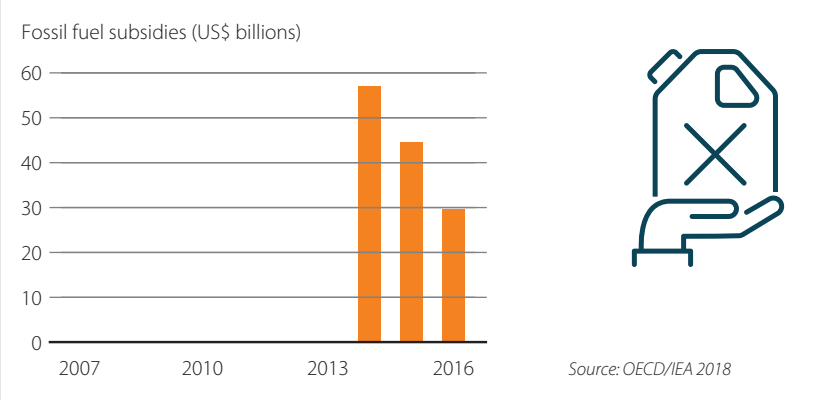
No evidence of formal engagement with TCFD-compliant initiatives was found in Saudi Arabia.

FISCAL POLICY LEVERS

Fiscal policy levers raise public revenues and direct public resources. Critically, they can shift investment decisions and consumer behaviour towards low-carbon, climate-resilient activities by reflecting externalities in prices.

FOSSIL FUEL SUBSIDIES

In 2016, Saudi Arabia provided US\$29.7bn in fossil fuel subsidies (from US\$57.1bn in 2014). Between 2014 and 2016, subsidies were greater (US\$0.027) than the G20 average (US\$0.004) per unit of GDP. This includes an estimate of consumption subsidies alone, adopting the price-gap approach. In 2017, the government however introduced plans to reduce consumption subsidies to gasoline, natural gas and diesel, in order to meet international prices by 2025.



CARBON REVENUES

Saudi Arabia does not have a national carbon tax or emissions trading scheme, nor are any such schemes planned.



FINANCING THE TRANSITION

SAUDI ARABIA

PUBLIC FINANCE

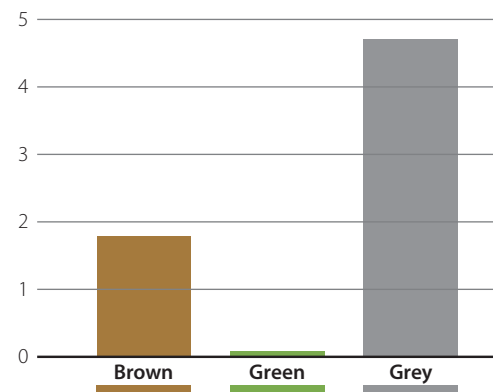
Governments steer investments through their public finance institutions including via development banks, both at home and overseas, and green investment banks. Developed G20 countries also have an obligation to provide finance to developing countries and public sources are a key aspect of these obligations under the UNFCCC.

NATIONAL AND INTERNATIONAL PUBLIC FINANCE IN THE POWER SECTOR²¹

From 2013 to 2015, Saudi Arabia's public finance institutions spent an annual average of US\$1.8bn brown, US\$0.1bn green and US\$4.7bn grey financing in the power sector, domestically and internationally. The largest transaction was the Ministry of Finance interest-free loan (US\$13.2bn) to Saudi Electricity Co for power generation projects.

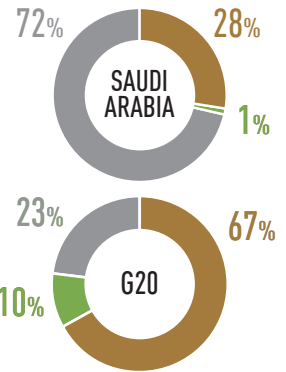
- coal, oil and gas projects (and associated infrastructure) **brown**
- large-scale hydropower, biofuels, biomass, nuclear, incineration, transmission, distribution, storage, energy efficiency, other general electricity support **grey**
- renewable energy projects (excluding grey financing) **green**

2013-2015 annual average of power finance (US\$ billions)



Source: Oil Change International 2017

Proportion of total public finance to power



PROVISION OF INTERNATIONAL PUBLIC SUPPORT

Saudi Arabia is not listed in Annex II of the UNFCCC and is therefore not formally obliged to provide climate finance. While Saudi Arabia may channel international public finance towards climate change via multilateral and other development banks, this has not been included in this report.

OBLIGATION TO PROVIDE CLIMATE FINANCE UNDER UNFCCC



CONTRIBUTIONS THROUGH THE MAJOR MULTILATERAL CLIMATE FUNDS²²

Note: See Technical Note for multilateral climate funds included and method to attribute amounts to countries

Source: Climate Funds Update 2017

Annual average contribution (mn US\$, 2015-2016)	Theme of support		
	Adaptation	Mitigation	Cross-cutting
0.87	0%	100%	0%

BILATERAL CLIMATE FINANCE CONTRIBUTIONS²³

Source: Country reporting to the UNFCCC

Annual average contribution (mn US\$, 2015-2016)	Theme of support			
	Mitigation	Adaptation	Cross-cutting	Other
n.a.	n.a.	n.a.	n.a.	n.a.

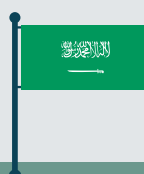
ANNEX



For more detail on sources and methodologies, please refer to the Technical Note at:

https://www.climate-transparency.org/wp-content/uploads/2018/11/Technical-Note_data-sources-and-methodology.pdf

- 1) The 2030 projections of the future development of greenhouse gas (GHG) emissions under current policies are based on the Climate Action Tracker (CAT) estimates.
- 2) The CAT is an independent scientific analysis that tracks progress towards the globally agreed aim of holding warming to well below 2°C, and pursuing efforts to limit warming to 1.5°C. The CAT "Effort Sharing" assessment methodology applies state-of-the-art scientific literature on how to compare the fairness of government efforts and (Intended) Nationally Determined Contribution (I) NDC proposals against the level and timing of emission reductions consistent with the Paris Agreement. The assessment of the temperature implications of a country's NDC is based on the assumption that all other governments would follow a similar level of ambition.
- 3) This assessment is based on the policy evaluation on page 9 of this Country Profile.
- 4) Gross Domestic Product (GDP) per capita is calculated by dividing GDP with mid-year population figures. GDP is the value of all final goods and services produced within a country in a given year. Here GDP figures at purchasing power parity (PPP) are used. Data for 2017.
- 5) The Human Development Index (HDI) is a composite index published by the United Nations Development Programme (UNDP). It is a summary measure of average achievement in key dimensions of human development. A country scores higher when the lifespan is higher, the education level is higher, and GDP per capita is higher.
- 6) The ND-GAIN index summarises a country's vulnerability to climate change and other global challenges in combination with its readiness to improve resilience. This report looks only at the exposure indicators as part of the vulnerability component of the ND-GAIN index for six sectors. It displays the exposure scores provided by the ND-GAIN on a scale from low (score: 0) to high (score: 1).
- 7) The indicator covers all Kyoto gases showing historic emissions in each of the IPCC source categories (energy, industrial processes, agriculture, etc.). Emissions projections (excl. forestry) under a current policy scenario until 2030 are taken from the Climate Action Tracker and scaled to the historical emissions from PRIMAP (see Brown to Green Report 2018 Technical Note).
- 8) The ratings on GHG emissions are taken from the Climate Change Performance Index (CCPI) 2018. The rating of "current level compared to a well below 2°C pathway" is based on a global scenario of GHG neutrality in the second half of the century and a common but differentiated convergence approach.
- 9) CO₂ emissions cover only the emissions from fossil fuels combustion (coal, oil and gas) by sector. They are calculated according to the UNFCCC methodology (in line with the 2006 IPCC Guidelines for National Greenhouse Gas Inventories).
- 10) Total primary energy supply data displayed in this Country Profile does not include non-energy use values. Solid fuel biomass in residential use has negative environmental and social impacts and is shown in the category "other".
- 11) Zero-carbon fuels include nuclear, hydropower and new renewables (non-residential biomass, geothermal, wind, solar).
- 12) Climate Transparency ratings assess the relative performance across the G20. A high scoring reflects a good effort from a climate protection perspective but is not necessarily 1.5°C compatible.
- 13) New renewables include non-residential biomass, geothermal, wind and solar energy. Hydropower and solid fuel biomass in residential use are excluded due to their negative environmental and social impacts.
- 14) Total primary energy supply (TPES) per capita displays the historical, current and projected energy supply in relation to a country's population. Alongside the intensity indicators (TPES/GDP and CO₂/TPES), TPES per capita gives an indication on the energy efficiency of a country's economy. In line with a well-below 2°C limit, TPES per capita should not grow above current global average levels. This means that developing countries are still allowed to expand their energy use to the current global average, while developed countries have to simultaneously reduce it to that same number.
- 15) TPES per GDP describes the energy intensity of a country's economy. This indicator illustrates the efficiency of energy usage by calculating the energy needed to produce one unit of GDP. Here GDP figures at PPP are used. A decrease in this indicator can mean an increase in efficiency but also reflects structural economic changes.
- 16) The carbon intensity of a country's energy sector describes the CO₂ emissions per unit of total primary energy supply and gives an indication of the share of fossil fuels in the energy supply.



ANNEX (continued)

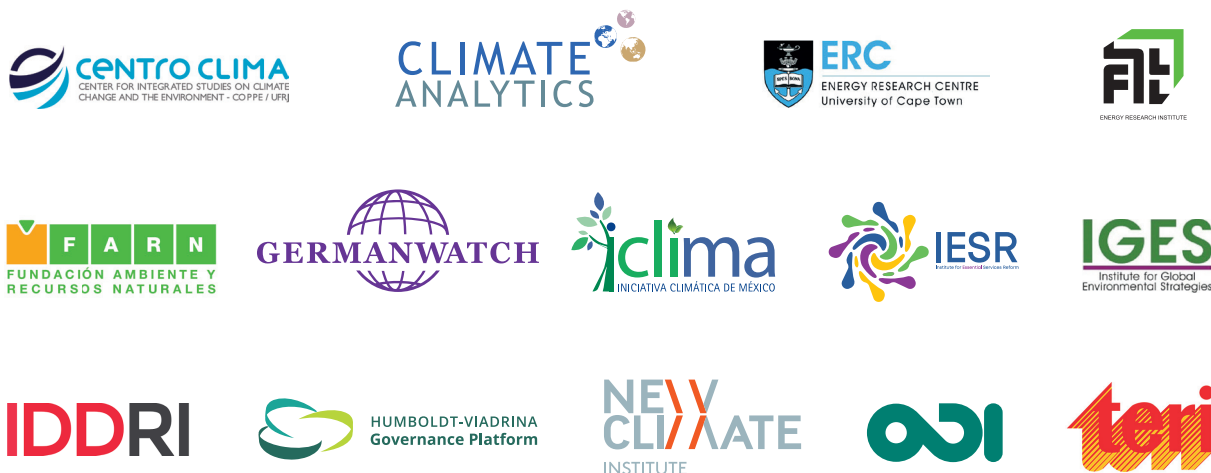


- 17) The selection of policies rated and the assessment of 1.5°C compatibility are informed by the Paris Agreement and the Climate Action Tracker (2016): "The ten most important short-term steps to limit warming to 1.5°C". The table below displays the criteria used to assess a country's policy performance. See the Brown to Green Report 2018 Technical Note for the sources used for this assessment.
- 18) The CCPI evaluates a country's performance in national climate policy, as well as international climate diplomacy through feedback from national experts from non-governmental organisations to a standardised questionnaire.
- 19) See the Brown to Green 2018 Technical Note for the sources used for this assessment.
- 20) The University of Cambridge Institute for Sustainability Leadership (CISL) in early 2018 reviewed the progress made by the national regulatory agencies of G20 members in making the Task Force on Climate-related Financial Disclosures (TCFD) recommendations relevant to their national contexts. See the Brown to Green Report 2018 Technical Note for more information on the assessment.
- 21) This data includes bilateral public finance institutions such as national development banks and other development finance institutions, overseas aid agencies, export credit agencies, as well as key multilateral development banks. The analysis omits most finance delivered through financial intermediaries and significant volumes of multilateral development bank (MDB) development policy finance (due to a lack of clarity on power finance volumes). Given a lack of transparency, other important multilateral institutions in which G20 governments participate are not covered. See the Brown to Green Report 2018 Technical Note for further details.
- 22) Finance delivered through multilateral climate funds comes from Climate Funds Update, a joint ODI/Heinrich Boell Foundation database that tracks spending through major multilateral climate funds. See the Brown to Green Report 2018 Technical Note for multilateral climate funds included and method to attribute approved amounts to countries.
- 23) Bilateral finance commitments are sourced from Biennial Party reporting to the UNFCCC. Financial instrument reporting is sourced from the OECD-DAC; refer to the Brown to Green Report 2018 Technical Note for more detail. Figures represent commitments of Official Development Assistance (ODA) funds to projects or programmes, as opposed to actual disbursements.

On endnote 17)	Criteria description			
	● Low	● Medium	● High	● Fronrunner
GHG emissions target for 2050 or beyond	No emissions reduction target for 2050 or beyond	Existing emissions reduction target for 2050 or beyond	Existing emissions reduction target for 2050 or beyond and clear interim steps	Emissions reduction target to bring GHG emissions to at least net zero by 2050
Long-term low emissions development strategy	No long-term low emissions strategy	Existing long-term low emissions strategy	Long-term low emissions strategy includes interim steps and/or sectoral targets	Long-term low emissions strategy towards full decarbonisation in the second half of the century; includes interim steps and/or sectoral targets, plus institutions and measures in place to implement and/or regularly review the strategy
Renewable energy in power sector	Allianz Monitor 2018 Category 1.2 (targets) and 2 (policies), average 0-25	Allianz Monitor 2018 Category 1.2 (targets) and 2 (policies), average 26-60	Allianz Monitor 2018 Category 1.2 (targets) and 2 (policies), average 61-100	Allianz Monitor 2018 Category 1.2 (targets) and 2 (policies), 61-100 plus 100% renewables in the power sector by 2050 in place
Coal phase-out	No consideration or policy in place for phasing out coal	Significant action to reduce coal use implemented or coal phase-out under consideration	Coal phase-out decided and under implementation	Coal phase-out date compatible with 1.5°C
Phase-out of fossil fuel light duty vehicles (LDVs)	No policy or emissions performance standards for LDVs in place	Energy/emissions performance standards or support for efficient LDVs	National target to phase out fossil fuel LDVs in place	Ban on new fossil-based LDVs by 2025/30
Near zero-energy new buildings	No policy or low emissions building codes and standards in place	Building codes, standards or fiscal/financial incentives for low emissions options in place	National strategy for near zero-energy buildings (at least for all new buildings)	National strategy for near zero-energy buildings by 2020/25 (at least for all new buildings)
Low-carbon new industry installations	No policy or support for energy efficiency in industrial production in place	Support for energy efficiency in industrial production (covering at least two of the country's sub-sectors (e.g. cement and steel production))	Target for new installations in emissions-intensive sectors to be low-carbon	Target for new installations in emissions-intensive sectors to be low-carbon after 2020, maximising efficiency
Net zero deforestation	No policy or incentive to reduce deforestation in place	Incentives to reduce deforestation or support schemes for afforestation / reforestation in place	National target for reaching zero deforestation	National target for reaching zero deforestation by 2020s or for increasing forest coverage

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<http://www.climate-transparency.org/g20-climate-performance/g20report2018>

