ARGENTINA

This country profile assesses Argentina's past, present – and indications of future – performance towards a low-carbon economy by evaluating emissions, climate policy performance, climate finance and decarbonisation. The profile summarises the findings of several studies by renowned institutions.

HUMAN DEVELOPMENT INDEX 1

<table>
<thead>
<tr>
<th>Country</th>
<th>Index</th>
</tr>
</thead>
<tbody>
<tr>
<td>Argentina</td>
<td>0.83</td>
</tr>
</tbody>
</table>

GDP PER CAPITA 2 ($ (const. 2011, international))

<table>
<thead>
<tr>
<th>Country</th>
<th>GDP PER CAPITA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Argentina</td>
<td>19,126</td>
</tr>
</tbody>
</table>

SHARE OF GLOBAL GDP 2

<table>
<thead>
<tr>
<th>Country</th>
<th>SHARE OF GLOBAL GDP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Argentina</td>
<td>0.7%</td>
</tr>
</tbody>
</table>

GHG EMISSIONS PER CAPITA 3 (tCO₂ e/cap)

<table>
<thead>
<tr>
<th>Country</th>
<th>GHG EMISSIONS PER CAPITA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Argentina</td>
<td>10</td>
</tr>
</tbody>
</table>

SHARE OF GLOBAL GHG EMISSIONS 3

<table>
<thead>
<tr>
<th>Country</th>
<th>SHARE OF GLOBAL GHG EMISSIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Argentina</td>
<td>0.9%</td>
</tr>
</tbody>
</table>

This country profile is part of the Brown to Green 2017 report. The full report and other G20 country profiles can be downloaded at:

http://www.climate-transparency.org/g20-climate-performance/g20report2017
ARGENTINA

GREENHOUSE GAS (GHG) EMISSIONS DEVELOPMENT

ARGENTINA's emissions have slowly but steadily increased since the 1990s; the agriculture and energy sectors contributed the most to overall GHG emissions.

Emissions are expected to increase faster until 2030.

Source: CCPI 2017 – G20 Edition

*Land Use, Land Use Change and Forestry emissions according to the Climate Action Tracker
Source: PRIMAP, 2017; CAT, 2017

CCPI PERFORMANCE RATING OF GHG EMISSIONS PER CAPITA

Argentina's emissions have slowly but steadily increased since the 1990s; the agriculture and energy sectors contributed the most to overall GHG emissions. Emissions are expected to increase faster until 2030.

Source: CCPI 2017 – G20 Edition
Climate Transparency evaluates sectoral policies and rates them whether they are in line with the Paris Agreement temperature goal. For more detail, see Annex.

Argentina’s experts continue to rate its policy performance in many sectors as low. They note Argentina needs to improve its national policy framework and set more ambitious and sector-specific targets. Their evaluation of renewable energy slightly improved. In contrast to national grades, the experts rate Argentina’s international performance as high.

REGULATORY INDICATORS FOR SUSTAINABLE ENERGY (RISE) INDEX
RISE scores reflect a snapshot of a country’s policies and regulations in the energy sector. Here Climate Transparency shows the RISE evaluation for Renewable Energy and Energy Efficiency.

Source: RISE index, 2017
Since the government changed in 2015, Argentina has shown positive developments on climate. It adopted policies like the ‘Biofuels Law’ and the new ‘Renewable Energy Law,’ ratified the Paris Agreement (Sept, 2016), and presented a more ambitious Nationally Determined Contribution (NDC) at COP22, Nov 2016. Argentina needs to do more, as under current policies, emissions from all sectors (excluding LULUCF) are projected to grow by about 50% above 2010 levels by 2030. The Climate Action Tracker (CAT) rates Argentina’s unconditional NDC target as ‘Inadequate.’ If Argentina were to make its conditional target unconditional, it would move close to the CAT’s “medium” rating.

FINANCING THE TRANSITION

INVESTMENTS

Argentina is one of the only G20 countries with no national climate strategy beyond its NDC – although discussions have started. A Climate Strategy existed during the previous government but was never implemented. The new government aims to translate the new NDC implementation into the new National Climate Plan (Climate strategy) in 2018. However, a new renewable energy law, and two successful, large-scale renewable energy tender rounds in 2016, coupled with a gradual reform of fossil fuel subsidies, show a fresh commitment to clean technologies (Allianz, 2017).

Source: CAT, 2017

Source: CAT, 2017

Source: Allianz, 2017; EY, 2017
FINANCING THE TRANSITION

GREEN BONDS
Green bonds are bonds that earmark proceeds for climate or environmental projects and have been labelled as ‘green’ by the issuer.\(^\text{13}\)

Source: Calculations done by ODI based on OECD inventory, 2017

EMISSIONS OF NEW INVESTMENTS IN THE POWER SECTOR
This indicator shows the emissions per MWh coming from newly-installed capacity in 2016. The smaller the value, the more decarbonised the new installed capacity.

Source: Calculations done by IDDRI for Climate Transparency, 2017

FISCAL POLICIES

FOSSIL FUEL SUBSIDIES (FOR PRODUCTION AND CONSUMPTION)\(^\text{14}\)
Argentina provided US$ 13.6 billion in fossil fuel subsidies in 2014, based on a comparison of the end-user prices paid by consumers to the full cost of supply. It has provided consumption subsidies for gas and electricity, but started cutting down gas subsidies in 2014, and ended electricity subsidies in 2016, to relieve budgetary pressures. At the same time, it has recently been investing heavily in exploration and the development of new reserves of oil and gas, including through tax breaks for companies.

Source: Calculations done by ODI based on OECD inventory, 2017

EFFECTIVE CARBON RATE\(^\text{16}\)
Argentina has no explicit carbon taxes or an emissions trading system, but 73% of its energy-related CO2 emissions were priced through taxes on energy use in 2012. The transport sector, accounting for 25% of emissions, was priced above € 30/tCO2 (~US$ 37). Energy use in agriculture and fisheries were not priced, however most unpriced emissions arose from energy use in the industry and electricity sectors.\(^\text{17}\)

Source: OECD, 2016

TOTAL VALUE OF GREEN BONDS
0.2 billion US$\(_{2017}\)

GREEN BONDS AS SHARE OF OVERALL DEBT
0.10 %
G20 average: 0.16%

GREEN BONDS

Source: Calculations done by ODI based on OECD inventory, 2017

EMISSIONS OF NEW INVESTMENTS IN THE POWER SECTOR

0.45 tCO2/MWh

Source: Calculations done by IDDRI for Climate Transparency, 2017

FISCAL POLICIES

FOSSIL FUEL SUBSIDIES (FOR PRODUCTION AND CONSUMPTION)\(^\text{14}\)

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Source: OECD, 2016
PROVISION OF INTERNATIONAL PUBLIC SUPPORT

Argentina is not listed in Annex II of the UNFCCC, and it is therefore not formally obliged to provide climate finance. While there may be climate-related contributions through bilateral or multilateral development banks, these have not been included in this report.

### PLEDGE TO THE GREEN CLIMATE FUND (GCF)

<table>
<thead>
<tr>
<th>Obligation to provide climate finance under the UNFCCC</th>
<th>Signed pledge to the GCF (Million US$)</th>
<th>Pledge per 1000 dollars of GDP (US$2011 (constant))</th>
</tr>
</thead>
<tbody>
<tr>
<td>no</td>
<td>n/a</td>
<td>n/a</td>
</tr>
</tbody>
</table>

Source: GCF, 2017

### CONTRIBUTIONS THROUGH THE MAJOR MULTILATERAL CLIMATE FUNDS

<table>
<thead>
<tr>
<th>Annual average contribution 2013-2014 (Billion US$)</th>
<th>Annual average contribution 2013-2014 per 1000 dollars of GDP (Billion US$)</th>
<th>Adaptation</th>
<th>Mitigation</th>
</tr>
</thead>
<tbody>
<tr>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
</tr>
</tbody>
</table>

Source: Climate Funds Update, 2017

### BILATERAL CLIMATE FINANCE CONTRIBUTIONS

<table>
<thead>
<tr>
<th>Bilateral finance commitments (annual average 2013-14) (Billion US$)</th>
<th>Bilateral finance commitments per 1000 dollars of GDP (annual average 2013-14) per 1000 dollars of GDP</th>
<th>Financial instrument (average 2013-2014)</th>
<th>Theme of support (average 2013-14)</th>
</tr>
</thead>
<tbody>
<tr>
<td>n/a</td>
<td>n/a</td>
<td>Grant</td>
<td>Concessional Loan</td>
</tr>
<tr>
<td></td>
<td></td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Mitigation</td>
<td>Adaptation</td>
</tr>
<tr>
<td></td>
<td></td>
<td>n/a</td>
<td>n/a</td>
</tr>
</tbody>
</table>

Source: Party reporting to the UNFCCC, 2013-14

### CLIMATE FINANCE CONTRIBUTIONS THROUGH MULTILATERAL DEVELOPMENT BANKS (MDBs)

MDBs in aggregate spent $21.2 billion on mitigation and $4.5 billion on adaptation in developing countries in 2014.

No national disaggregation available

Source: MDB report, 2015

### FUTURE CLIMATE FINANCE COMMITMENTS

Source: “Roadmap to US$100 Billion” (both at the top)
### SECTOR-SPECIFIC INDICATORS

#### POWER SECTOR

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Argentina</th>
<th>G20 average</th>
<th>G20 average:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electricity Demand per Capita (kWh/capita)</td>
<td>2,949</td>
<td>632</td>
<td>22%</td>
</tr>
<tr>
<td>Emissions Intensity of the Power Sector (gCO₂/kWh)</td>
<td>632</td>
<td>394</td>
<td></td>
</tr>
<tr>
<td>Share of Renewables in Power Generation (incl. large hydro)</td>
<td>31.5%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Share of Population with Access to Electricity (%)</td>
<td>96%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Share of Population with Biomass Dependency (%)</td>
<td>0%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Data from 2014 Source: CAT, 2016

#### TRANSPORT SECTOR

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Argentina</th>
<th>G20 average</th>
<th>G20 average:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transport Emissions per Capita (tCO₂/capita)</td>
<td>0.22</td>
<td>1.2</td>
<td>64%</td>
</tr>
<tr>
<td>Transport Emissions Intensity (kgCO₂/vkm)</td>
<td>n/a</td>
<td>0.22</td>
<td></td>
</tr>
<tr>
<td>Share of Private Cars and Motorcycles (%)</td>
<td>n/a</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Share of Global Electric Vehicle Sales (%)</td>
<td>n/a</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Data from 2014 Source: CAT, 2016

#### BUILDING SECTOR

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Argentina</th>
<th>G20 average</th>
<th>G20 average:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Building Emissions Intensity (tCO₂/capita)</td>
<td>1.4</td>
<td>1.4</td>
<td></td>
</tr>
<tr>
<td>Residential Buildings Emissions Intensity (kgCO₂/m²)</td>
<td>n/a</td>
<td>37</td>
<td></td>
</tr>
<tr>
<td>Residential Building Space (m²/capita)</td>
<td>n/a</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Data from 2014 Source: CAT, 2016

#### AGRICULTURE SECTOR

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Argentina</th>
<th>G20 average</th>
<th>G20 average:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture Emissions Intensity (tCO₂/thousand US$2010 sectoral GDP (constant))</td>
<td>4.6</td>
<td>26</td>
<td></td>
</tr>
</tbody>
</table>

Data from 2014 Source: PRIMAP, 2017; WorldBank, 2017

#### FOREST SECTOR

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Argentina</th>
<th>G20 average</th>
<th>G20 average:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Forest Area Compared to 1990 Level (%)</td>
<td>78%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Data from 2015 Source: CAT, 2016
**ENERGY MIX**

![Energy Mix Graph]

**SHARE OF COAL IN ENERGY SUPPLY**

While Argentina's share of coal in the energy mix has somewhat increased in recent years, it remains the second lowest in the G20 at around 2% in 2014.

**SHARE OF RENEWABLES IN ENERGY SUPPLY**

At 9% in 2014 Argentina's share of renewables in the energy mix was just a little above the G20 average of 7.6%.

**PERFORMANCE RATING**

**RECENT DEVELOPMENTS (2009-2014)**

**CURRENT LEVEL (2014)**

Source: IEA, 2016

**CCPI PERFORMANCE RATING OF THE SHARE OF RENEWABLES**

Source: CCPI 2017 – G20 Edition

Source: own evaluation
ARGENTINA

DECARBONISATION

ENERGY USE PER CAPITA

Argentina's energy use per capita has increased at a similar rate as the G20 average over the last 14 years, but remains below average.

ENERGY INTENSITY OF THE ECONOMY

Argentina's energy intensity of the economy remains below the G20 average but contrary to the G20 trend it has not decreased steadily over the past couple of decades.
CARBON INTENSITY OF THE ENERGY SECTOR

The carbon intensity of Argentina’s energy sector has been relatively steady and remains slightly below the G20 average.

The carbon intensity of Argentina's energy sector has been relatively steady and remains slightly below the G20 average.
**ANNEX**

## KEY INDICATORS

1) 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. Data for 2016.

2) Gross Domestic Product (GDP) per capita is calculated by dividing GDP with midyear 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 2015.

3) PRIMAP-hist combines several published datasets to create a comprehensive set of greenhouse gas emissions pathways for every country and Kyoto gas covering the years 1850 to 2014 and all UNFCCC member states as well as most non-UNFCCC territories. The data resolves the main IPCC 1996 categories. Data for 2014.

4) The ND-GAIN index summarizes a country’s vulnerability to climate change and other global challenges in combination with its readiness to improve resilience. It is composed of a vulnerability score and a readiness score. In this report, we display the vulnerability score, which measures a country’s exposure and sensitivity to the negative impact of climate change in six life-supporting sectors – food, water, health, ecosystem service, human habitat and infrastructure. In this report, we only display the vulnerability score of the index. Data for 2015.

5) Average level of exposure of a nation’s population to concentrations of suspended particles measuring less than 2.5 microns in aerodynamic diameter, which are capable of penetrating deep into the respiratory tract and causing severe health damage. Data for 2015.

6) This indicator gives an overview of the country’s emissions profile and the direction the country’s emissions are taking under current policy scenario.

7) The Climate Change Performance Index (CCPI) aims to enhance transparency in international climate policies. On the basis of standardised criteria, the index evaluates and compares the climate protection performance of countries in the categories GHG emissions, renewable energy and energy use. It assesses the recent developments, current levels, policy progress and the compatibility of the country’s current performance and future targets with the international goal of limiting global temperature rise well below 2°C.

---

### GREENHOUSE EMISSIONS (GHG)

6) This indicator gives an overview of the country’s emissions profile and the direction the country’s emissions are taking under current policy scenario.

7) The Climate Change Performance Index (CCPI) aims to enhance transparency in international climate policies. On the basis of standardised criteria, the index evaluates and compares the climate protection performance of countries in the categories GHG emissions, renewable energy and energy use. It assesses the recent developments, current levels, policy progress and the compatibility of the country’s current performance and future targets with the international goal of limiting global temperature rise well below 2°C.

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### CLIMATE POLICY PERFORMANCE:

8) The table below displays the criteria used to assess a country’s policy performance. For the sector-specific policy criteria the ‘high’ rating is informed by the Climate Action Tracker (2016) report on the ten steps needed to limit warming to 1.5°C and the Paris Agreement.

9) The CCPI evaluates a country’s performance in national climate policy, meaning the performance in establishing and implementing a sufficient policy framework, as well as international climate diplomacy through feedback from national climate and energy experts.

10) The Climate Action Tracker is an independent, science-based assessment that tracks government emissions reduction commitments and actions. It provides an up-to-date assessment of individual national pledges, targets and NDCs and currently implemented policies to reduce greenhouse gas emissions.

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### FINANCING THE TRANSITION

11) The Allianz Climate and Energy Monitor ranks G20 member states on their relative fitness as potential investment destinations for building low-carbon electricity infrastructure. The investment attractiveness of a country is assessed through four categories: policy adequacy, policy reliability of sustained support, market absorption capacity and the national investment conditions.

12) The Renewable Energy Country Attractiveness Index (RECAI) produces scores and rankings for countries’ attractiveness based on macro drivers, energy market drivers and technology-specific drivers which, together, compress a set of 5 drivers, 16 parameters and over 50 datasets. For comparability purposes with the Allianz Monitor index, we divided the G20 members included in the latest RECAI ranking (May 2017) in two categories and rate the top half as ‘high performance’ and the lower half as ‘medium performance’.

13) The green bonds country indicator shows which countries are active in the green bond market by showing green bonds per country as a percentage of the overall debt securities market for that country. Green bonds were created to fund projects that have positive environmental and/or climate benefits.

14) The data presented is from the OECD inventory: www.oecd.org/site/ taifiss/ except for Argentina and Saudi Arabia for which data from the IEA subsidies database is used. The IEA uses a different methodology for calculating subsidies than the OECD. It uses a ‘price-gap’ approach and covers a sub-set of consumer subsidies. The price-gap approach compares average end-user prices paid by consumers with reference prices that corresponds to the full cost of supply.

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### GREENHOUSE EMISSIONS PERFORMANCE

<table>
<thead>
<tr>
<th>Criteria description</th>
<th>Low</th>
<th>Medium</th>
<th>High</th>
</tr>
</thead>
<tbody>
<tr>
<td>Long term low emissions development strategy</td>
<td>No long term low emissions strategy</td>
<td>Existing long term low emissions strategy</td>
<td>Long-term low emissions strategy submitted to the UNFCCC in accordance with Article 4, paragraph 19, of the Paris Agreement</td>
</tr>
<tr>
<td>GHG emissions target for 2050</td>
<td>No emissions reduction target for 2050 (or beyond)</td>
<td>Existing emissions reduction target for 2050 (or beyond)</td>
<td>Emissions reduction target to bring CO2 emissions to at least net zero by 2050</td>
</tr>
<tr>
<td>Renewable energy in power sector</td>
<td>No policy or support scheme for renewable energy in place</td>
<td>Support scheme for renewables in the power sector in place</td>
<td>Support scheme and target for 100% renewables in the power sector by 2050 in place</td>
</tr>
<tr>
<td>Coal phase-out</td>
<td>No consideration or policy in place for phasing out coal</td>
<td>Significant action to reduce coal use implemented or coal phase-out under consideration</td>
<td>Coal phase-out in place</td>
</tr>
<tr>
<td>Efficient light duty vehicles</td>
<td>No policy or emissions performance standards for LDVs in place</td>
<td>Energy/emissions performance standards for LDVs</td>
<td>National target to phase out fossil fuel cars in place</td>
</tr>
<tr>
<td>Efficient residential buildings</td>
<td>No policy or low-emissions building codes and standards in place</td>
<td>Building codes, standards and fiscal/financial incentives for low-emissions options in place</td>
<td>National strategy for near-zero energy buildings (at least for all new buildings)</td>
</tr>
<tr>
<td>Energy efficiency in industry sector</td>
<td>No policy or support for energy efficiency in industrial production in place</td>
<td>Support for energy efficiency in industrial production (covering at least 20% of the country’s industrial sub-sectors e.g. cement and steel production)</td>
<td>Target for new installations in emissions-intensive sectors to be low-carbon after 2020, maximising efficiency</td>
</tr>
<tr>
<td>Reducing deforestation</td>
<td>No policy or incentive to reduce deforestation in place</td>
<td>Incentives to reduce deforestation or support schemes for afforestation/reforestation in place</td>
<td>National target for reaching zero deforestation by 2020</td>
</tr>
</tbody>
</table>

---

To endnote 8) Rating
15) This footnote had to be deleted as the data for the corresponding indicator was not available at the time of publication of this report.

16) In addition to carbon pricing mechanisms, emissions trading schemes and various energy taxes also act as prices on carbon, although they are generally not developed with the aim or reducing emissions. The OECD report presents calculations on Effective Carbon Rates as the sum of carbon taxes, specific taxes on energy use, and tradable emission permit prices. The calculations are based on 2012 energy policies and prices, as covered in OECD's Taxing Energy Use database. According to OECD estimates, to tackle climate change emissions should be priced at least EUR 30 (or US$ 37) per tonne of CO2, revealing a major 'carbon pricing gap' within the G20.

17) The effective carbon rate presented in this country profile does not factor in emissions from biomass, as many countries and the UNFCCC treat them as carbon-neutral. However, in many cases biomass emissions are found to be non-carbon neutral over their lifecycle, especially due to the land use changes they cause.

18) 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. Figures include: Adaptation for Smallholder Agriculture Programme; Adaptation Fund; Clean Technology Fund; Forest Carbon Partnership Facility; Forest Investment Program; Global Environment Facility (5th and 6th Replenishment, Climate Focal Area only); Least Developed Countries Fund; Partnership for Market Readiness; Pilot Program for Climate Resilience; Scaling-up Renewable Energy Program; and the Special Climate Change Fund.

19) Bilateral finance commitments are sourced from Party reporting to the UNFCCC under the Common Tabular Format. Figures represent commitments of funds to projects or programmes, as opposed to actual disbursements.

20) Data for the MDB spending on climate action includes ADB, AfDB, EBRD, EIB, IDB, IFC and the World Bank. Data is self-reported annually by the MDBs, based on a shared methodology they developed. The reported data includes MDBs own resources and expenditure in EU13, not funding from external sources that are channelled through the MDBs (e.g. through bilateral donors and dedicated climate funds that are captured elsewhere). Data reported corresponds to the financing of adaptation or mitigation projects or of those components, sub-components, or elements within projects that provide adaptation or mitigation benefits (rather than the entire project cost). It does not include public or private finance mobilised by MDBs.

For more detail on the sources and methodologies behind the calculation of the indicators displayed, please download the Technical Note at:

http://www.climate-transparency.org/g20-climate-performance/g20report2017