



This country profile is part of the **Climate Transparency Report 2020**. Find the full report at: www.climate-transparency.org

PER CAPITA GREENHOUSE GAS (GHG) EMISSIONS

Colombia's GHG emission (incl. land use) is increasing at the rate of 5.5% (2012-2017)¹.

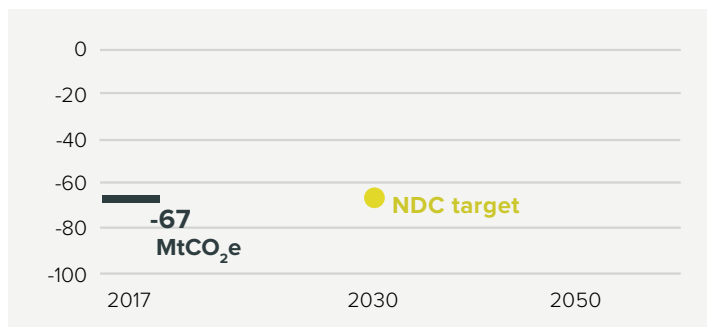


Data for 2017. Sources: UN Department of Economic and Social Affairs Population Division, 2020

2030 NDC TARGET



The country's 2030 NDC target is -67 MtCO₂e by 2030. There is no Climate Action Tracker analysis for Colombia. All figures exclude land use emissions.



KEY OPPORTUNITIES FOR ENHANCING CLIMATE AMBITION



Deforestation-driven emissions accounted for almost half of emissions in 2014 and are mainly driven by land use change toward pasture land, crop land and

illegal activities. **Changing this trend represents a significant opportunity for Colombia to reduce its emissions.**



Most energy emissions are due to land transport.

Electrification of end use sectors, with a focus on transportation

would have a significant impact on Colombia's emissions.



Heavy reliance on hydropower renders the Colombian power system vulnerable to the El Niño Southern Oscillation (ENSO) phenomena and thermal power generation offsets

this vulnerability. **The country needs to find a mixture of renewable sources and technologies to provide a stable energy supply without increasing emissions.**

RECENT DEVELOPMENTS



A regulatory framework set by Decree 328 (February 2020) provides the basis to

start pilot projects for the exploration and exploitation of non-conventional oil and gas with fracking techniques.



In September 2020, Colombia's Congress shelved Article 210 of the Royalties

Law, which would have incentivised exploration and potentially further stimulated the extraction of oil and gas through fracking.



The President of Colombia announced that its

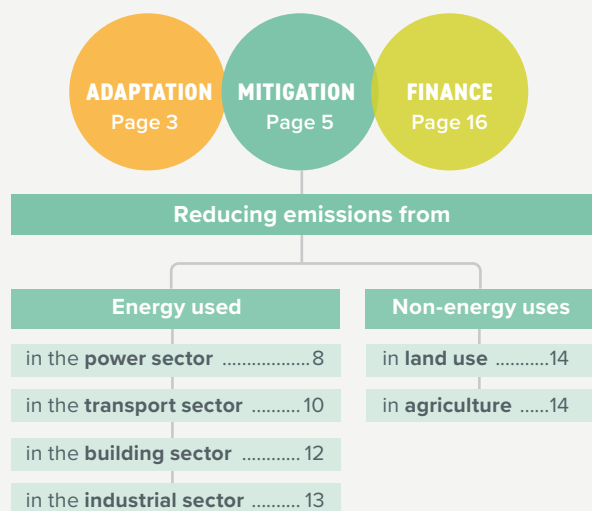
December 2020 NDC will commit the country to a 51% emissions reduction by 2030 with respect to BAU and reach carbon neutrality by 2050.

CORONAVIRUS RECOVERY

The Colombian "Policy for Reactivation and Sustainable and Inclusive Growth" (PRCSI) is currently under discussion. Energy efficiency, renewable power and new fuels for transportation are part of the COVID-19 recovery plan and job creation strategy. Other workstreams include sustainable livestock, green growth (e.g., promoting bioeconomy, planting 180 million trees) and the circular economy. If the PRCSI is adopted, 8% of the recovery funds will be allocated to promote renewable energy and to the restoration and protection of the environment.

CONTENTS

We unpack Colombia's progress and highlight key opportunities to enhance climate action across:



LEGEND

Trends show developments over the past five years for which data are available. The thumbs indicate assessment from a climate protection perspective.



Decarbonisation Ratings⁴ assess a country's performance compared to other G20 countries. A high score reflects a relatively good effort from a climate protection perspective but is not necessarily 1.5°C compatible.



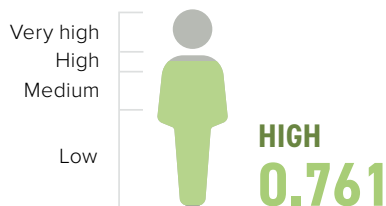
Policy Ratings⁵ evaluate a selection of policies that are essential pre-conditions for the longer-term transformation required to meet the 1.5°C limit.



SOCIO-ECONOMIC CONTEXT

Human Development Index

The Human Development Index reflects life expectancy, level of education, and per capita income. Colombia ranks high.

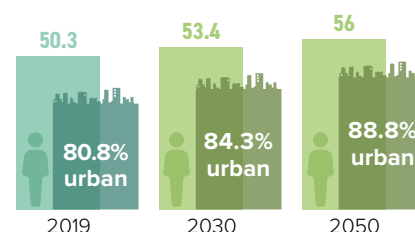


Data for 2018. Source: UNDP, 2019

Population and urbanisation projections

(in millions)

Colombia's population is expected to increase by 11% by 2050 and become more urbanised.



Sources: The World Bank, 2019; United Nations, 2018

Gross Domestic Product (GDP) per capita



Data for 2019. Source: The World Bank, 2020

Death rate attributable to air pollution

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

0.37

Nearly 13,000 people die in Colombia every year as a result of outdoor air pollution, due to stroke, heart disease, lung cancer and chronic respiratory diseases.

12,668
deaths per year

Data for 2016. Source: WHO, 2018

JUST TRANSITION



The recently proposed recovery plan by the Department of Planification "Policy for Reactivation and Sustainable and Inclusive Growth (PRCSI)" focuses mostly on measures to generate jobs by making the labor market more flexible. **It does, however, include a focus on developing energy infrastructure to allow better integration of renewable energies and increase inter-connectivity between regions.**

1. ADAPTATION

ADDRESSING AND REDUCING VULNERABILITY TO CLIMATE CHANGE



PARIS AGREEMENT Increase the ability to adapt to the adverse effects of climate change and foster climate resilience and low-GHG development.



Colombia is vulnerable to climate change and adaptation actions are needed.



**HIGH COST OF
EXTREME WEATHER**

On average, 474 fatalities and almost USD 4bn losses occur yearly due to extreme weather events.



**HIGH LEVEL OF
EROSION**

40% of the land area has some level of erosion and 3% has severe erosion.

Source: IDEAM et al., 2015

ADAPTATION NEEDS

Climate Risk Index

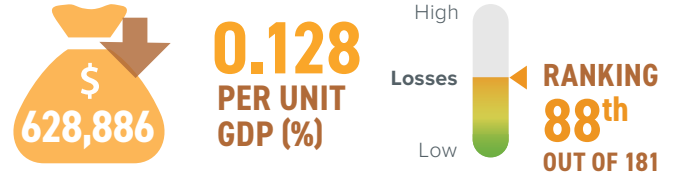
Impacts of extreme weather events in terms of fatalities and economic losses that occurred. All numbers are averages (1998-2017).

Annual weather-related fatalities



Source: Germanwatch, 2018

Annual average losses (USD mn PPP)



Source: Germanwatch, 2018

Exposure to future impacts at 1.5°C, 2°C and 3°C

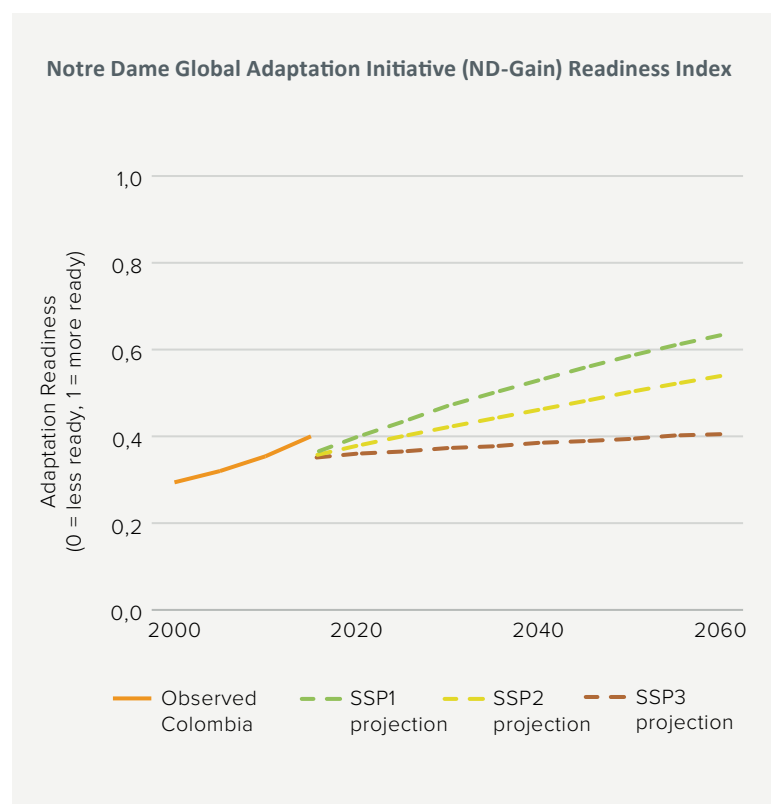
No impact ranking scale data available

CORONAVIRUS RECOVERY

Colombia's COVID-19 response does not include inputs specifically focused on climate change adaptation or increasing climate resilience.

Adaptation readiness

The figure shows 2000-2015 observed data from the ND-GAIN Index overlaid with projected Shared Socioeconomic Pathways (SSPs) from 2015-2060.



Colombia's observed adaptation readiness between 2000 and 2015 is low but increasing steadily. Socio-economic developments in line with SSP1 would produce significant improvements in readiness by 2060. Relative to other countries assessed, Colombia's current vulnerabilities are manageable but improvements in readiness would help it better adapt to future challenges.

The readiness component of the Index created by the Notre Dame Global Adaptation Initiative (ND-GAIN) encompasses social economic and governance indicators to assess a country's readiness to deploy private and public investments in aid of adaptation. The index ranges from 0 (low readiness) to 1 (high readiness).

*The overlaid SSPs are qualitative and quantitative representations of a range of possible futures. The three scenarios shown here in dotted lines are qualitatively described as a *sustainable development-compatible scenario (SSP1)*, a *middle-of-the-road (SSP2)* and a *'Regional Rivalry' (SSP3)* scenario.*

Source: Andrijevic et al., 2019

ADAPTATION POLICIES

National Adaptation Strategies

No data available

Nationally Determined Contribution (NDC): Adaptation

Targets	Actions
Not mentioned	Formulation of 11 territorial adaptation plans to climate change.

The public version of the NDC update – currently available for comment – contains a proposal for the adaptation actions.

Source: Government of Colombia, 2018

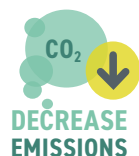
2. MITIGATION

REDUCING EMISSIONS TO LIMIT GLOBAL TEMPERATURE INCREASE



Hold the increase in the global average temperature to well below 2°C above pre-industrial levels and pursue efforts to limit to 1.5°C, recognising that this would significantly reduce the risks and impacts of climate change.

EMISSIONS OVERVIEW



Colombia's GHG emissions have increased by 68% during the period of 1990-2016 and was at 168 MtCO₂e/year in 2017.

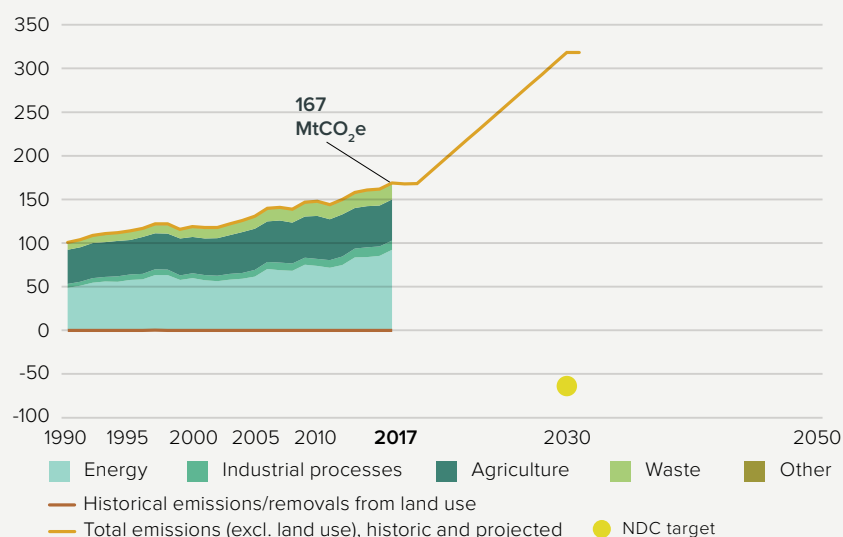


In 2030, global CO₂ emissions need to be 45% below 2010 levels and reach net zero by 2050. **Global energy-related CO₂ emissions must be cut by 40%** below 2010 levels by 2030 and reach net zero by 2060.

Source: Rogelj et al., 2018

GHG emissions (MtCO₂e/year) across sectors and NDC target

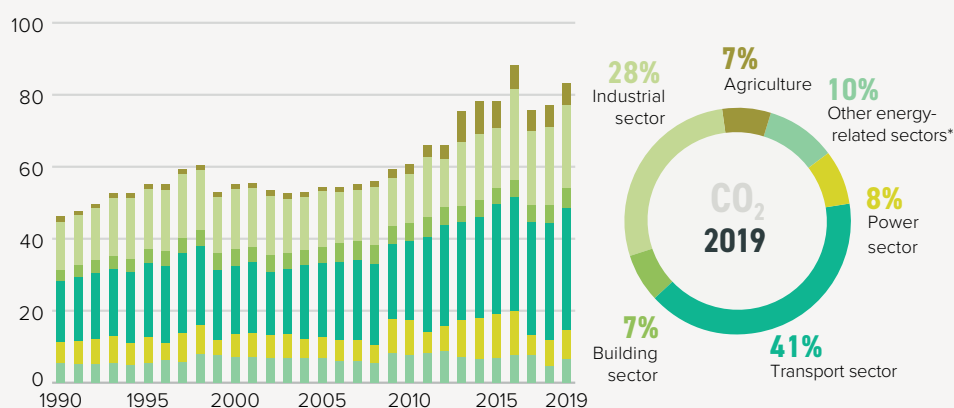
Total GHG emissions across sectors (MtCO₂e/year)



Colombia's emissions (excl. land use) have increased by 68% between 1990 and 2016. When considered by category, increases are seen in all sectors. The Republic of Colombia's climate target for 2030 is a 20-30% reduction in relation to business-as-usual scenario emissions by 2030. The 20% reduction target is unconditional whereas the 30% reduction target is subject to the provision of international support (i.e. is conditional).

Energy-related CO₂ emissions by sector

Annual CO₂ emissions from fuel combustion (MtCO₂/year)



* 'Other energy-related sectors' covers energy-related CO₂ emissions from extracting and processing fossil fuels. Due to rounding, some graphs may sum to slightly above or below 100%.

The largest driver of overall GHG emissions are CO₂ emissions from energy combustion. The transport sector is by far the largest contributor (41%), followed by industrial sector and electricity and heat generation with 28% and 10% respectively. Emissions from Household, Services and Agriculture have steadily increased albeit from a low base.

The El Niño Southern Oscillation (ENSO) has a notable impact on emissions from fuel combustion. In dry years, hydropower generation is negatively affected and the use of thermal power plants instead dramatically increases GHG emissions from the power sector.

CORONAVIRUS RECOVERY

The COVID-19 pandemic has revealed systemic weaknesses that would have otherwise taken more time to uncover.

It is important to recognise smart and forward-looking government spending in the near-term and longer-term is as urgent as collaborative mechanisms between government, NGOs, and the private sector. Core spending to address the pandemic fallout can be the same resilience spending required to adapt to climate change and to secure early attainment of Sustainable Development Goals.

ENERGY OVERVIEW



Fossil fuels still make up 77% of Colombia's energy mix (counting power, heat, transport fuels, etc). Despite the increase in renewable energy over the last two decades, the carbon intensity of the energy mix has hardly changed.

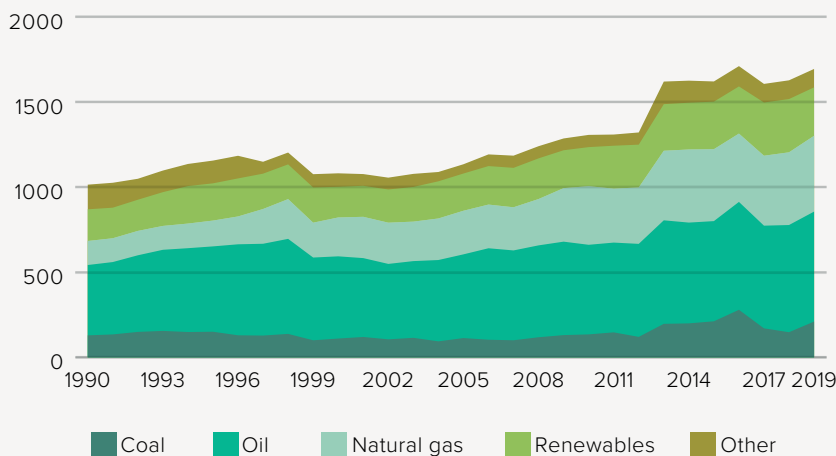


The share of **fossil fuels globally needs to fall to 67% of global total primary energy by 2030 and to 33% by 2050** (and to substantially lower levels without Carbon Capture and Storage).

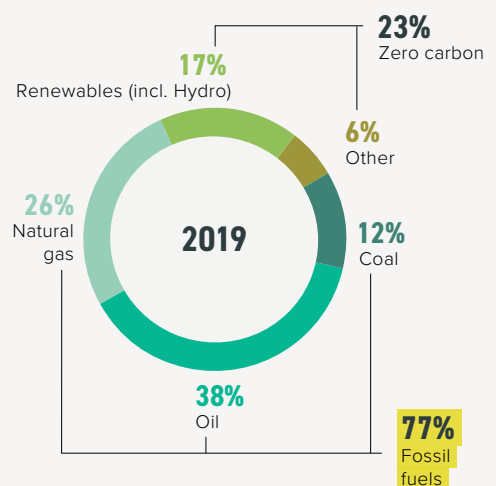
Source: Rogelj et al., 2018

Energy Mix

Total primary energy supply (PJ)



Source: Enerdata, 2020

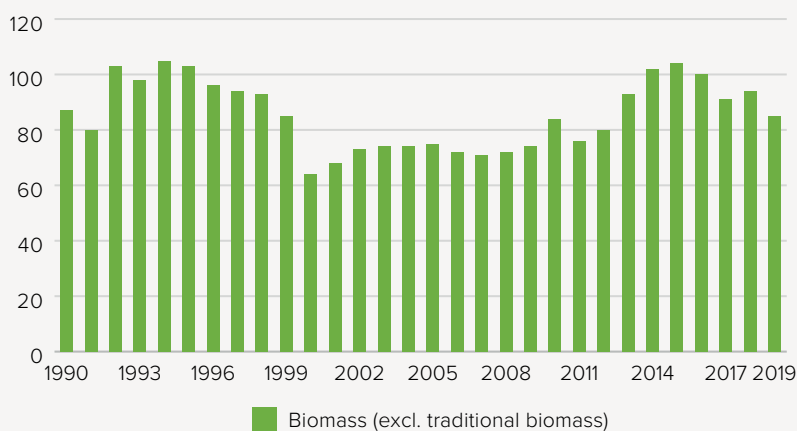


Due to rounding, some graphs may sum to slightly above or below 100%.

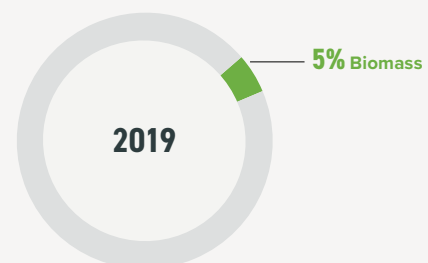
This graph shows the fuel mix for all energy supply, including energy used not only for electricity generation, heating, and cooking, but also for transport fuels. Fossil fuels (oil, coal and gas) still make up 77% of Colombia's energy mix.

Solar, Wind, Geothermal, and Biomass Development

Total primary energy supply (TPES) from solar, wind, geothermal and biomass (PJ)



Biomass account for 5% of Colombia's energy supply



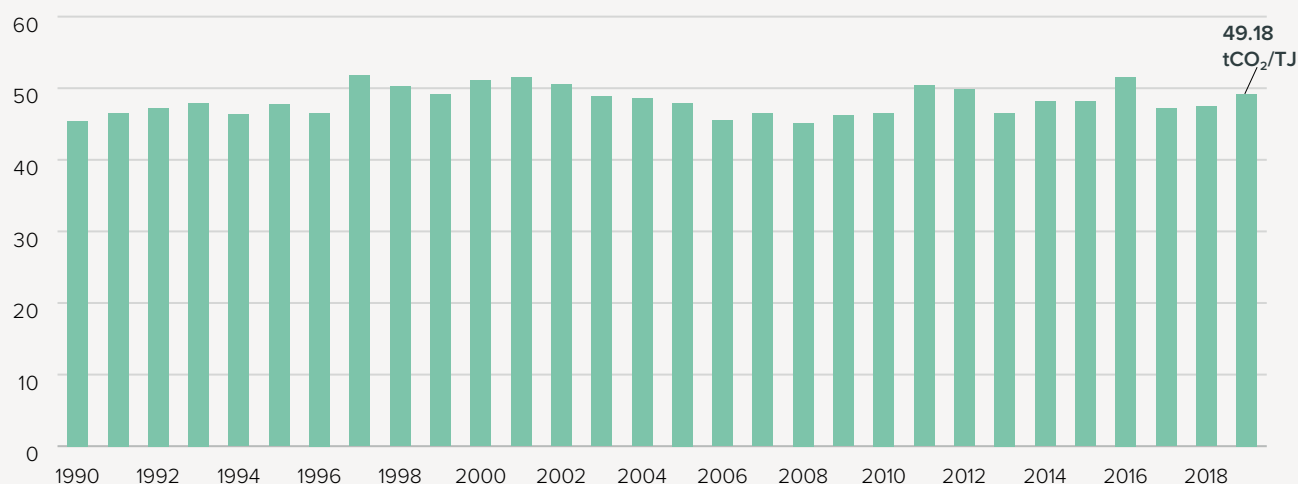
Source: Enerdata, 2020

Large hydropower and solid fuel biomass in residential use are not reflected due to their negative environmental and social impacts.
Due to rounding, some graphs may sum to slightly above or below 100%.

Biomass accounts for just over 5% of Colombia's total primary energy supply, with wind and solar energy providing less than 1% when combined. In the five years between 2014 and 2019, the share of renewables in Colombia's energy supply mix has declined at a rate of 18%.

Carbon Intensity of the Energy Sector

Tonnes of CO₂ per unit of total primary energy supply (tCO₂/TJ)



Source: Enerdata, 2020

Carbon intensity shows how much CO₂ is emitted per unit of energy supply. In Colombia, carbon intensity has remained almost constant, at around 49 tCO₂/TJ, over the last five years. This level reflects the continuously high share of fossil fuels in the energy mix.

Source: Enerdata, 2020

Energy supply per capita

34
GJ/capita

Sources: Enerdata, 2020; The World Bank, 2019

TPES per capita
(GJ/capita):
5-year trend
(2014-2019)



-4.7%

The level of energy use per capita is closely related to economic development, climatic conditions and the price of energy. Energy use per capita in Colombia is 34 GJ/capita and decreasing (-4.7%, 2014-2019).

Energy intensity of the economy

2.12
TJ/PPP USD2015 millions

Data for 2018. Sources: Enerdata, 2020; The World Bank, 2020

Energy intensity
of the economy:
5-year trend
(2013-2018)



-11.2%

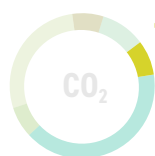
This indicator quantifies how much energy is used for each unit of GDP. This is closely related to the level of industrialisation, efficiency achievements, climatic conditions or geography. Colombia's energy intensity is decreasing at a rate of 11.6% (between 2013-2018).



POWER SECTOR

Emissions from energy used to make electricity and heat

Colombia produces most of its electricity – 73% – from renewables, followed by natural gas at 14% and coal and oil up to 13%.



10% share in energy-related CO₂ emissions from electricity and heat production in 2018

Source: Enerdata, 2020



Coal and decarbonisation

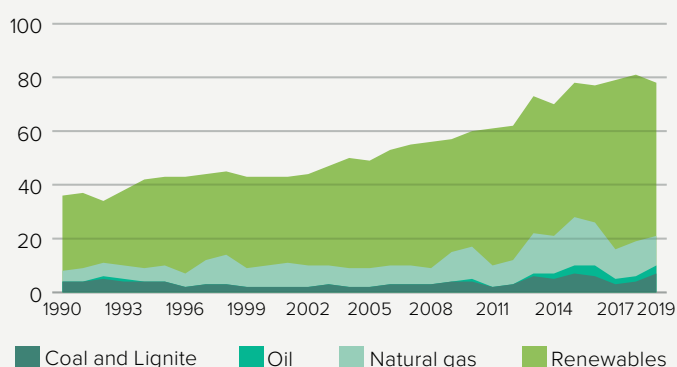
Worldwide, **coal use for power generation needs to peak by 2020** and, between 2030 and 2040, all the regions of the world need to phase out coal-fired power generation. **Electricity generation has to be decarbonised before 2050**, with renewable energy the most promising alternative.

Sources: Rogelj et al., 2018; Climate Analytics, 2016; Climate Analytics, 2019

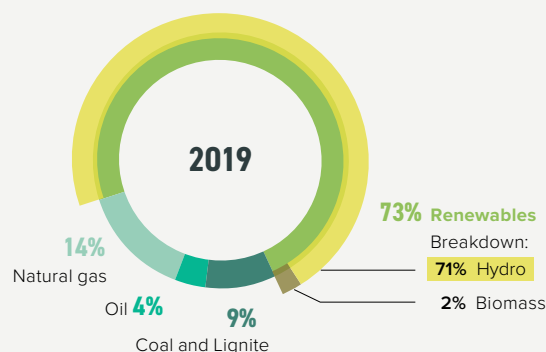
STATUS OF DECARBONISATION

Electricity mix

Gross power generation (TWh)



Source: Enerdata, 2020



Due to rounding, some graphs may sum to slightly above or below 100%.

Renewables account for nearly two thirds of the power mix – largely hydro (71%) followed by biomass and waste at around 2%. Despite being the largest coal producer in Latin America, Colombia's share of coal in the electricity mix is only 9%. The El Niño Southern Oscillation (ENSO) has a large impact on the electricity mix. In dry years (for example the 2014-2016), power generation from hydro was negatively affected and thermal power plants were used to produce electricity instead.

Share of renewables in power generation

(incl. large hydro)

27%

Share of
renewables in
power generation:
5-year trend
(2014-2019)



+14%

Source: Enerdata, 2020

Emissions intensity of the power sector

182
gCO₂/kWh

Source: Enerdata, 2020

For each kilowatt hour of electricity, 182 gCO₂ are emitted in Colombia. The emissions intensity has decreased by 29% over the years 2014-2019. Note, however, that this value varies significantly between periods as dictated by the availability of water (for hydro power use) which is driven by the El Niño Southern Oscillation (ENSO). For instance, in 2017 this value was 100 gCO₂/kWh.

Emissions
intensity:
5-year trend
(2014-2019)



-29.4%

POLICY ASSESSMENT

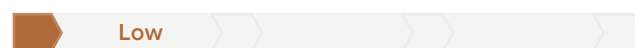
Renewable energy in the power sector



The government has set a target to increase its share of non-conventional renewable energy (excluding hydropower) by 12% by 2022. The first tender was carried out in October 2019 by the Ministry of Energy from which eight projects, totalling 1.3 GW of wind and solar, were awarded with 15-year power purchase agreements.

Reference: own evaluation based on Ministerio de Energía, 2020

Coal phase-out in the power sector



Colombia is a producer and major exporter of fossil fuels, with coal exports accounting for close to 18% of total exports in 2018 and 14% in 2019.

Reference: own evaluation based on DANE, 2020



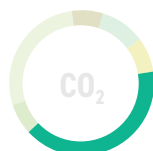
TRANSPORT SECTOR

Emissions from energy used to transport people and goods

In Colombia, transport contributes the most energy-related CO₂ emissions at 41%. The transport sector is still dominated by fossil fuel, and oil contributes up to 95% of the total transport energy mix.

Share in energy-related CO₂ emissions from transport sector

Source: Enerdata, 2020



0.01%
Electricity-related emissions

41%
Direct emissions



COMPATIBILITY

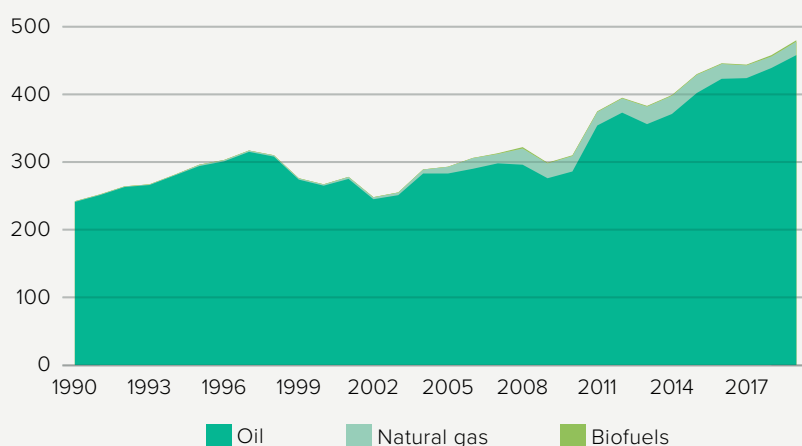
The share of low-carbon fuels in the transport fuel mix must increase to about 60% by 2050.

Source: Rogelj et al., 2018

STATUS OF DECARBONISATION

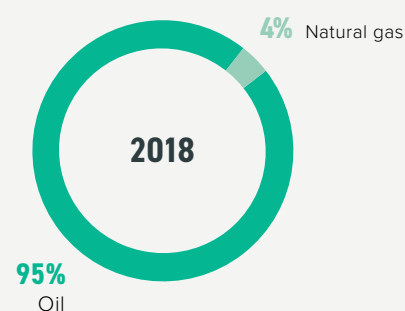
Transport energy mix

Final energy consumption of transport by source (PJ/year)



Source: Enerdata, 2020

Due to rounding, some graphs may sum to slightly above or below 100%.



Electricity and biofuels make up only 0.4% of the energy mix in transport, whereas an overwhelming 95.3% of the fuel used for transport remains oil.

Transport emissions per capita

excl. aviation (tCO₂/capita)

No data available

Transport emissions:
5-year trend

No data available

Aviation emissions per capita⁶

Aviation emissions:
5-year trend
(2012-2017)



+41.1%

Data for 2017. Source: Enerdata, 2020

Motorisation rate

No data available

Passenger transport

(modal split in % of passenger-km)

No data available

Freight transport

(modal split in % of tonne-km)

No data available

Market share of electric vehicles in new car sales (%)

No data available

POLICY ASSESSMENT**Phase out fossil fuel cars**

Law 1964 of 2019 promotes sustainable mobility through tax reductions, special parking spots and other benefits for electric vehicles. Starting in 2025 at least 30% of the new cars purchased or rented for the official fleet (not including public transport) are required to be electric.

For public transport systems, cities are required to increase the share of the electric buses in their overall bus purchases from 10% in 2025 to 100% in 2035 (the share increases smoothly in the period). By 2023 all the major cities are required to have at least 5 public fast charging stations regardless of whether there is demand or not for such infrastructure (Bogota is required to have at least 20 stations).

Reference: own evaluation based on El Congreso De Colombia, 2019

Phase out fossil fuel heavy-duty vehicles

While there are currently (December 2020) no phase out policies for fossil fuel for heavy-duty vehicles in Colombia, the Congress passed Law 1972 in July 2019, to regulate exhaust emissions according to Euro 6/VI standards.

Reference: own evaluation based on Hernandez, 2019

Modal shift in (ground) transport

On 23 November 2020, the Colombian government published its railway master plan that seeks the reactivation of the national rail network. This reactivation includes freight rail lines such as commuter passenger trains.

The city of Bogota was due to start the construction of its first line of the metro system in 2020 and financial support for the construction of the second line of Medellin's metro has been approved.

References: own evaluation based on Departamento Nacional de Planeacion, 2019; Metro de Bogotá, 2020; Ministerio de Transporte, 2020



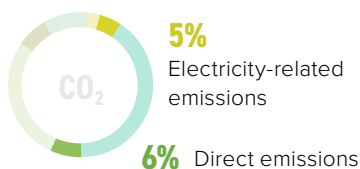
BUILDING SECTOR

Emissions from energy used to build, heat and cool buildings

Colombia's building emissions from heating, cooking and also indirect emissions from electricity use, make up 11% of total CO₂ emissions. Per capita, building-related emissions are less than half the G20 average.

Building emissions occur directly (burning fuels for heating, cooking etc) and indirectly (grid-electricity for air conditioning, appliances, etc).

Source: Enerdata, 2020



Global emissions from buildings need to be halved by 2030, and be 80-85% below 2010 levels by 2050, mostly through increased efficiency, reduced energy demand and electrification in conjunction with complete decarbonisation of the power sector.

Source: Rogelj et al., 2018

STATUS OF DECARBONISATION

Building emissions per capita (incl. indirect emissions)



Colombia has managed to decrease per capita building emissions to 13% (2013-2018). The Ministry of Housing's climate change management plan (PIGCC) outlines intended mitigation from the management of solid waste (3.82 MtCO₂e) and waste water (0.18 MtCO₂e) and energy efficiency improvements.

Source: Enerdata, 2020

Building emissions:
5-year trend
(2014-2019)



-27.34%

Residential buildings Energy use per m²

No data available

Commercial and public buildings Energy use per m²

No data available

Building emissions are largely driven by how much energy is used in heating, cooling, lighting, household appliances, etc. No data is available for Colombia.

POLICY ASSESSMENT

Near zero energy new buildings



In 2015 the Sustainable Construction Guide came into effect along with the Government Resolution 0549. The guide sets an energy performance benchmark for both residential and commercial buildings across Colombia. Depending on the climate zone, the guide prescribes a reduction in energy consumption of between 25% and 45%, although this reduction is voluntary for lower income, publicly supported housing. This guide is still in effect.

Reference: own evaluation based on Kachi et al., 2020

Renovation of existing buildings

No data available



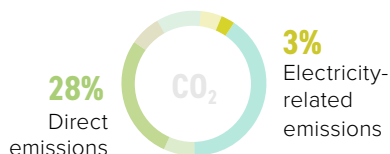
INDUSTRY SECTOR

Emissions from energy in the industrial sector

The industry sector had a 28% share of direct CO₂ emissions and 3% share in electricity-related CO₂ emissions in 2018.

Share in energy-related CO₂ emissions from industrial sector

Source: Enerdata, 2020



Industrial emissions need to be reduced by 65–90% from 2010 levels by 2050.

Source: Rogelj et al., 2018

STATUS OF DECARBONISATION

Industry emissions intensity⁷



Industry emissions:
5-year trend
(2012-2017)



+2%

Data for 2017. Sources: Gütschow et al., 2019; Enerdata, 2020

Carbon intensity of cement production⁸ (kgCO₂/tonne product)

No data available

Carbon intensity of steel production⁸ (kgCO₂/tonne product)

No data available

Steel production and steelmaking are significant GHG emissions sources, and challenging to decarbonise.

POLICY ASSESSMENT

Energy Efficiency

According to the Ministry of Industry's Climate Change management plan (PIGCC), mitigation to contribute to the first Colombian NDC will be through energy efficiency (2.27 MtCO₂e mitigated by 2030), logistics and transport (1.3 MtCO₂e mitigated by 2030), Industrial Processes and Product Use (IPPU) improvements (1.43 MtCO₂e mitigated by 2030).

Reference: own evaluation



LAND USE SECTOR

Emissions from changes in the use of the land



To stay within the 1.5°C limit, Colombia needs to make the land use and forest sector a net sink of emissions, e.g. by discontinuing the degradation of peatlands and use of moor soils, converting cropland into wetlands, and by creating new forests.



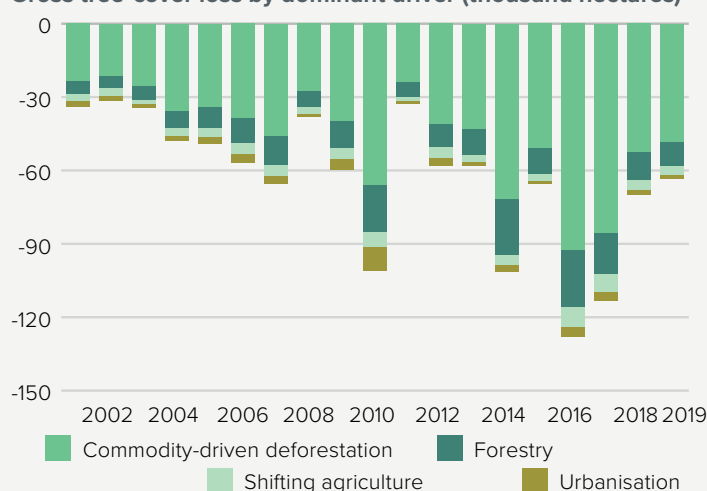
COMPATIBILITY

Global deforestation needs to be halted and changed to net CO₂ removals by around 2030.

Source: Rogelj et al., 2018

Global tree-cover loss

Gross tree-cover loss by dominant driver (thousand hectares)



This indicator covers only gross tree-cover loss and does not take tree-cover gain into account. It is thus not possible to deduce from this indicator the climate impact of the forest sector. 2000 tree cover extent – >30% tree canopy.

Source: Global Forest Watch, 2019

POLICY ASSESSMENT

Target for net-zero deforestation



The forestry sector is critical for Colombia's carbon footprint with deforestation-based emissions accounting for almost half total emissions. Colombia has no net-zero deforestation targets (November 2020), however it recently announced that the planting of 180 million trees would be a goal in its COVID-19 recovery plan, currently under development. The 2020 NDC is expected to contain a deforestation goal, but it was not published at the time of writing.

Reference: own evaluation

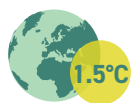


AGRICULTURE SECTOR

Emissions from agriculture



Colombia's agricultural emissions are mainly from enteric fermentation, livestock manure, and the use of synthetic fertilisers. A 1.5°C pathway requires dietary shifts, increased organic farming and less fertiliser use.

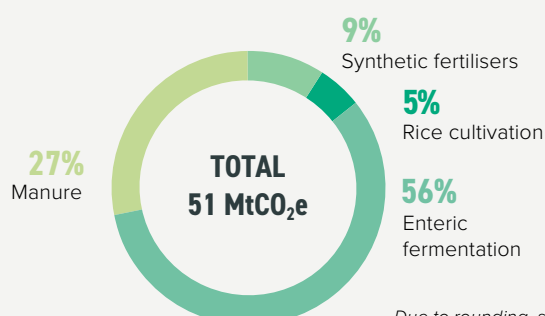


COMPATIBILITY

Methane emissions (mainly enteric fermentation) need to decline to 10% by 2030 and to 35% by 2050 (from 2010 levels). Nitrous oxide emissions (mainly from fertilisers and manure) need to be reduced by 10% by 2030 and by 20% by 2050 (from 2010 levels).

Source: Rogelj et al., 2018

Emissions from agriculture (excluding energy)



Data for 2017. Source: FAO, 2019

Due to rounding, some graphs may sum to slightly above or below 100%.

In Colombia, the largest sources of GHG emissions in the agricultural sector are enteric fermentation (56%), livestock manure (27%) and the use of synthetic fertilisers (9%). A shift to organic farming, more efficient use of fertilisers and dietary changes can help reduce emissions.

MITIGATION: TARGETS AND AMBITION

The combined mitigation effect of nationally determined contributions (NDC) submitted by September 2020 is not sufficient and will lead to a warming of 2.7°C by the end of the century. This highlights the urgent need for all countries to submit more ambitious targets by 2020, as they agreed in 2015, and to urgently strengthen their climate action to align to the Paris Agreement's temperature goal.

AMBITION: 2030 TARGETS

Nationally Determined Contribution (NDC): Mitigation

Targets

Subject to the provision of international support, Colombia could increase its ambition from an unconditional 20% reduction with respect to BAU to 30% with respect to BAU by 2030

Actions

43 mitigation actions have been prepared under the framework of the Colombia Low Carbon Development Strategy (CLCDS)

14 Nationally Appropriate Mitigation Actions (NAMAs) – under different levels of implementation

Sources: Government of Colombia, 2018; NDC Partnership, 2017

Climate Action Tracker (CAT) evaluation of NDC and actions

Colombia has not been analysed for the Climate Action Tracker.

TRANSPARENCY: FACILITATING AMBITION

Countries are expected to communicate their NDCs in a clear and transparent manner in order to ensure accountability and comparability.

The NDC Transparency Check has been developed in response to Paris Agreement decision (1/CP.21) and the Annex to decision 4/CMA.1. While the Annex is only binding from the second NDC onwards, countries are “strongly encouraged” to apply it to updated NDCs, due in 2020.



NDC Transparency Check recommendations

For more visit www.climate-transparency.org/ndc-transparency-check

Colombia's NDC has yet to be assessed using the NDC Transparency Check tool.

AMBITION: LONG-TERM STRATEGIES

Status	Strategy preparation process launched in June 2020
2050 target	No 2050 target yet but CLCDS aims to formulate the 2050 strategy
Interim steps	Interim, 2025 targets included
Sectoral targets	No but CLCDS aims to develop eight sectorial action plans
Net-Zero target	No
Net-Zero year	No

Sources: Government of Colombia, 2018; NDC Partnership, 2019; NDC Partnership, 2017

3. FINANCE

MAKING FINANCE FLOWS CONSISTENT WITH CLIMATE GOALS



Make finance flows consistent with a pathway towards low-GHG emissions and climate-resilient development.



Colombia spent USD 0.66 bn on fossil fuel subsidies in 2019, completely on petroleum. Colombia has no explicit carbon price.



Investment in green energy and infrastructure needs to outweigh fossil fuels investments by 2050.
Source: Rogelj et al., 2018

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 the price.

Fossil Fuel Subsidies

Colombian Fossil fuel subsidies (USD billions)

No data available

Fossil Fuel Subsidies by fuel type

Subsidies by fuel type

No data available

In 2019, Colombia provided USD 0.7bn in fossil fuel subsidies (compared to USD 0.2bn in 2011 and fluctuating over the last decade). This amount is for the estimate of consumption subsidies alone, adopting the price-gap approach (unlike the data provided for the G20 countries, except Saudi Arabia, in this report).

Carbon pricing and revenue

No data available

Colombia introduced a carbon tax in 2017. The tax covers 24% of domestic emissions and is applied to all fossil fuels, with emissions priced at around USD 5/tCO₂. The scheme generated USD 145m revenue in 2019. Since the adoption of the national climate bill in July 2018, an emissions trading scheme has been under consideration in the country as well.

Sources: Carbon Pulse, 2018; O. de Vera, 2019; Tubayan, 2018

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.

Public finance for fossil fuels

No data available

Provision of international public support

(annual average 2017 and 2018)

Climate finance contributions are sourced from Party reporting to the UNFCCC.

Bilateral, regional and other channels

Annual average contribution

No data available

Theme of support:

No data available

Multilateral climate finance contributions

No data available

Theme of support:

No data available

Core / General Contributions

Annual average contribution:

No data available

Colombia is not listed in Annex II of the UNFCCC and is therefore **not formally obliged to provide climate finance**. In 2015 it nevertheless pledged international public finance to the first resource mobilisation of the Green Climate Fund (USD 6m). While Colombia may channel international public finance towards climate change via multilateral and other development banks, it has not been included in this report.

FINANCIAL POLICY AND REGULATION

Financial policy and regulation

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.

Category	Instruments	Objective	Under Discussion/ implementation		None identified	
Green Financial Principles	n/a	This indicates political will and awareness of climate change impacts, showing where there is a general discussion about the need for aligning prudential and climate change objectives in the national financial architecture.			●	
			Mandatory	Voluntary	Under Discussion/ implementation	None identified
Enhanced supervisory review, risk disclosure and market discipline	Climate risk disclosure requirements	Disclose the climate-related risks to which financial institutions are exposed				●
	Climate-related risk assessment and climate stress-test	Evaluate the resilience of the financial sector to climate shocks		●		
Enhanced capital and liquidity requirements	Liquidity instruments	Mitigate and prevent market illiquidity and maturity mismatch				●
	Lending limits	Limit the concentration of carbon-intensive exposures				●
		Incentivise low carbon-intensive exposures				●
	Differentiated reserve requirements	Limit misaligned incentives and channel credit to green sectors				●

In 2012, the Green Protocol was signed by the Colombian Government and some of the most relevant commercial and development banks associated in the Asobancaria (Banking Association of Colombia). The Green Protocol is a voluntary framework with guidelines that aim to promote green finance. The signatories of the Protocol represent more than 50% of the national financial market. They have agreed to make efforts to generate guidelines and tools to promote green and sustainable finance, to promote sustainable consumption of renewable natural resources, and to consider climate-related risks. The Asobancaria is a member of the Sustainable Banking Network (SBN) since 2012. The Central Bank of Colombia and the Superintendencia Financiera de Colombia (2018) are members of the NGFS.

Nationally Determined Contribution (NDC): Finance

Conditionality	Not applicable.
Investment needs	Not specified.
Actions	Not mentioned.
International market mechanisms	No contribution from international credits for the achievement of the target.

ENDNOTES

For more detail on the sources and methodologies behind the calculation of the indicators displayed, please download the Technical Note at: www.climate-transparency.org/g20-climate-performance/g20report2020





- 1 'Land use' emissions is used here to refer to land use, land use change and forestry (LULUCF). The Climate Action Tracker (CAT) derives historical LULUCF emissions from the UNFCCC Common Reporting Format (CRF) reporting tables data converted to the categories from the IPCC 1996 guidelines, in particular separating Agriculture from Land use, land use change and forestry (LULUCF), which under the new IPCC 2006 Guidelines is integrated into Agriculture, Forestry, and Other Land Use (AFOLU).
- 2 The 1.5°C fair-share ranges for 2030 and 2050 are drawn from the CAT, which compiles a wide range of perspectives on what is considered fair, including considerations such as responsibility,

capability, and equality. Countries with 1.5°C 'fair-share' ranges reaching below zero, particularly between 2030 and 2050, are expected to achieve such strong reductions by domestic emissions reductions, supplemented by contributions to global emissions reduction efforts via, for example, international finance. On a global scale, negative emissions technologies are expected to play a role from the 2030s onwards, compensating for remaining positive emissions. The CAT's evaluation of NDCs shows the resulting temperature outcomes if all other governments were to put forward emissions reduction commitments with the same relative ambition level.

- 3 In order to maintain comparability across all countries, this report utilises the PRIMAP year of 2017. However, note that Common Reporting Format (CRF) data is available for countries which have recently updated GHG inventories.
- 4 The Decarbonisation Ratings assess the current year and average of the most recent five years

(where available) to take account of the different starting points of different G20 countries.

- 5 The selection of policies rated and the assessment of 1.5°C compatibility are informed by the Paris Agreement, the IPCC's 2018 SR15 and the Climate Action Tracker (2016). The table below displays the criteria used to assess a country's policy performance.
- 6 This indicator adds up emissions from domestic aviation and international aviation bunkers in the respective country. In this Country Profile, however, only a radiative forcing factor of 1 is assumed.
- 7 This indicator includes only direct energy-related emissions and process emissions (Scope 1) but not indirect emissions from electricity.
- 8 This indicator includes emissions from electricity (Scope 2) as well as direct energy-related emissions and process emissions (Scope 1).

On endnote 5.	 Low	 Medium	 High	 Frontrunner
Renewable energy in power sector	No policy to increase the share of renewables	Some policies	Policies and longer-term strategy/target to significantly increase the share of renewables	Short-term policies + long-term strategy for 100% renewables in the power sector by 2050 in place
Coal phase-out in power sector	No target or policy in place for reducing coal	Some policies	Policies + coal phase-out decided	Policies + coal phase-out date before 2030 (OECD and EU28) or 2040 (rest of the world)
Phase out fossil fuel cars	No policy for reducing emissions from light-duty vehicles	Some policies (e.g. energy/emissions performance standards or bonus/malus support)	Policies + national target to phase out fossil fuel light-duty vehicles	Policies + ban on new fossil-based light-duty vehicles by 2035 worldwide
Phase out fossil fuel heavy-duty vehicles	No policy	Some policies (e.g. energy/emissions performance standards or support)	Policies + strategy to reduce absolute emissions from freight transport	Policies + innovation strategy to phase out emissions from freight transport by 2050
Modal shift in (ground) transport	No policies	Some policies (e.g. support programmes to shift to rail or non-motorised transport)	Policies + longer-term strategy	Policies + longer-term strategy consistent with 1.5°C pathway
Near zero energy new buildings	No policies	Some policies (e.g. building codes, standards or fiscal/financial incentives for low-emissions options)	Policies + national strategy for near zero energy new buildings	Policies + national strategy for all new buildings to be near zero energy by 2020 (OECD countries) or 2025 (non-OECD countries)
Energy efficiency in Industry	0-49% average score on the policy-related metrics in the ACEEE's International Energy Efficiency Scorecard	50-79% average score on the policy-related metrics in the ACEEE's International Energy Efficiency Scorecard	80-89% average score on the policy-related metrics in the ACEEE's International Energy Efficiency Scorecard	Over 90% average score on the policy-related metrics in the ACEEE's International Energy Efficiency Scorecard
Retrofitting existing buildings	No policies	Some policies (e.g. building codes, standards or fiscal/financial incentives for low-emissions options)	Policies + retrofitting strategy	Policies + strategy to achieve deep renovation rates of 5% annually (OECD) or 3% (non-OECD) by 2020
Net-zero deforestation	No policy or incentive to reduce deforestation in place	Some policies (e.g. incentives to reduce deforestation or support schemes for afforestation / reforestation in place)	Policies + national target for reaching net-zero deforestation	Policies + national target for reaching zero deforestation by 2020s or for increasing forest coverage

BIBLIOGRAPHY

Andrijevic, M. et al. (2020). "Governance in Socioeconomic Pathways and its Role for Future Adaptive Capacity", *Nature Sustainability*. Springer US, 3(1), pp. 35-41.

Climate Analytics. (2019). *Decarbonising South and South East Asia: Shifting Energy Supply in South Asia and South East Asia*. Berlin, Germany. <https://climateanalytics.org/media/decarbonisingasia2019-fullreport-climateanalytics.pdf>

Climate Analytics. (2016). *Implications of the Paris Agreement for Coal Use in the Power Sector*. Berlin, Germany. <http://climateanalytics.org/publications/2016/implications-of-the-paris-agreement-for-coal-use-in-the-power-sector.html>

Departamento Administrativo Nacional de Estadística (DANE). (2020). Exportaciones: Información Octubre 2020. <https://www.dane.gov.co/index.php/estadisticas-por-tema/comercio-internacional/exportaciones>

Departamento Administrativo de la Función Pública. (2020). *Decreto 328 de 2020*. https://www.funcionpublica.gov.co/eva/gestornormativo/norma_pdf.php?i=107874

Departamento Nacional de Planeación. (2019). *Vuelven los Trenes a Colombia*. <https://www.dnp.gov.co/Paginas/Vuelven-los-trenes-a-Colombia.aspx>

El Congreso De Colombia. (2019). Ley No. 1964. *Por Medio De La Cual Se Promueve El Uso De Vehiculos Electricos En Colombia Y Se*

Dictan Otras Disposiciones. <https://dapre.presidencia.gov.co/normativa/normativa/LEY%201964%20DEL%2011%20DE%20JULIO%20DE%202019.pdf>

Enerdata. (2020). *Global Energy and CO₂ Data*. Grenoble, France. <https://www.enerdata.net/research/energymarket-data-co2-emissions-database.html>

Food and Agriculture Organisation (FAO). (2019). *FAOSTAT: Agriculture Total*. Rome, Italy. <http://www.fao.org/faostat/en/#data/GT>

Germanwatch. (2018). *Global Climate Risk Index 2019. Who Suffers Most from Extreme Weather Events?* Bonn, Germany. <http://www.germanwatch.org/>

- Global Forest Watch. (2019). *Global Annual Tree-Cover Loss by Dominant Driver*. <https://www.globalforestwatch.org/>
- Gütschow, J. et al. (2019). The PRIMAP-hist national historical emissions time series (1850–2017), V.2.1. GFZ Data Services. <https://doi.org/10.5880/PIK.2019.018>
- Hernandez, S. F. G. (2019). “Congreso de Colombia Decreta Medidas para Reducir Emisiones que Contaminan el Aire”, Anadolu Agency. <https://www.aa.com.tr/es/mundo/congreso-de-colombia-decreta-medidas-para-reducir-emisiones-que-contaminan-el-aire/1536710>
- Herrera, O. I. R. (2020). “Congreso Hundió el Artículo 210 que Daría vía Libre al Fracking”, Vanguardia. <https://www.vanguardia.com/politica/congreso-hundio-el-articulo-210-que-daria-via-libre-al-fracking-CM2853136>
- Jiménez, I. (2020). “Fracking ni Hoy ni Nunca: Entrevista a Tatiana Roa”, CENSAT ‘Agua Viva’ Amigos de la Tierra Colombia. <https://censat.org/es/analisis/fracking-ni-hoy-ni-nunca-entrevista-a-tatiana-roa-9615>
- Kachi, A., Warnecke C., Hagemann M., Nascimento L., Mooldijk S. and R. Tewar. (2020). *Net-Zero Energy Housing Virtual Article 6 Pilot*. Berlin: New Climate Institute. <https://newclimate.org/wp-content/uploads/2020/01/Colombia-Art-6-Virtual-Pilot-15-January-2020.pdf>
- Metro de Bogotá. (2020). *Proyecto Primera Línea del Metro de Bogotá*. <https://www.metrodebogota.gov.co/?q=que-es-metro>
- Ministerio de Ambiente y Desarrollo Sostenible. (2020). *Todos los Colombianos Pueden Comentar Documento que Contiene los Compromisos del País en Materia de Cambio Climático*. <https://www.minambiente.gov.co/index.php/noticias/4832-todos-los-colombianos-pueden-comentar-documento-que-contiene-los-compromisos-del-pais-en-materia-de-cambio-climatico>
- Ministerio de Energía. (2020). Día Histórico para las Energías Renovables en Colombia: Por Primera Vez, la Energía del Sol y del Viento Llegará, a Precios Más Bajos, a los Hogares Colombianos. <https://www.minenergia.gov.co/en/historico-de-noticias?idNoticia=24146550>
- Ministerio de Transporte. (2020). CONPES Declaró Metro Ligero de la Avenida 80 en Medellín Como de Importancia Estratégica. <https://www.mintransporte.gov.co/publicaciones/8966/conpes-declaro-metro-ligero-de-la-avenida-80-en-medellin-como-de-importancia-estrategica/>
- NDC Partnership. (2017). *NDC Country Outlook COLOMBIA*. https://ndcpartnership.org/sites/all/themes/ndcp_v2/docs/country-engagement/countries/NCDP_Outlook_Colombia_v6a.pdf
- NDC Partnership. (2019). *Strategising to Decouple Economic Growth from GHG Emissions: The Colombian Low Carbon Development Strategy*. <https://ndcpartnership.org/case-study/strategising-decouple-economic-growth-ghg-emissions-colombian-low-carbon-development>
- Rogelj, J. et al. (2018). “Mitigation Pathways Compatible with 1.5°C in the Context of Sustainable Development”, in Masson-Delmotte, V. et al. (eds) *Global Warming of 1.5°C. An IPCC Special Report on the impacts of global warming of 1.5°C above preindustrial levels and related global greenhouse gas emission pathways, in the context of strengthening the global response to the threat of climate change*. Geneva, Switzerland: IPCC. https://www.ipcc.ch/site/assets/uploads/sites/2/2019/05/SR15_Chapter2_Low_Res.pdf
- United Nations. (2018). *World Urbanisation Prospects*. Geneva: The Population Division of the Department of Economic and Social Affairs of the United Nations. <https://population.un.org/wup>
- United Nations Department of Economic and Social Affairs, Population Division. (2020). *World Population Prospects, 2019 Highlights*. www.un.org/development/desa/pd/files/files/documents/2020/Jan/wpp2019_highlights.pdf
- The World Bank. (2020). *GDP, PPP* (current international \$). Washington, DC: USA. <https://data.worldbank.org/indicator/NY.GDP.MKTP.PP.CD>
- The World Bank. (2019). *Population, total*. Washington, DC: USA. <https://data.worldbank.org/indicator/SP.POP.TOTL>
- The World Health Organisation (WHO). (2018) *Global Health Observatory data repository | By category | Deaths by country*. Geneva, Switzerland. <https://apps.who.int/gho/data/node.main.BODAMBIENTAIRDTHS?lang=en>

ABOUT CLIMATE TRANSPARENCY



Climate
Transparency



Climate Transparency is a global partnership with a shared mission to stimulate a “race to the top” in climate action in G20 countries through enhanced transparency.
www.climate-transparency.org

PARTNERS



DATA PARTNERS



FUNDERS



Supported by:



Federal Ministry
for the Environment, Nature Conservation
and Nuclear Safety



based on a decision of the German Bundestag