

BROWN TO GREEN:

THE G20 TRANSITION TO A LOW-CARBON ECONOMY | 2018

SOUTH KOREA

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

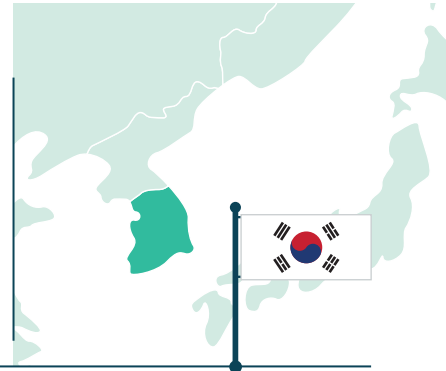
13.3

South Korea

8

G20 average

Data from 2015 | Source: PRIMAP 2018



The gap:

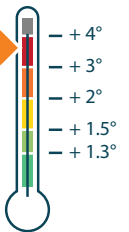
Is South Korea on track to stay below the Paris Agreement temperature limit?

Based on implemented policies, South Korea's GHG emissions are set to increase to around 737 to 753 MtCO₂e in 2030 (excl. forestry). This emission pathway is not compatible with the Paris Agreement.¹

South Korea's NDC is not consistent with the Paris Agreement but would lead to a warming of between 3°C and 4°C (CAT 2018).²

South Korea's sectoral policies still fall short of being consistent with the Paris Agreement, but the country's recent policy changes to increase the share of renewable electricity generation is promising.³

Current NDC²



Source: CAT 2018

Recent developments:

What has happened since the Paris conference?



In 2018, the government revised its 2030 GHG emission plan but not its 2030 emission target. The revision only adjusts the share of reductions to be achieved at domestic level instead of overseas.



The government released a new 15-year "Plan for Electricity Supply and Demand" that confirms President Moon Jae-in's stated intention to increase the share of renewable electricity generation.



The government is supporting the uptake of electric vehicles (EV), with a goal of having 250,000 EVs on the road by 2020, through subsidies of up to US\$12,000 per vehicle.

Brown and green performance:

Where does South Korea lead or lag compared to G20 countries?

ENERGY INTENSITY OF THE ECONOMY
Total primary energy supply in TJ per GDP in million US\$2015 (PPP)



G20 average: 4.72

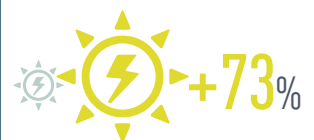
Data from 2017 | Source: Enerdata 2018

TRANSPORT EMISSIONS PER CAPITA
(tCO₂/capita)



Data from 2017 | Source: Enerdata 2018

2012-2017 TREND IN SHARE OF NEW RENEWABLES IN THE ENERGY MIX



G20 average: +35%

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:
SOUTH KOREAGDP PER CAPITA⁴
(PPP US\$ const. 2015, international)

Source: World Bank 2017

HUMAN DEVELOPMENT INDEX⁵

Data from 2017 | Source: UNDP 2018

SOUTH KOREA'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

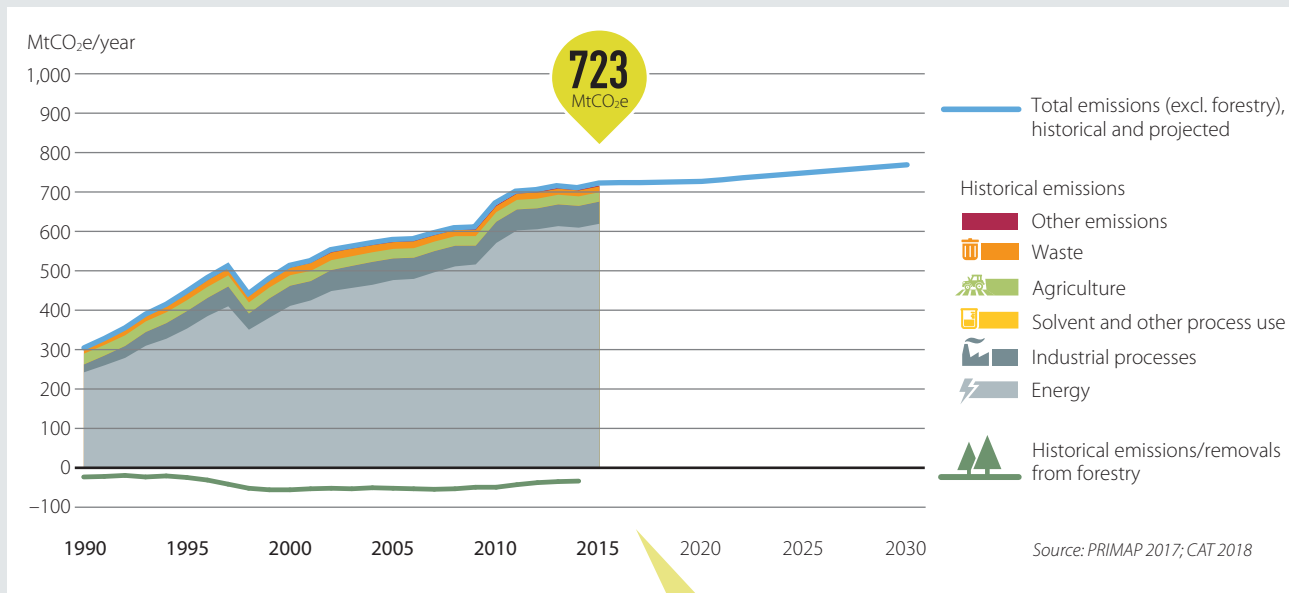


Own composition based on ND-GAIN 2017 (based on data for 2016)

GREENHOUSE GAS (GHG) EMISSIONS

SOUTH KOREA

TOTAL GHG EMISSIONS ACROSS SECTORS⁷

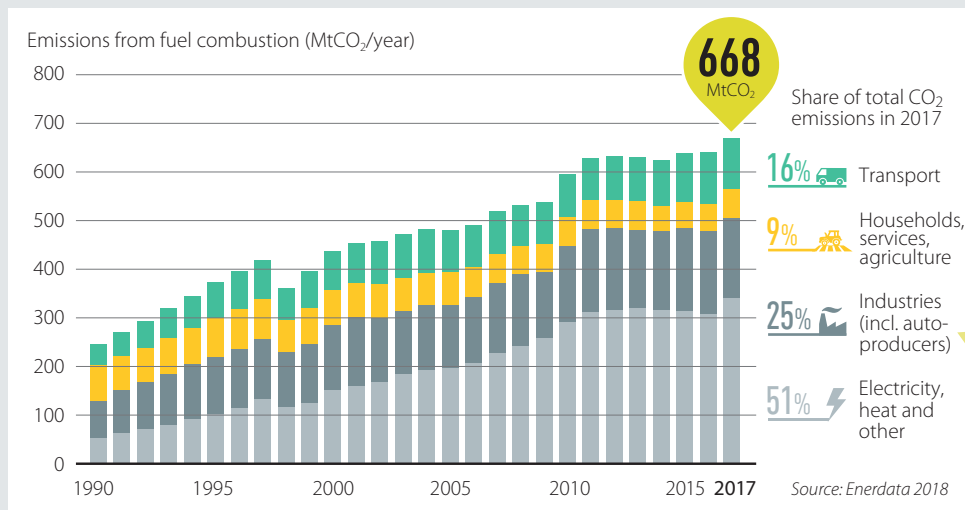


CCPI PERFORMANCE RATING OF GHG EMISSIONS PER CAPITA⁸



South Korea's emissions more than doubled between 1990 and 2015 (+137%). Emissions are expected to increase slightly towards 2030. Energy production and use contribute by far most to overall emissions.

ENERGY-RELATED CO₂ EMISSIONS⁹



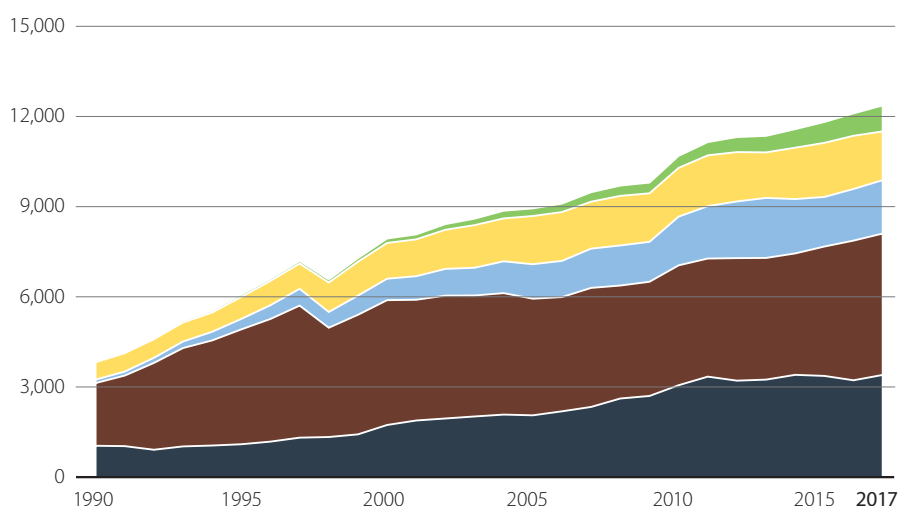
The largest contributor for overall GHG emissions are CO₂ emissions from energy, which increased in South Korea by 6% (2012–2017). Electricity and heat generation, and industries make up the largest share and increased significantly from 2016 to 2017.

DECARBONISATION

SOUTH KOREA

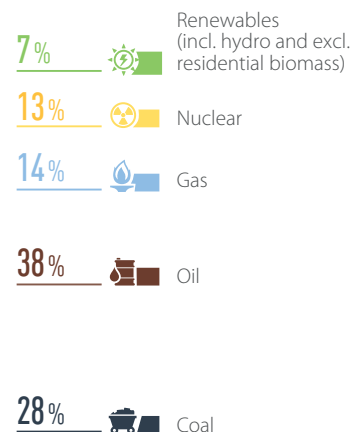
ENERGY MIX¹⁰

Total primary energy supply (PJ)



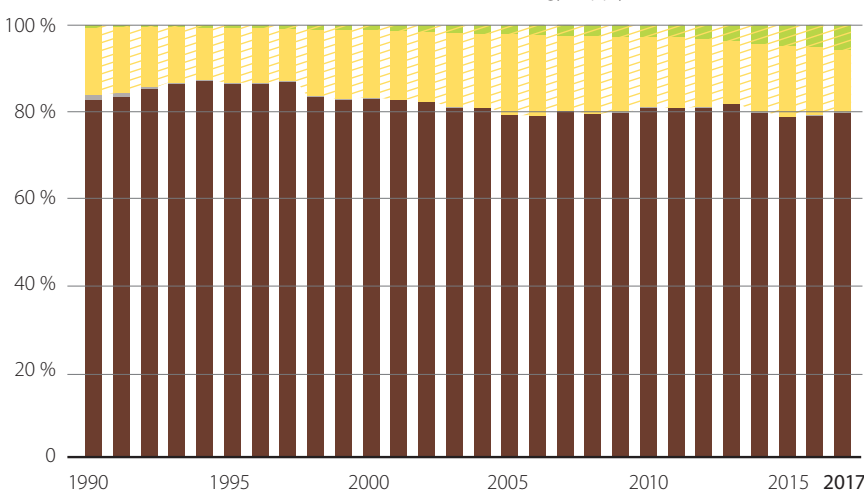
Source: Enerdata 2018

Share in 2017

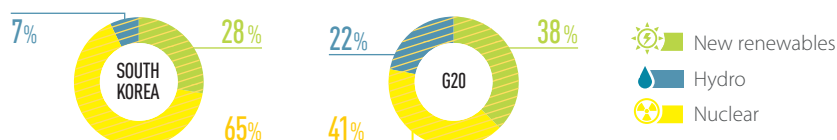


SHARE OF FOSSIL FUELS AND 'ZERO-CARBON' FUELS IN ENERGY SUPPLY¹¹

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

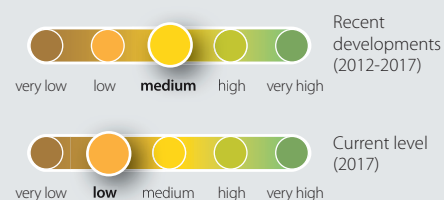


'ZERO-CARBON' SHARES



Source: Enerdata 2018

PERFORMANCE RATING OF SHARE OF FOSSIL FUELS¹²



Source: own evaluation

Zero-carbon fuels are mainly nuclear, hydropower, new renewables. Their share in Japan's energy mix is at 20% above the G20 average (14%) due to the high share of nuclear.

PERFORMANCE RATING OF SHARE OF ZERO-CARBON TECHNOLOGY¹²

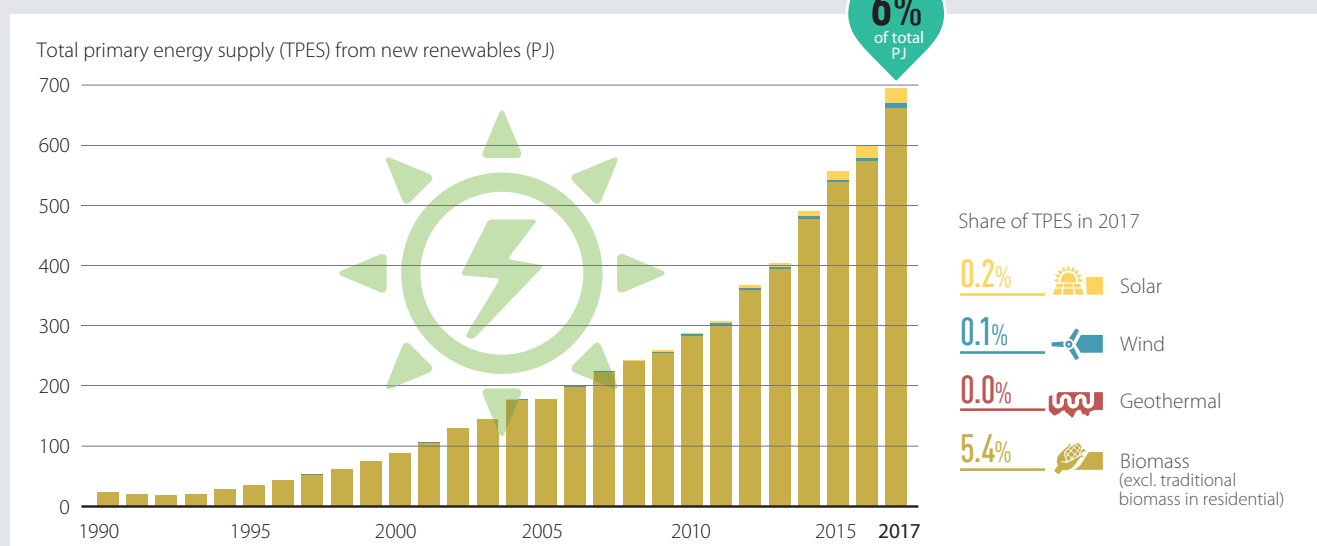


Source: own evaluation



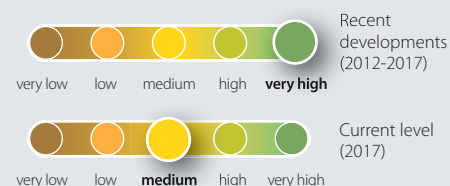
DECARBONISATION

SOUTH KOREA

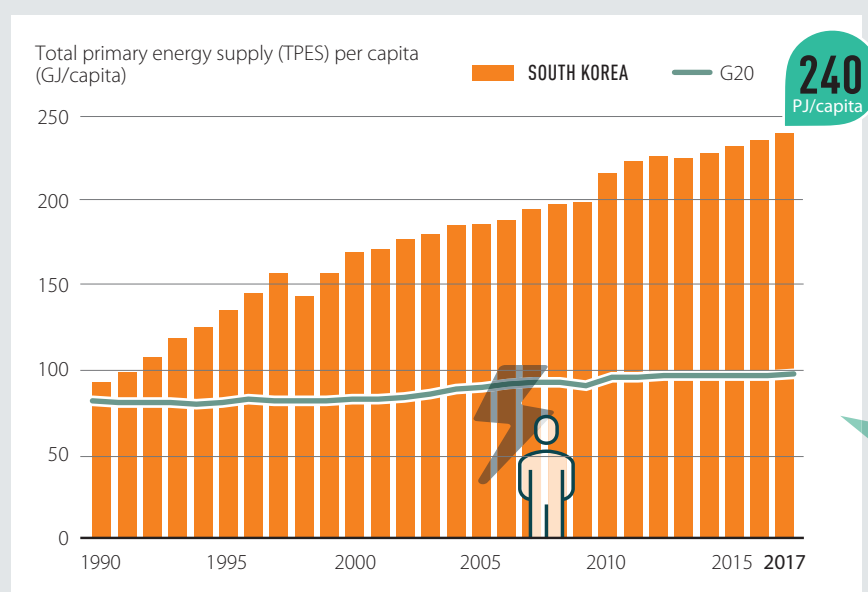
NEW RENEWABLES¹³

Source: Enerdata 2018

"New renewables" excludes unsustainable renewable sources such as large hydropower. The amount of energy from new renewable sources has almost doubled (2012–2017). The current share of new renewables in the energy mix is at 6% slightly above the G20 average (5%). South Korea's new renewables are mainly derived from biomass, compared to wind and solar in other countries.

PERFORMANCE RATING OF NEW RENEWABLES¹²

Source: own evaluation

ENERGY USE PER CAPITA¹⁴

Source: Enerdata 2018

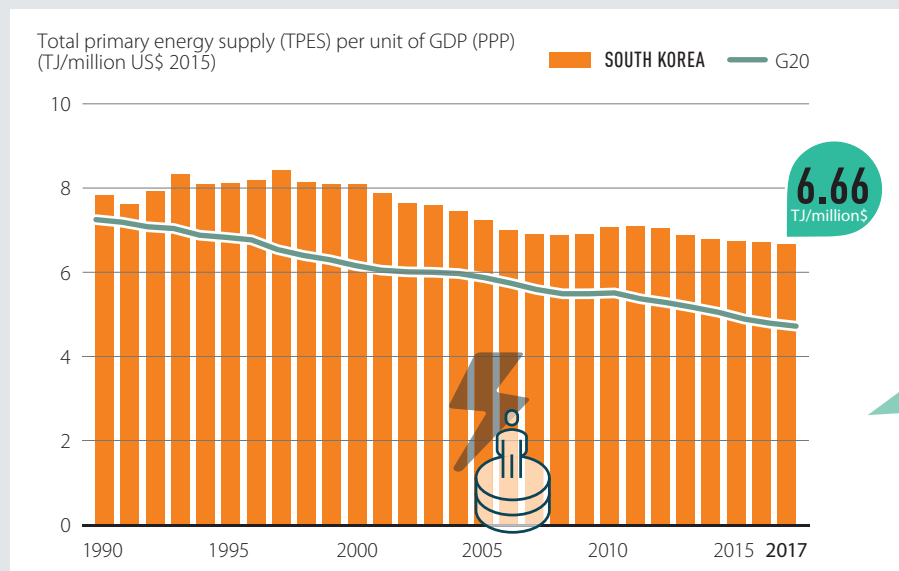
PERFORMANCE RATING OF ENERGY USE PER CAPITA¹²

Source: own evaluation

Energy use per capita in South Korea more than doubled between 1990 and 2017. It is now 2.4 times the G20 average.

DECARBONISATION SOUTH KOREA

ENERGY INTENSITY OF THE ECONOMY¹⁵



Source: Enerdata 2018

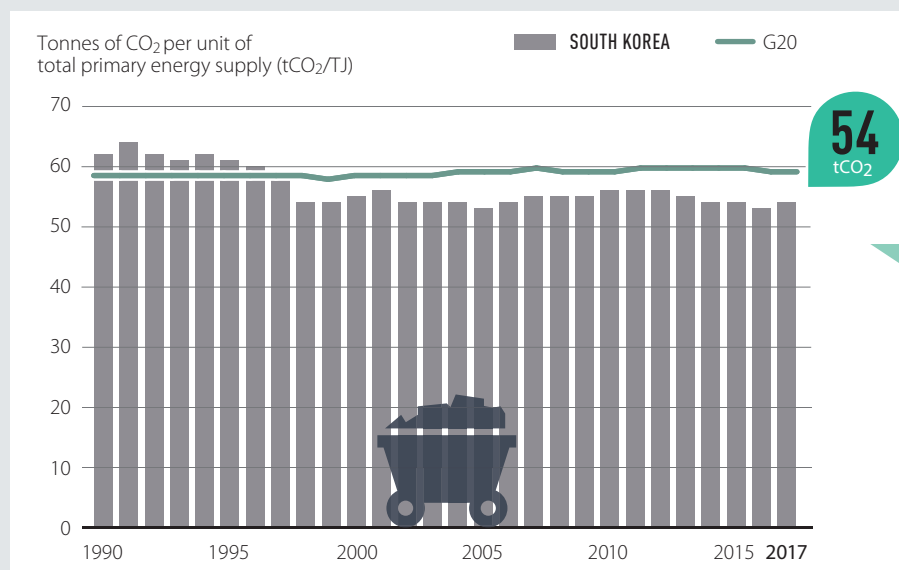
This indicator quantifies how much energy is used for each unit of GDP. South Korea's energy intensity is above the G20 average and has only decreased by 6% (2012–2017), compared to an 11% decrease in the G20.

PERFORMANCE RATING OF ENERGY INTENSITY¹²



Source: own evaluation

CARBON INTENSITY OF THE ENERGY SECTOR¹⁶



Source: Enerdata 2018

The carbon intensity of South Korea's energy sector is slightly below the G20 average. It has been decreasing by 3% (2012–2017), at a quicker pace than the G20 average, reflecting the decreasing share of fossil fuels in the energy mix.

PERFORMANCE RATING OF CARBON INTENSITY¹²



Source: own evaluation

DECARBONISATION

SOUTH KOREA

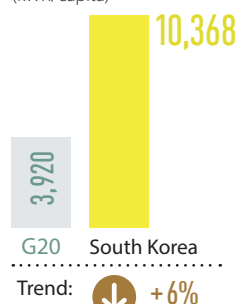
SECTOR-SPECIFIC INDICATORS

Legend for trend: negative positive

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

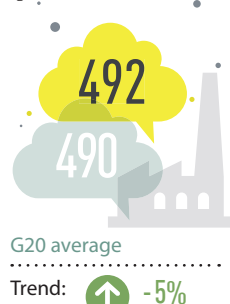
POWER SECTOR

ELECTRICITY DEMAND PER CAPITA
(kWh/capita)



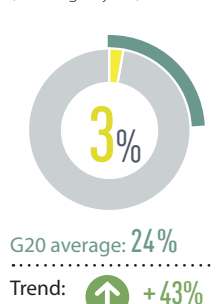
Data from 2017
Source: Enerdata 2018

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

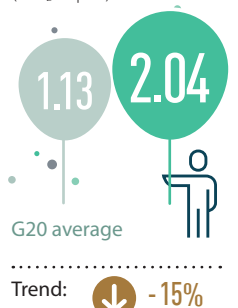
SHARE OF POPULATION WITH BIOMASS DEPENDENCY



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 2015 | 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

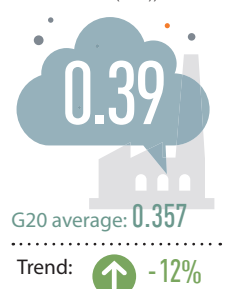
MARKET SHARE OF ELECTRIC VEHICLES IN NEW CAR SALES (%)



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

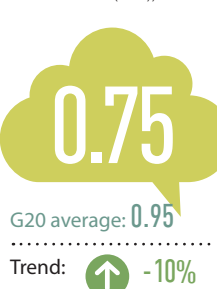
BUILDING EMISSIONS PER CAPITA
(tCO₂/capita)



Data from 2016
Source: Enerdata 2018

AGRICULTURE SECTOR

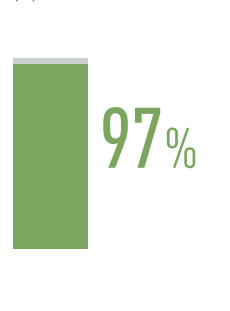
AGRICULTURE EMISSIONS INTENSITY
(tCO₂e/thousand US\$2015 sectoral GDP (PPP))



Data from 2015
Source: PRIMAP 2018

FOREST SECTOR

FOREST AREA COMPARED TO 1990 LEVEL (%)

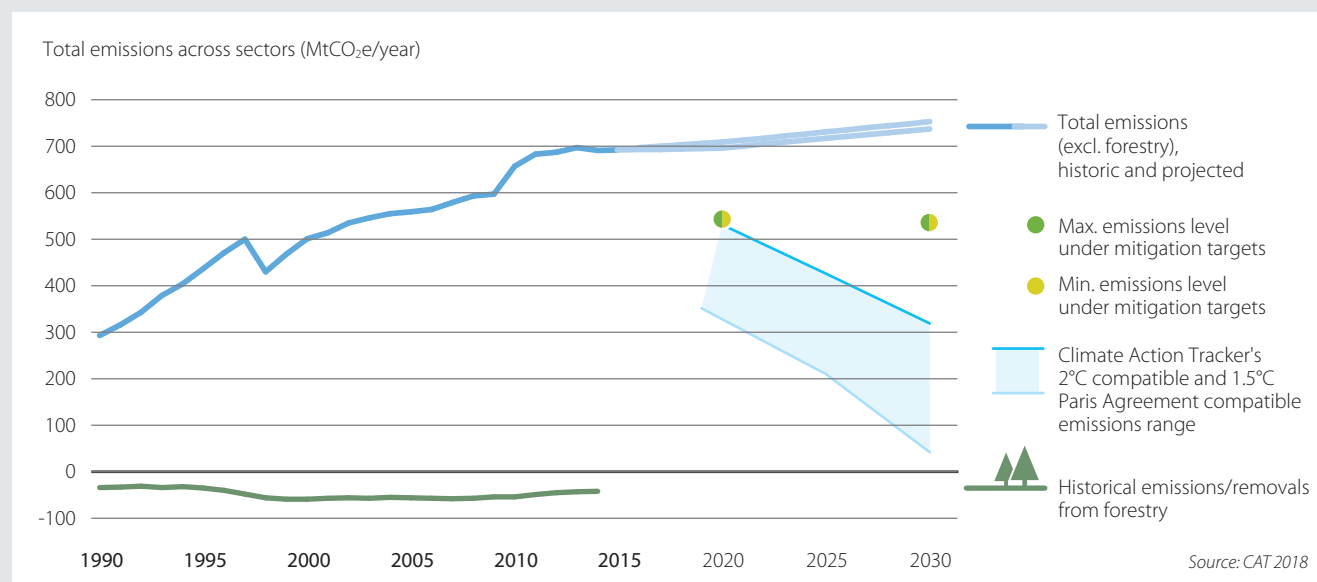


Data from 2015
Source: PRIMAP 2018

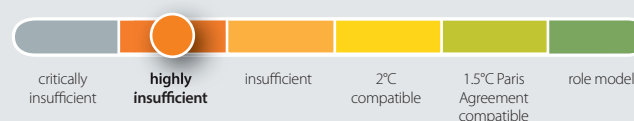


CLIMATE POLICY

SOUTH KOREA

COMPATIBILITY OF CLIMATE TARGETS WITH THE PARIS AGREEMENT²

The CAT rates South Korea's NDC target "highly insufficient" as it is not ambitious enough to limit warming to below 2°C, let alone to 1.5°C. South Korea's weak mitigation commitment allows domestic emissions in 2030 to more than double from 1990 levels. As a country with some of the fastest growing emissions in the OECD, South Korea would need more stringent policies to be able to peak and start declining emissions to meet the NDC target.

CLIMATE ACTION TRACKER (CAT) EVALUATION OF NDC²

NATIONALLY DETERMINED CONTRIBUTION (NDC)

MITIGATION

Targets	<p>Overall targets</p> <p>To reduce its GHG emissions by 37% from the business-as-usual (850.6 MtCO₂eq) level by 2030 across all economic sectors</p> <p>Coverage</p> <ul style="list-style-type: none"> Sectors covered: energy, industrial processes and product use, agriculture and waste GHG covered: carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), sulphur hexafluoride (SF₆) Percentage of national emissions covered: Not specified
Actions	Actions mentioned but not further specified

ADAPTATION

Targets	Not mentioned
Actions	Actions mentioned but not further specified (sectors: water, ecosystems, health)

FINANCE

Conditionality	NDC not conditional on international financial support
Investment needs	Not specified
Actions	National actions to align financial flows are mentioned, but not further specified (fiscal levers)
International market mechanisms	Korea will partly use carbon credits from international market mechanisms to achieve its 2030 mitigation target

Source: own compilation based on UNFCCC 2018





CLIMATE POLICY

SOUTH KOREA

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:

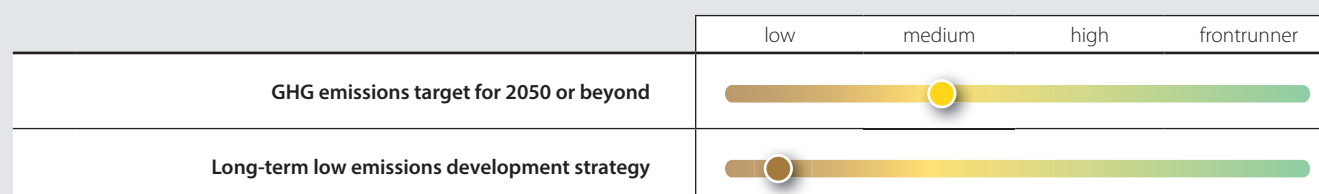
low No action

medium Some action

high Significant action and a long-term vision

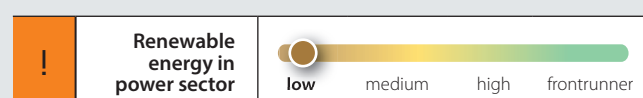
frontrunner Significant action, and a long-term vision that is compatible with 1.5°C

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

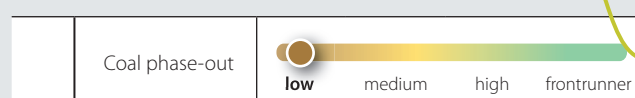


South Korea does not have a long-term emission strategy nor a 2050 emissions target.

POWER

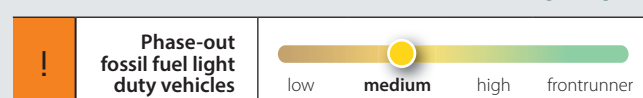


South Korea aims to increase the share of renewables in the electricity mix to 20% by 2030. According to its 2017 Electricity Plan this would require an increase of installed capacity from 11.3 GW in 2017 to 58.5 GW in 2030. The government revised the Renewable Portfolio Standard by prioritising wind power and incentivising renewable power plants to have a shared profit model with communities.



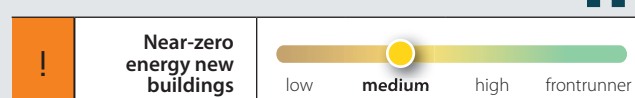
After assuming power in 2017, the new government decided to temporarily shut down coal power plants older than 30 years for shorter periods, and to decommission these in 2022. New coal power plants will be built until 2022, but the government decided to change some of the planned units into LNG. Overall, coal use is expected to peak at 42 GW by 2022 and then decrease to 39.9 GW in 2030.

TRANSPORT



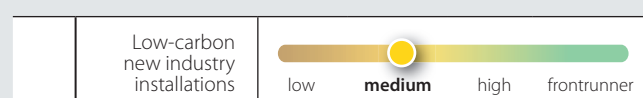
Since 2009, fuel economy standards and fleet-average emission limits are in place. The government adopted 2020 standards requiring fuel economy reductions of 31.1% to a 2013 baseline. There are no targets to phase out fossil-based LDVs, but the government is supporting the uptake of electric vehicles (EV), with a goal of having 250,000 EVs on the road by 2020, through subsidies of up to US\$12,000 per vehicle.

BUILDINGS



Building codes for large residential and non-residential buildings are in place, yet there is no strategy to promote zero-energy buildings.

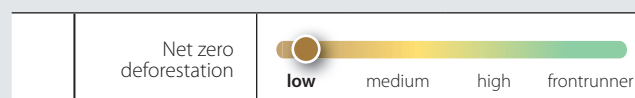
INDUSTRY



In 2015, South Korea introduced an emissions trading scheme that covers around 68% of GHG emissions. Other large emitters are covered under the GHG Target Management System that regularly sets obligatory GHG emission targets for different industries. There are no specific policies requiring new installations to be low carbon.

Source: own evaluation

FORESTS



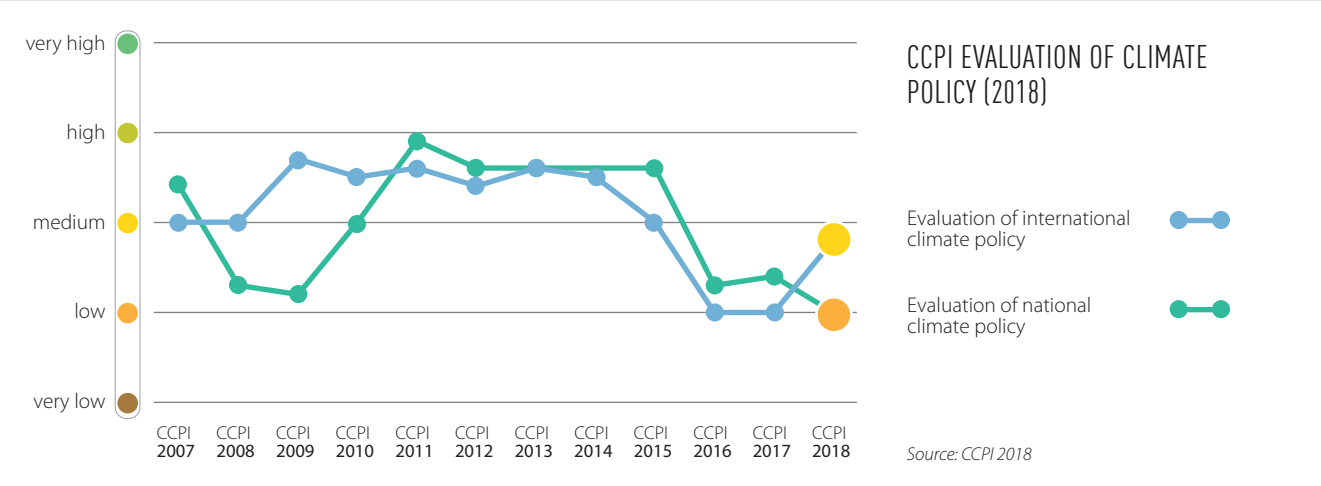
Since 1973, South Korea has had five different and largely successful National Forest Plans, the last of which ended in 2017. Right now, there are no forestry policies or targets to reach zero deforestation.

CLIMATE POLICY

SOUTH KOREA

CCPI EXPERTS' POLICY EVALUATION¹⁸

South Korea's experts give a low rating to the country's performance on national climate policy, mainly due to its unambitious 2030 emission reduction target. They criticise the increased use of coal power and weak policies on renewable energy. Experts rate South Korea's international climate policy as medium, noting weak transparency and governance.



JUST TRANSITION¹⁹

Following President Moon Jae-in's election in May 2017, the government pledged to shut down ageing nuclear and coal power plants, abolish plans for new reactors, and grow the share of renewable energy to 20% by 2030. However, the share of gas-based electricity is also planned to grow to 38.4%. Discussions on whether to go ahead with the planned construction of Kori 5 and 6 nuclear reactors sparked much public debate on the impacts of plant closures on workers. Notably, Korean unions representing energy, transport and public service workers announced a call for a "just energy transition", stating their support for the phase-out of

coal and nuclear, but that a "roadmap for energy transition that ensures public accountability and strengthens democratic control of the energy industry" must also be developed. The 8th Basic Plan for Long-Term Electricity Supply and Demand 2017–2031, released late 2017, did not appear to include explicit planning for a just transition.





FINANCING THE TRANSITION

SOUTH KOREA

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
<div></div>	<div></div>	<div></div>	<div></div>	<div></div>

Source: CISL 2018

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

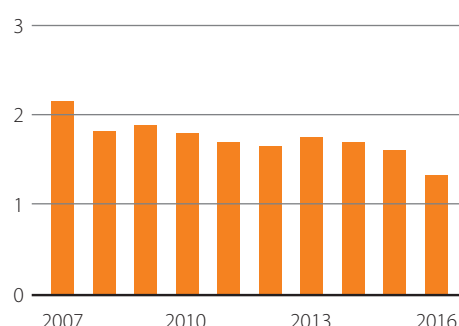
FISCAL POLICY LEVERS

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, South Korea provided US\$1.3bn in fossil fuel subsidies (from US\$2.1bn in 2007). Between 2007 and 2016, subsidies were lower (US\$0.001) than the G20 average (US\$0.003) per unit of GDP. Subsidies were provided through direct budget support and tax exemptions, primarily targeting production (82%). The largest subsidy is the fuel tax exemptions provided to the fisheries sector (and certain coastal passenger ships) (US\$573m in 2016).

Fossil fuel subsidies (US\$ billions)



Source: OECD/IEA 2017

CARBON REVENUES

In 2015, South Korea introduced a national emissions trading scheme, but due to the free allocation of permits no revenues have been generated. This scheme covers 68% of domestic emissions (in the power, industry, buildings, transport, aviation and waste sectors), with emissions priced at US\$21 per tonne of carbon dioxide.

NO ESTIMATES AVAILABLE.



Source: I4CE 2018



FINANCING THE TRANSITION

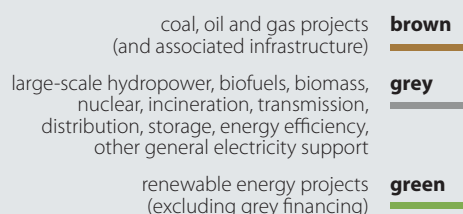
SOUTH KOREA

PUBLIC FINANCE

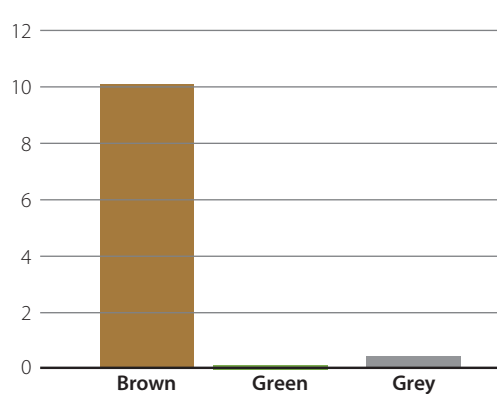
Governments steer investments through their public finance institutions including via development banks, both at home and overseas, and green investment banks. Developed G20 countries also have an obligation to provide finance to developing countries and public sources are a key aspect of these obligations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

NATIONAL AND INTERNATIONAL PUBLIC FINANCE IN THE POWER SECTOR²¹

From 2013 to 2015, South Korea's public finance institutions spent an annual average of US\$10bn brown, US\$0.1bn green and US\$0.4bn grey financing in the power sector, domestically and internationally. The largest transactions were the Export-Import Bank of Korea's loan (US\$2bn) to Pemex's credit line in Mexico, and the loan (US\$1.2bn) to the Jeddah South oil-fired power plant in Saudi Arabia.

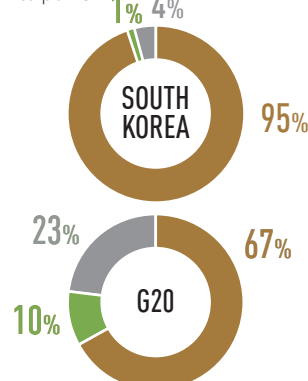


2013-2015 annual average of power finance (US\$ billions)



Source: Oil Change International 2017

Proportion of total public finance to power



PROVISION OF INTERNATIONAL PUBLIC SUPPORT

South Korea is not obligated to provide climate finance under the UNFCCC. Despite this, it has pledged US\$100m to the GCF and hosts its headquarters. It has also contributed to a number of multilateral climate change funds spread relatively evenly across themes and its reports show it provides bilateral climate-related ODA (as an OECD member) amounting to US\$268m in the 2015/16 period. While climate-related spending by multilateral development banks may exist, 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
0.32	0%	100%	0%

BILATERAL CLIMATE FINANCE CONTRIBUTIONS²³

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.

Source: Country reporting to the UNFCCC



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)

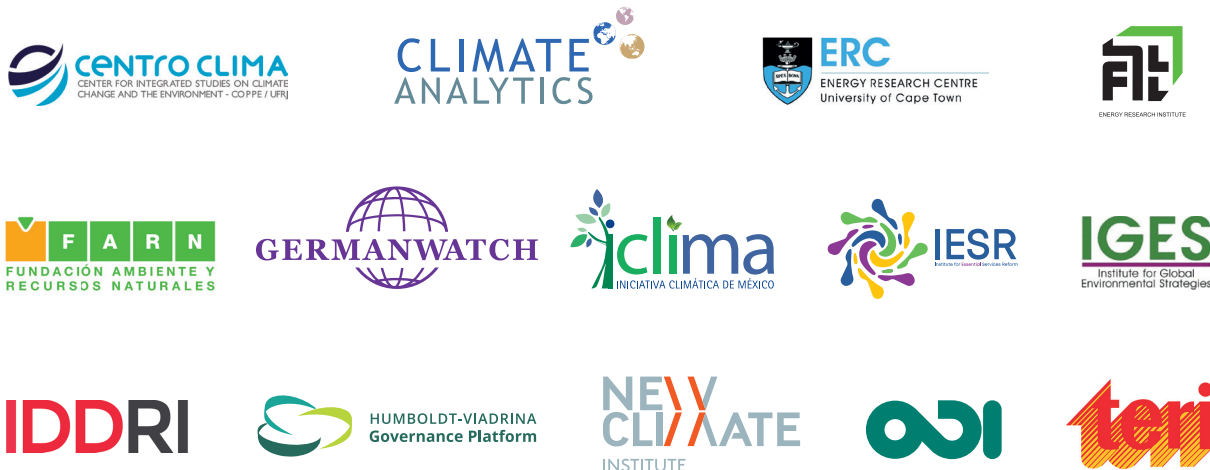


- 17) The selection of policies rated and the assessment of 1.5°C compatibility are informed by the Paris Agreement and the Climate Action Tracker (2016): "The ten most important short-term steps to limit warming to 1.5°C". The table below displays the criteria used to assess a country's policy performance. 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>

