





ASSESSING CLIMATE PROTECTION PERFORMANCE: G20 COUNTRY PROFILE

# France

This Country Profile assesses France's past and present actions to help mitigate climate change, and its Intended Nationally Determined Contribution (INDC) towards future global action. The profile summarises the respective findings of the Climate Change Performance Index (CCPI)<sup>i</sup> and Climate Action Tracker (CAT)<sup>ii</sup>.



# **COUNTRY CHARACTERISTICS**

KEY INDICATORS*	FRANCE	G20
Population [million]	65	4,587
GDP per capita (PPP) [US\$]	29,941	14,505
Share of global GHG emissions	1.1%	74.2%
Share of global GDP	2.4%	80.3%
Share of global population	0.9%	64.7%
GHG per capita [t CO₂e/cap]	7.1	7.2
Energy intensity of the economy (TPES/GDP [MJ/US\$])	5.5	6.6
Carbon intensity of energy supply (CO <sub>2</sub> /TPES [t CO <sub>2</sub> /TJ])	31.6	63.1
Carbon intensity of the economy (CO <sub>2</sub> /GDP [kg CO <sub>2</sub> /US\$])	0.17	0.42
Share of fossil fuels in primary energy supply	48.7%	83.4%
Share of coal in electricity production	3.9%	35.7%
Share of renewables in primary energy supply	8.4%	11.1%

\*year 2012 (unless stated otherwise)
GDP = gross domestic product
GHG = greenhouse gas emissions (net
emissions including sinks from agriculture,
forestry, and other land uses)
TPES = total primary energy supply
PPP = purchasing power parity in prices
of 2005

## **EMISSIONS AND EMISSIONS TRENDS**

# 

In France, carbon dioxide  $(CO_2)$  accounts for over two thirds of greenhouse gas (GHG) emissions. Nitrous oxide  $(N_2O)$  and methane  $(CH_4)$  have nearly equal shares of about 12% each. Total energy related

 $CO_2$  emissions and per capita emissions are both falling, and are relatively low compared with other G20 countries. France's emissions level is evaluated in the CCPI as medium, with a positive trend.

CCPI EVALUATION OF FRANCE'S EMISSIONS



#### DECARBONISATION

Decarbonisation of the global economy will be a crucial element for staying below the 2°C threshold. Two important steps towards achieving such decarboni-

sation are a shift from fossil fuels to renewable energy sources, and a reduction in carbon and energy intensity<sup>iii</sup>.

#### RENEWABLE ENERGY

#### RENEWABLE ENERGY IN FRANCE



Total of Renewable Energies (in TJ)
Share of Renewable Energies (in %)
G20 Share

Source: IEA 2014

France's renewable energy sector is dominated by hydro power, while the supply of other renewable energy sources (such as wind and solar) has grown in the last decade. France wants to reduce its dependence on nuclear power, cutting the share of nuclear in electricity generation from 75% to 50%. Energy efficiency and renewable energy will play a major

role in filling the gap. The share of renewable energy in the total energy supply has increased slowly over the last decade, but is still relatively low compared with other G20 members. In the CCPI evaluation, France's renewables level is ranked as medium, with a strongly increasing trend.

# CCPI EVALUATION OF FRANCE'S RENEWABLE ENERGY



#### **ENERGY- AND CARBON INTENSITY**

The measurement of carbon and energy intensity uses macroeconomic data. A country's progress towards decarbonisation is indicated by decoupling of its GDP growth from growth in carbon and energy

intensity. The latter are measured as CO<sub>2</sub> emissions per unit of Primary Energy Supply (CO<sub>2</sub>/TPES) and Primary Energy Supply per unit of GDP (TPES/GDP) respectively.

- Climate Change Performance Index is jointly published by Germanwatch and Climate Action Network Europe, a coalition of over 120 member organizations. The Index is 80% based on objective indicators of emissions trend and level, renewable energies and energy efficiency and 20% on national and international climate policy assessments by more than 300 experts from the respective countries. www.germanwatch.org/en/ccpi
- i Climate Action Tracker is an independent scientific analysis produced by four research organizations: Climate Analytics, Ecofys, the Potsdam Institute for Climate Impact Studies and the NewClimate Institute. www.climateactiontracker.org
- iii Another indicator is energy efficiency. However, energy efficiency is complex to measure, requiring a sector by sector analysis, where comparable data sources across G20 countries are not available at present.

# ENERGY- AND CARBON INTENSITY IN FRANCE To Good (Co2/TPES) TPES/GDP (IEA) G20 (TPES/GDP) France's carbon and energy intensity are both below the G20 average and steadily falling. Because they already are at a relative low level, the CCPI evaluated France's energy and carbon intensity as good compared with the other G20 countries. Further positive developments are reflected in a positive trend.

CCPI EVALUATION OF FRANCE'S ENERGY AND CARBON INTENSITY



Source: CCPI 2015

### CLIMATE POLICY PERFORMANCE

#### **EVALUATION OF RECENT CLIMATE POLICY**

The CCPI evaluates a country's performance in national and international climate policy through feedback from national energy and climate experts.

The experts assess the country's performance in international negotiations, national policy making and in the implementation of climate policies.

#### FRANCE'S CLIMATE POLICY



France's climate policy performance is rated as medium relative to other countries. The country's experts criticise a lack of ambition in international negotiations, before taking over the COP presidency.

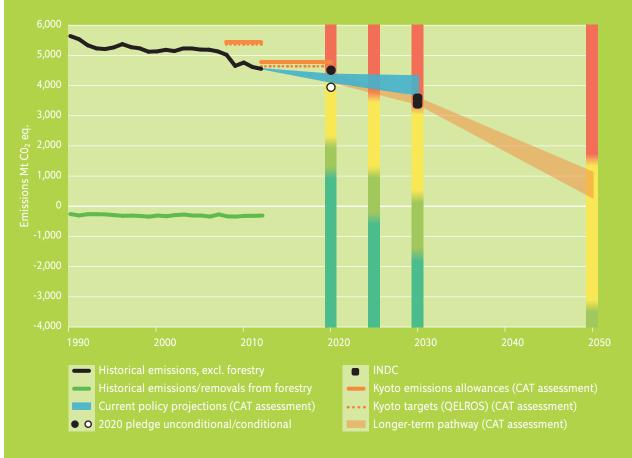
The country was judged to have a weak position in the negotiations over the EU's 2030 targets, but actively promoted a G7 statement on decarbonisation.

#### CCPI EVALUATION OF FRANCE'S CLIMATE POLICY



#### COMPATIBILITY OF NATIONAL CLIMATE TARGETS WITH 2°C

As an EU member state, France did not submit its own Intended Nationally Determined Contribution (INDC) or emissions reduction target towards COP21.



 $Source: @ www.climateactiontracker.org/Climate Analytics/Ecofys/ \ NewClimate/PIK \\$ 

Under its INDC, the EU proposed on 6 March 2015 a binding, economy-wide target to cut domestic greenhouse gas emissions by at least 40% below 1990 levels in 2030. No individual EU member state has its own INDC, but some countries, such as Germany, may have more ambitious, domestic targets.

The Climate Action Tracker (CAT) rates the EU emissions target as "medium", meaning that the INDC is not consistent with limiting warming below 2°C. It would require other countries to make a comparably greater effort and much deeper emissions reductions.

The overall level of GHG emissions reductions proposed in the INDC is not yet sufficient to fall within the range of approaches for fair and equitable emission reductions by the EU28. Current policies are projected to reduce domestic emissions by 23–35% below 1990 levels in 2030, and so do not yet put the EU on a trajectory towards meeting either its 2030 or 2050 targets. The EU's Emissions Trading Scheme is the bloc's most important instrument to achieve its 2020 and 2030 emissions reduction targets. However, an accumulated surplus of emissions allowances could dilute the 40% GHG target by 7% in 2030. It is therefore important that the EU creates a robust market reserve for eliminating that surplus, to keep in line with the 40% GHG target.