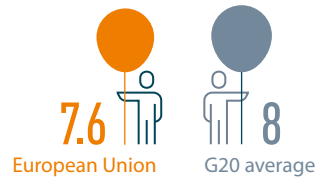


BROWN TO GREEN:

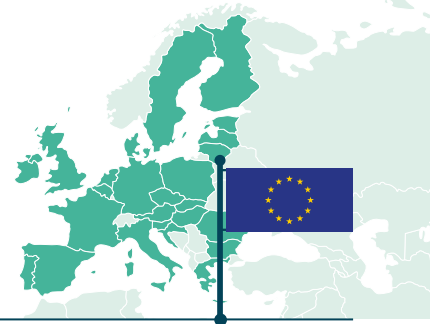
THE G20 TRANSITION TO A LOW-CARBON ECONOMY | 2018

THE EUROPEAN UNION

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



Data from 2015 | Source: PRIMAP 2018



The gap:

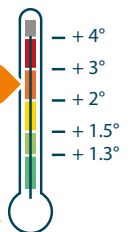
Is the EU on track to stay below the Paris Agreement temperature limit?

Based on implemented policies, the EU's **GHG emissions** are expected to decrease to between 3.4 GtCO₂e and 3.8 GtCO₂e by 2030 (excl. forestry). This emission pathway is not compatible with the Paris Agreement.¹

The EU's **NDC** is not consistent with the Paris Agreement's temperature limit but would lead to a warming between 2°C and 3°C.²

The EU's sectoral **policies** are still falling short of being consistent with the Paris Agreement, but the new renewable energy and energy efficiency targets for 2030 are an improvement.³

Current NDC²



Source: CAT 2018

Recent developments:

What has happened since the Paris conference?



The reform of the EU emissions trading scheme has led to a significant increase in the prices of emissions allowances, which in 2018 exceeded €20. Yet heavy industry will continue to benefit from generous exceptions.



The European Commission initiated a debate on the EU's long-term climate strategy that would replace the outdated 2011 Low Carbon Roadmap 2050, giving it a chance to reflect the Paris Agreement temperature limit.



The EU agreed on more ambitious renewable energy and energy efficiency targets than initially proposed by the Commission. If reached they would lead to emissions reductions by around 45% in 2030.

Brown and green performance:

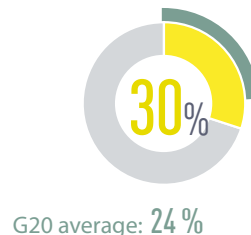
Where does the EU lead or lag compared to G20 countries?

TRANSPORT EMISSIONS PER CAPITA
(tCO₂/capita)



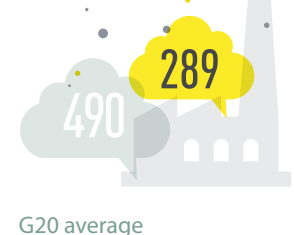
Data from 2017 | Source: Enerdata 2018

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



Data from 2017 | Source: Enerdata 2018

EMISSIONS INTENSITY OF
THE POWER SECTOR
(gCO₂/kWh)



Data from 2016 | 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:
EUGDP PER CAPITA⁴
(PPP US\$ const. 2015, international)

Source: World Bank 2017

HUMAN DEVELOPMENT INDEX⁵

Data from 2017 | Source: UNDP 2018

THE EU'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. Data is only available for individual EU member states.



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

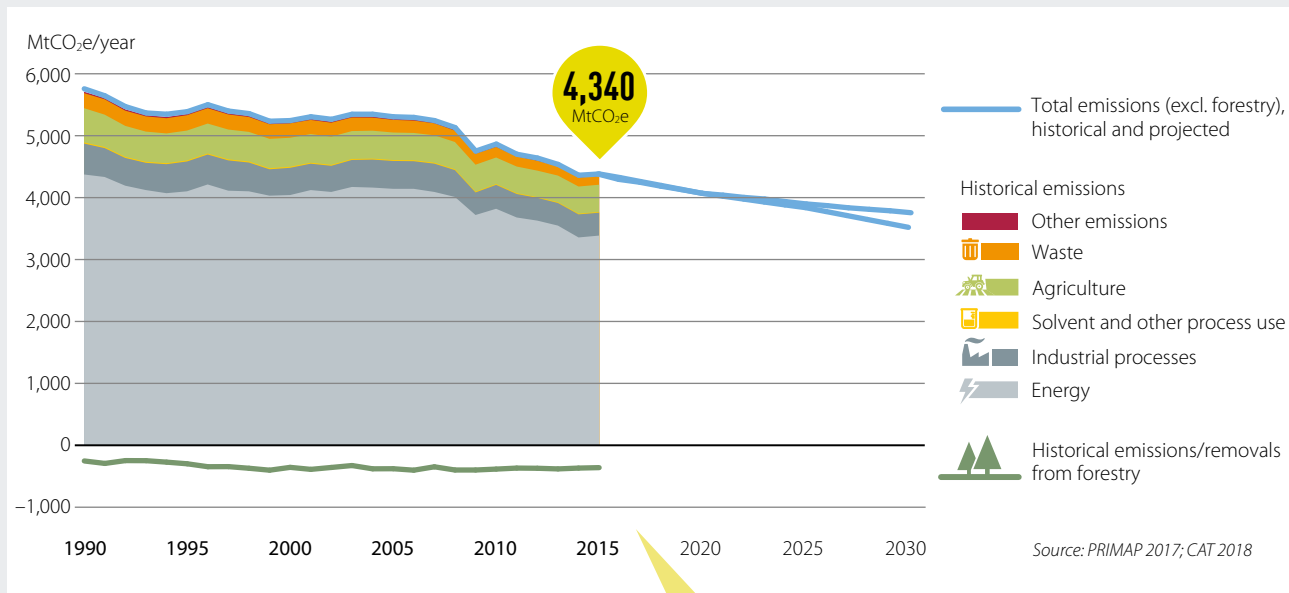
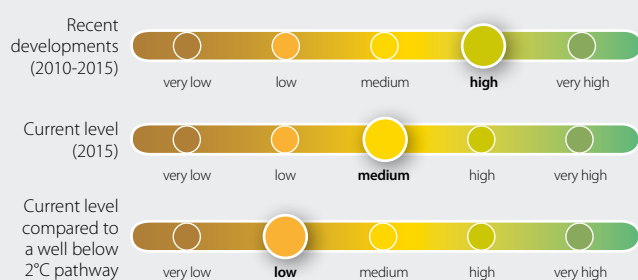


Own composition based on ND-GAIN 2017 (based on data for 2016)

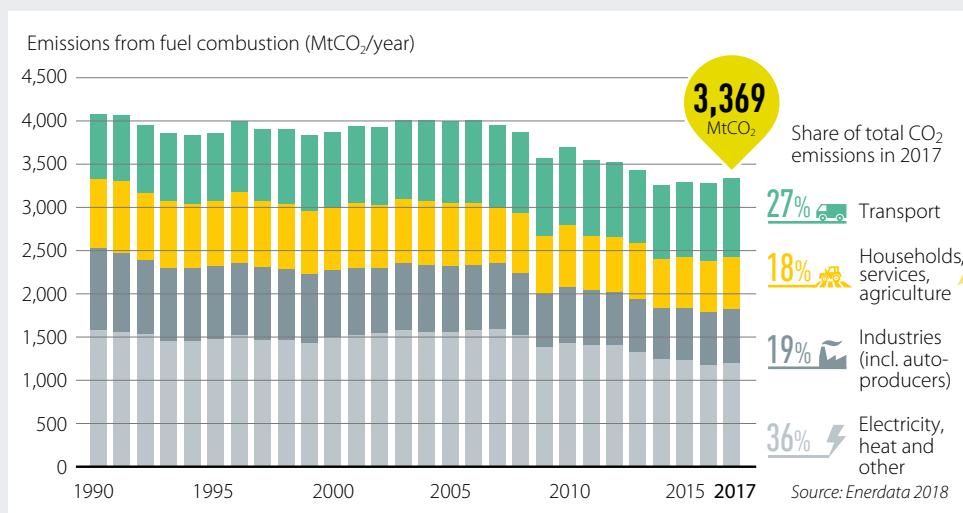


GREENHOUSE GAS (GHG) EMISSIONS

THE EUROPEAN UNION

TOTAL GHG EMISSIONS ACROSS SECTORS⁷CCPI PERFORMANCE RATING OF GHG EMISSIONS PER CAPITA⁸

The EU's emissions have steadily decreased by 24% between 1990 and 2017. The trend is expected to continue towards 2030. The energy sector contributes most to overall emissions.

ENERGY-RELATED CO₂ EMISSIONS⁹

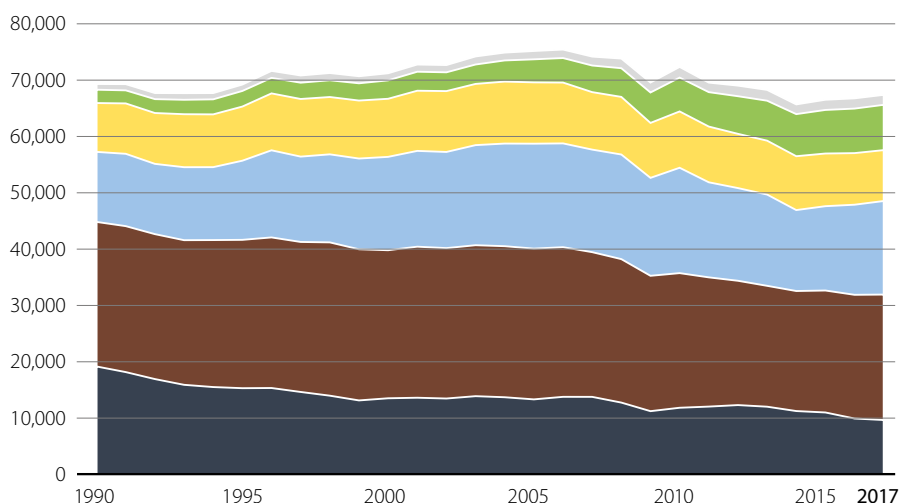
The largest contributor for overall GHG emissions are CO₂ emissions from energy, which have decreased in the EU by 5% (2012–2017). Electricity and heat generation, and transport make up the largest share.

DECARBONISATION

THE EUROPEAN UNION

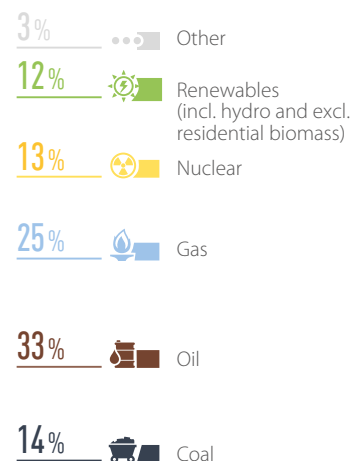
ENERGY MIX¹⁰

Total primary energy supply (PJ)



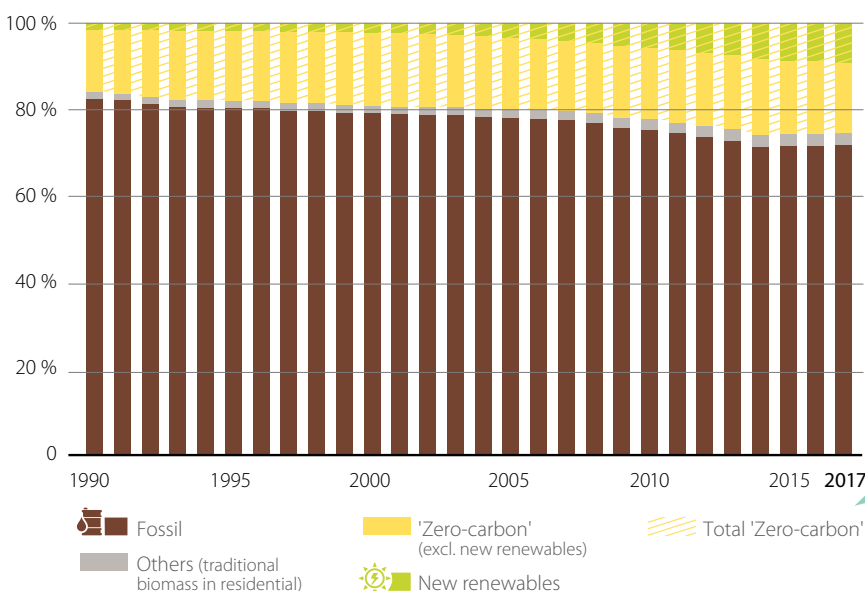
Source: Enerdata 2018

Share in 2017

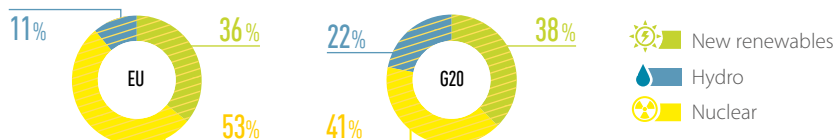


SHARE OF FOSSIL FUELS AND 'ZERO-CARBON' FUELS IN ENERGY SUPPLY¹¹

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

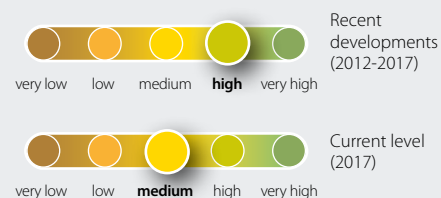


'ZERO-CARBON' SHARES



Source: Enerdata 2018

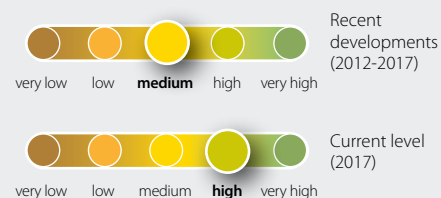
PERFORMANCE RATING OF SHARE OF FOSSIL FUELS¹²



Source: own evaluation

Zero-carbon fuels include nuclear, hydropower, new renewables. Their share in the EU's energy mix is driven by a high share of nuclear energy and at 25% is higher than G20 average (14%).

PERFORMANCE RATING OF SHARE OF ZERO-CARBON TECHNOLOGY¹²

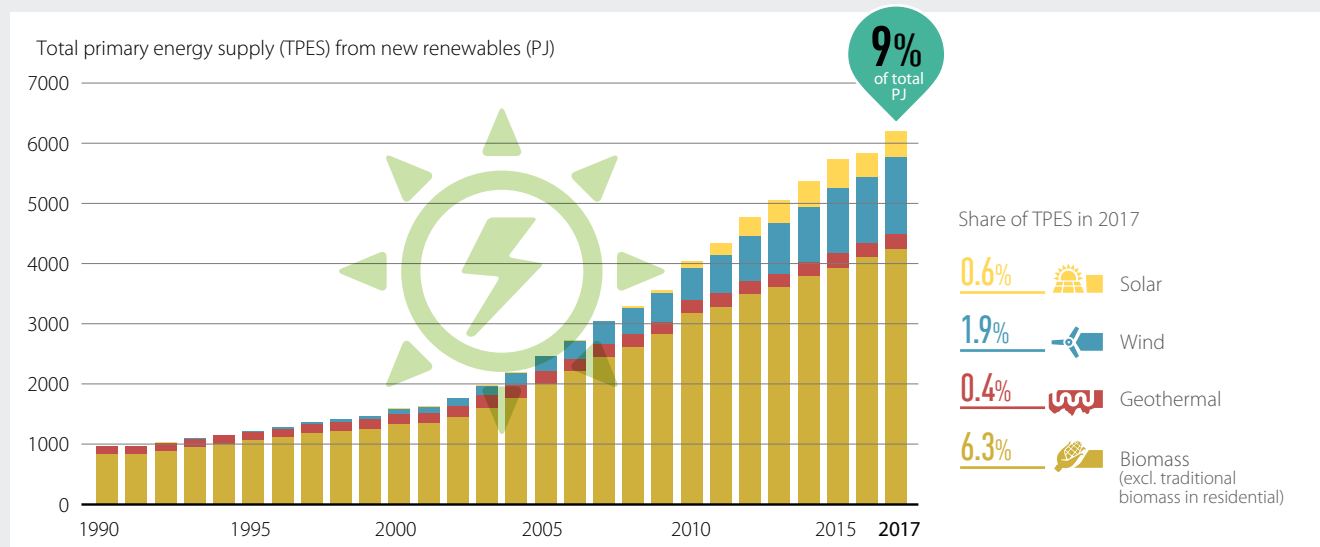


Source: own evaluation



DECARBONISATION

THE EUROPEAN UNION

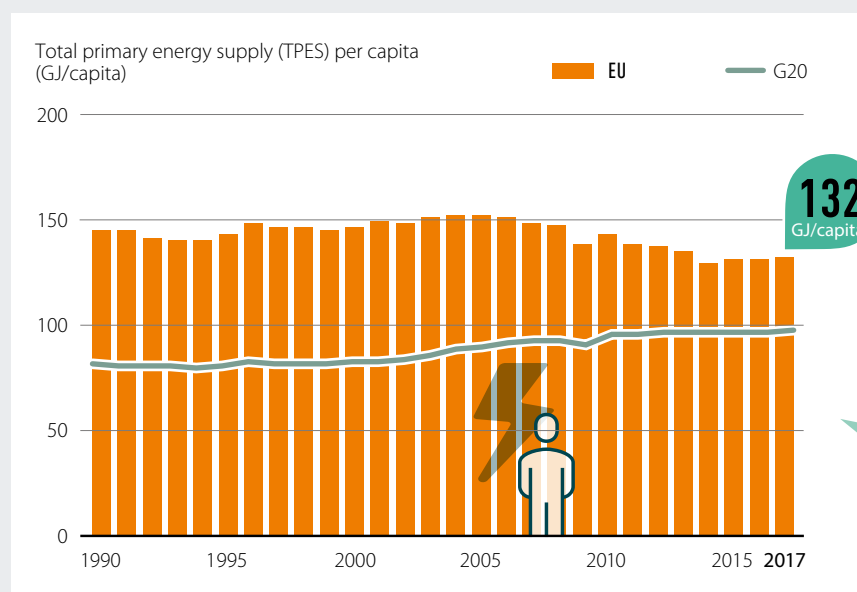
NEW RENEWABLES¹³

Source: Enerdata 2018

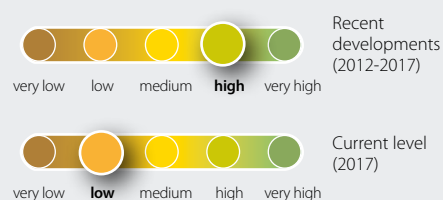
"New renewables" excludes unsustainable renewable sources such as large hydropower. The amount of energy from new renewable sources in the EU is more than six times higher (6,199 PJ) than in 1990 (966 PJ). New renewables account for 9% of the energy supply, which is above the G20 average (5%). It is mostly derived from biomass but increasingly also from wind and solar.

PERFORMANCE RATING OF NEW RENEWABLES¹²

Source: own evaluation

ENERGY USE PER CAPITA¹⁴

Source: Enerdata 2018

PERFORMANCE RATING OF ENERGY USE PER CAPITA¹²

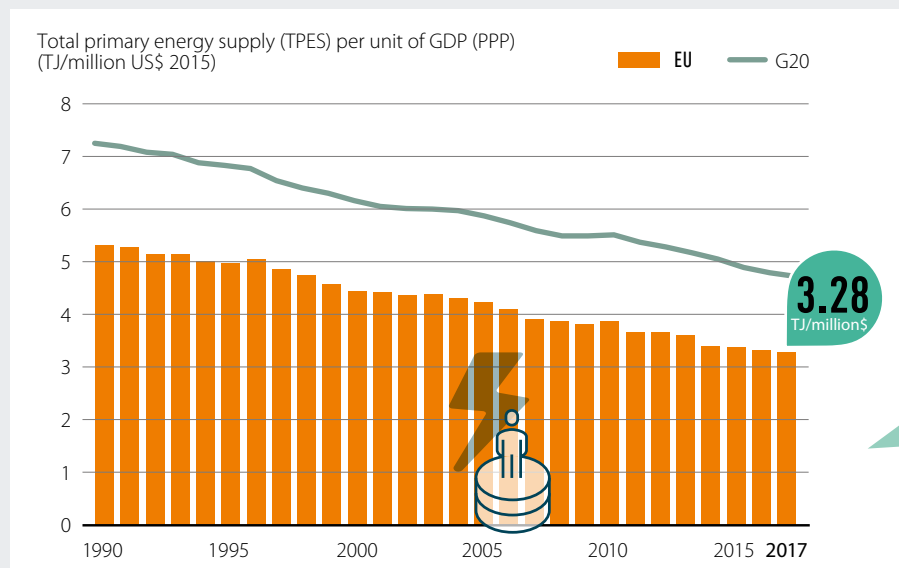
Source: own evaluation

EU energy use per capita has decreased by 4% (2012-2017), compared to an increasing trend in the G20 average (+1%). It remains 30% above G20 average.



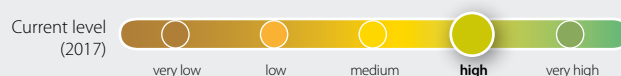
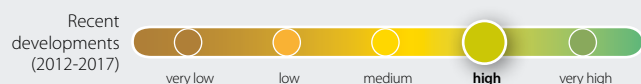
DECARBONISATION

THE EUROPEAN UNION

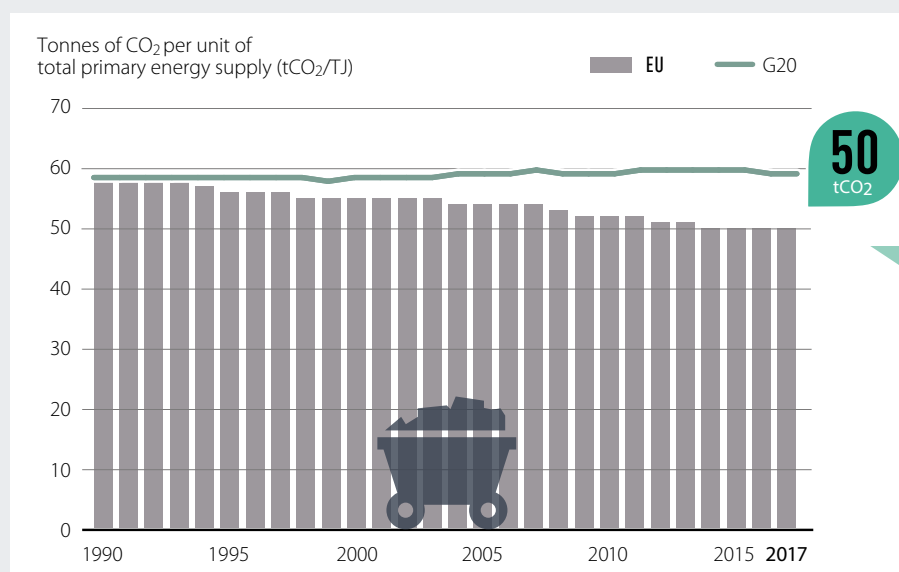
ENERGY INTENSITY OF THE ECONOMY¹⁵

Source: Enerdata 2018

This indicator quantifies how much energy is used for each unit of GDP. The EU's energy intensity shows a decreasing trend of 10% (2012–2017) similar to the G20 trend (-11%) and remains 30% below the G20 average.

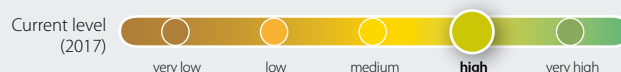
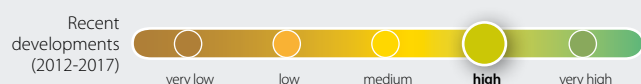
PERFORMANCE RATING OF ENERGY INTENSITY¹²

Source: own evaluation

CARBON INTENSITY OF THE ENERGY SECTOR¹⁶

Source: Enerdata 2018

The carbon intensity of the EU's energy sector is below the G20 average. It has been decreasing steadily since 1990, particularly by 3% between 2012 and 2017, reflecting a decreasing share of coal and oil in the energy mix.



PERFORMANCE RATING OF CARBON INTENSITY¹²

Source: own evaluation

DECARBONISATION

THE EUROPEAN UNION

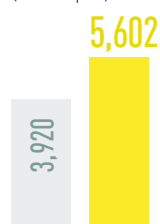
SECTOR-SPECIFIC INDICATORS

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)



Trend:  -3%

Data from 2017
Source: Enerdata 2018

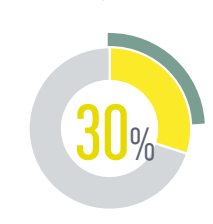
EMISSIONS INTENSITY OF THE POWER SECTOR
(gCO₂/kWh)



Trend:  -15%

Data from 2016
Source: Enerdata 2018

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



Trend:  +41%

Data from 2017
Source: Enerdata 2018

SHARE OF POPULATION WITH ACCESS TO ELECTRICITY



Trend: 0%

Data from 2016
Source: World Bank 2018

SHARE OF POPULATION WITH BIOMASS DEPENDENCY



Data from 2014
Source: IEA 2016

TRANSPORT SECTOR

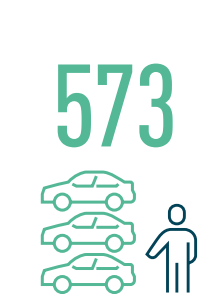
TRANSPORT EMISSIONS PER CAPITA
(tCO₂/capita)



Trend:  +4%

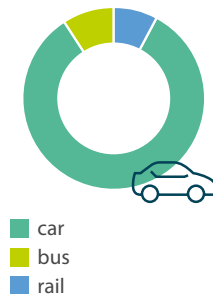
Data from 2017
Source: Enerdata 2018

MOTORISATION RATE
(Vehicles per 1000 inhabitants)



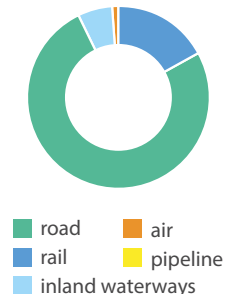
Data from 2015 | Source: Agora Verkehrswende 2018

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



Data from 2015 | Source: Agora Verkehrswende 2018

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



Data from 2015 | Source: Agora Verkehrswende 2018

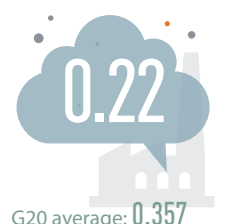
MARKET SHARE OF ELECTRIC VEHICLES IN NEW CAR SALES (%)



Data from 2017
Source: IEA 2018

INDUSTRY SECTOR

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



Trend:  -10%

Data from 2015
Source: PRIMAP 2018

BUILDING SECTOR

BUILDING EMISSIONS PER CAPITA
(tCO₂/capita)



Trend:  -6%

Data from 2016
Source: Enerdata 2018

AGRICULTURE SECTOR

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

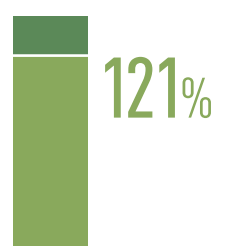


Trend:  -3%

Data from 2015
Source: PRIMAP 2018

FOREST SECTOR

FOREST AREA COMPARED TO 1990 LEVEL (%)

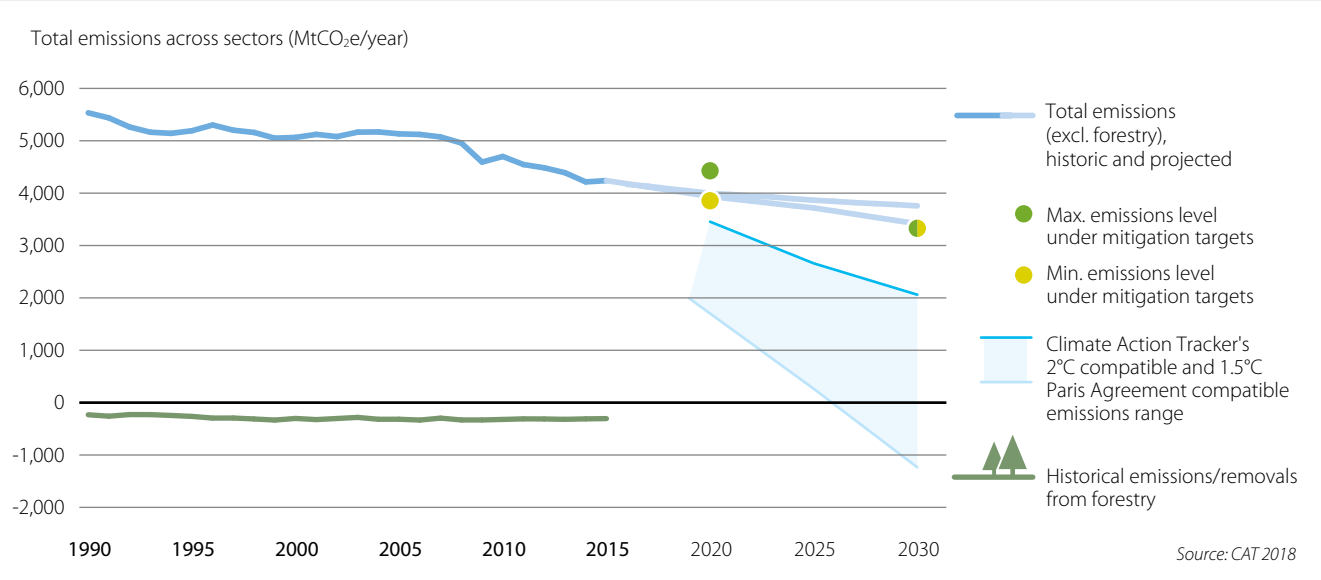


Data from 2015
Source: PRIMAP 2018

CLIMATE POLICY

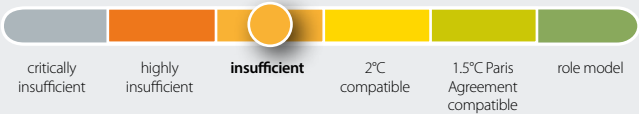
THE EUROPEAN UNION

COMPATIBILITY OF CLIMATE TARGETS WITH THE PARIS AGREEMENT²



The CAT rates the EU's NDC "insufficient" – not ambitious enough to limit warming to below 2°C, let alone to 1.5°C. The EU's climate leadership is threatened further by the fact that the rate of emissions reduction will not allow the EU to meet its 2030 goal, at least not with currently implemented measures. The EU recognises that it is not on track to meet its 2030 target and is discussing a large package of measures aimed at accelerating emissions reduction in different areas.

CLIMATE ACTION TRACKER (CAT) EVALUATION OF NDC²



NATIONALLY DETERMINED CONTRIBUTION (NDC)

The table presents the NDC of the European Union that includes contributions from all member states.

MITIGATION	
Targets	Overall targets At least 40% domestic GHG emissions reduction compared to 1990 by 2030 Coverage 100% of emissions covered (all sectors and gases)
Actions	Not mentioned

ADAPTATION	
Targets	Not mentioned
Actions	Not mentioned

FINANCE	
Condi-tion-ality	Not applicable
Investment needs	Not specified
Actions	Not mentioned
International market mechanisms	No contribution from international credits for the achievement of the target

Source: own compilation based on UNFCCC 2018





CLIMATE POLICY

THE EUROPEAN UNION

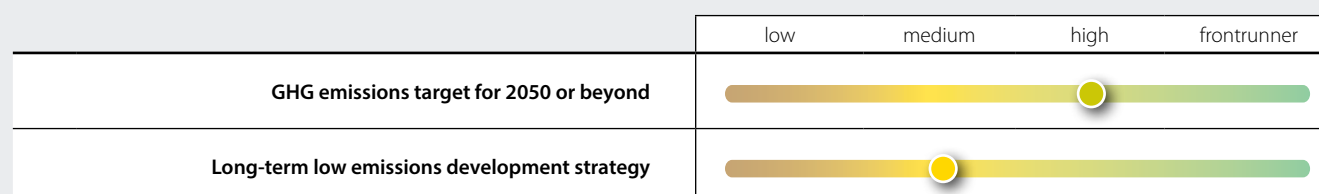
POLICY EVALUATION¹⁷

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



The European Commission (EC) has initiated discussion on the EU's long-term climate strategy, with a proposal expected by the first quarter of 2019. The strategy would replace the outdated 2011 Low Carbon Roadmap (including its 2050 reduction target

of 80% to 95% from 1990 levels). While it may not include a 2050 target, it should present scenarios reflecting the Paris Agreement temperature limit.

POWER

	Renewable energy in power sector	no rating
--	----------------------------------	-----------

The EU aims to source 20% of energy from renewable sources by 2020, and has set individual targets for each member state; a 2030 target of 32% is currently going through the legislative process. Support policies for renewables are member states' competence but the EC has adopted guidance for support schemes, e.g. suggesting the use of auctions.

!	Coal phase-out	
---	-----------------------	--

Ten EU member states representing 26% of the installed coal capacity have already committed to closing their power plants by 2030 at the latest. The reform of the EU's Emissions Trading Scheme adopted in early 2018, already resulting in much higher prices of emissions allowances, may accelerate this process on economic grounds.

TRANSPORT

!	Phase-out fossil fuel light duty vehicles	
---	--	--

While the carbon intensity of newly registered cars increased for the first time in 2017, the EC suggested stricter emissions standards for 2025 and 2030, to be adopted by the end of 2018. Some EU member states have also announced introducing bans on the sale of combustion cars but the promotion of clean transport takes place at different speeds in different member states.

BUILDINGS

!	Near-zero energy new buildings	
---	---------------------------------------	--

The 2010 Energy Performance Buildings Directive introduced the requirement that all new buildings from 2020 are nearly zero-energy buildings. The recast of the directive from 2018 complemented this requirement by obliging each member state to submit a long-term renovation strategy leading to decarbonisation of its building stock by 2050.

INDUSTRY

	Low-carbon new industry installations	
--	---------------------------------------	--

The EU's Industrial Emissions Directive requires around 50,000 installations undertaking industrial activities to receive a permit showing that they operate according to the Best Available Techniques.

FORESTS

	Net zero deforestation	
--	------------------------	--

In 2018 the EU adopted a new regulation with the no-debit rule meaning that emissions from deforestation need to be offset by either afforestation or improved management of existing forests.

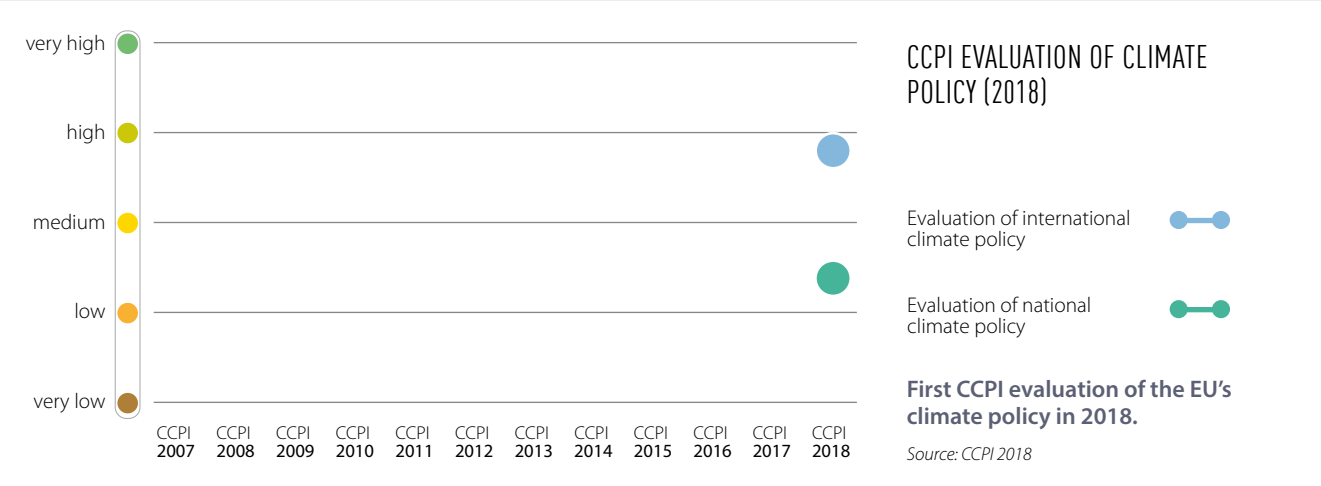
Source: own evaluation

CLIMATE POLICY

THE EUROPEAN UNION

CCPI EXPERTS' POLICY EVALUATION¹⁸

Experts rate the EU's performance internationally as high, noting its constructive role in international negotiations on climate diplomacy. They criticise its failure so far to produce more ambitious targets. The experts value discussions on new renewable energy policies and the EU budget, but warn that the carbon price under the Emissions Trading Scheme is highly insufficient and that the EU has failed so far to substantially reform it. So the EU is rated low for supranational performance.



JUST TRANSITION¹⁹

Currently, more than 450,000 people are directly and indirectly employed in coal power generation and mining in the EU, with 185,000 workers in coal mines. Renewable energy and energy efficiency employed 1.5 million people in 2015. To avoid negative impacts resulting from the loss of a major employer especially in regions with few alternatives, the EC included the concept of just transition in its Communication dealing with the Energy Union, according to which a just energy transition will require "retraining or up-skilling of employees in certain sectors and, where needed, social measures at the appropriate level".

In December 2017 the EC established the Platform for Coal Regions in Transition to assist EU member states and regions in structural and technological transition in coal regions. Just transition has also been referenced in the EU's Governance directive, which requires taking its aspects into consideration in the decarbonisation process.





FINANCING THE TRANSITION

THE EUROPEAN UNION

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

The EC High-Level Expert Group on Sustainable Finance (HLEG) 2018 report called for implementation of TCFD, the process of which drew on formal engagement with the private sector. The EC also published its Sustainable Finance Action Plan in 2018 that details how reforms, new laws and amendments to existing laws can implement the HLEG recommendations, in line with TCFD recommendations.

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

There is no EU-level fossil fuel subsidy data available. From 2007 to 2016, in Italy and the United Kingdom, fossil fuel subsidies were similar or greater (US\$0.003–0.004) than the G20 average (US\$0.003), and lower in France and Germany (US\$0.001–0.002) per unit of GDP. Under the new EU "Governance of the Energy Union Regulation" member states are required to start reporting on fossil fuel phase-out plans in their 10-year "National Energy and Climate Plans".

NO EU-LEVEL DATA AVAILABLE

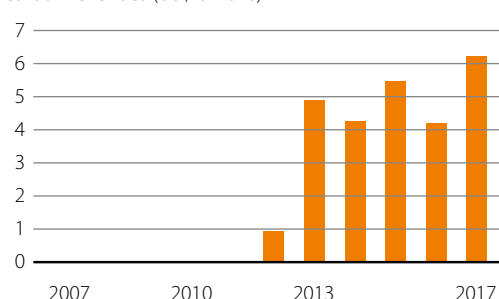


Source: OECD/IEA 2018

CARBON REVENUES

In 2005, the EU introduced the Emissions Trading Scheme that generated US\$6.2 billion in 2017. The scheme covers 45% of European emissions (in the power, industry and aviation sectors), priced at US\$21/tCO₂ as of September 2018. From 2012 to 2017, the EU's carbon revenues were lower (US\$0.0002) than the G20 average (US\$0.0005) per unit of GDP.

Carbon revenues (US\$ billions)



Estimates only available from 2012.

Source: I4CE 2018



FINANCING THE TRANSITION

THE EUROPEAN UNION

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

There is no EU-level data on public finance to power. From 2013 to 2015, France, Germany, Italy and the United Kingdom's public finance institutions spent an average p.a. of US\$7.2bn on brown, US\$5.3bn on green and US\$3.1bn on grey financing in the power sector, domestically and internationally. The largest transaction was Euler Hermes' loan guarantee (US\$1.3bn) for the Beni Suef natural gas power plant in Egypt.

NO EU-LEVEL DATA AVAILABLE

Source: Oil Change International 2017

PROVISION OF INTERNATIONAL PUBLIC SUPPORT

The EU is listed in Annex II of the UNFCCC and as a bloc is obliged to provide climate finance. It is the fourth largest contributor of bilateral climate finance, with a bias towards mitigation. The EU reports climate finance of the European Investment Bank (EIB), bringing the 2015/16 annual average bilateral finance to US\$4.7bn. This amount is excluded to make the EU contribution comparable to other G20 countries. The EU has contributed a small amount to the multilateral climate funds considered here that support mitigation. The EIB, an MDB, also channels climate finance to developing countries but has not been included in this report.

OBLIGATION TO PROVIDE CLIMATE FINANCE UNDER UNFCCC

YES

NO

CONTRIBUTIONS THROUGH THE MAJOR MULTILATERAL CLIMATE FUNDS²²

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

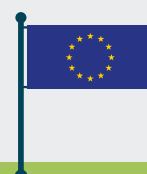
Source: Climate Funds Update 2017

Annual average contribution (mn US\$, 2015-2016)	Theme of support		
	Adaptation	Mitigation	Cross-cutting
2.06	0%	100%	0%

BILATERAL CLIMATE FINANCE CONTRIBUTIONS²³

Source: Country reporting to UNFCCC

Annual average contribution (mn US\$, 2015-2016)	Theme of support			
	Mitigation	Adaptation	Cross-cutting	Other
2,350.84	33%	41%	26%	0%



ANNEX

G20



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)

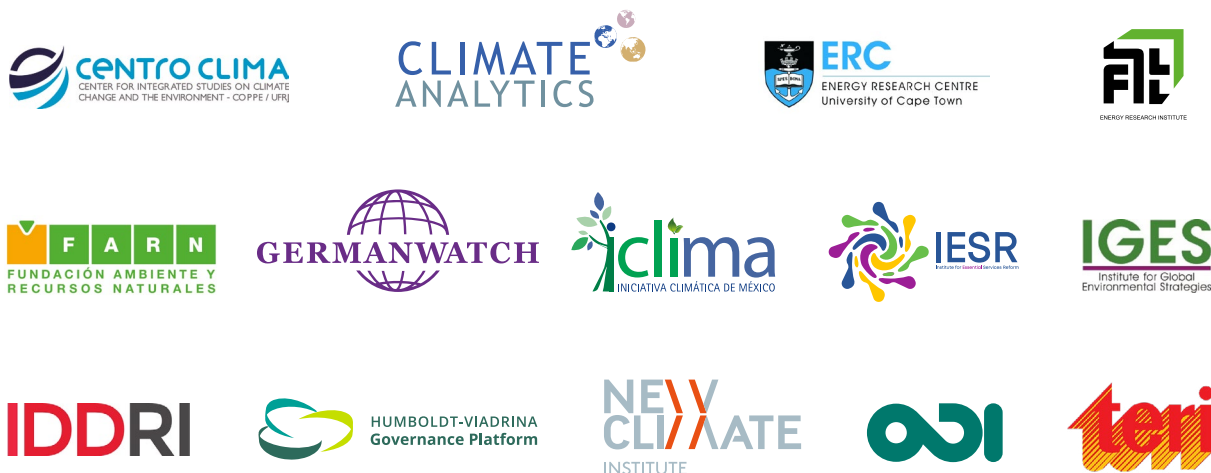


- 17) The selection of policies rated and the assessment of 1.5°C compatibility are informed by the Paris Agreement and the Climate Action Tracker (2016): "The ten most important short-term steps to limit warming to 1.5°C". The table below displays the criteria used to assess a country's policy performance.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

CLIMATE TRANSPARENCY

Partners:



Funders:



Data Partners:



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

