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Chapter I

Greenhouse Gas Emissions Inventory

I - DEVELOPMENTS SINCE 1990

A - Emissions within the Scope of the Convention from 1990 to 2015

Using Convention parameters, that is to say including both the French mainland and overseas territories, greenhouse gas emissions came to 463,6 Mt CO₂ e in 2015. They dropped by 15.7% from 1990 to 2015. An analysis of these reductions is carried out every year in the National Inventory Reports (NIR). The downward trend in greenhouse gas emissions since 1990 can mainly be explained, as regards industrial processes, by the improvement of those industrial processes, by the increasingly service-based nature of the French economy, and by the resulting loss of manufacturing production sites. In business sectors, targeted mitigation policies (see Part III, which provides a precise description and an assessment of the policies and measures put in place) have enabled us to overcome the upward trend in emissions linked to population growth and increased economic activity in the 2000s. Total emissions excluding LUCF per inhabitant have decreased by 28% from 1990 to 2015¹. When normalized to reflect Gross Domestic Product (GDP)², the effective drop in emissions has been 65%.

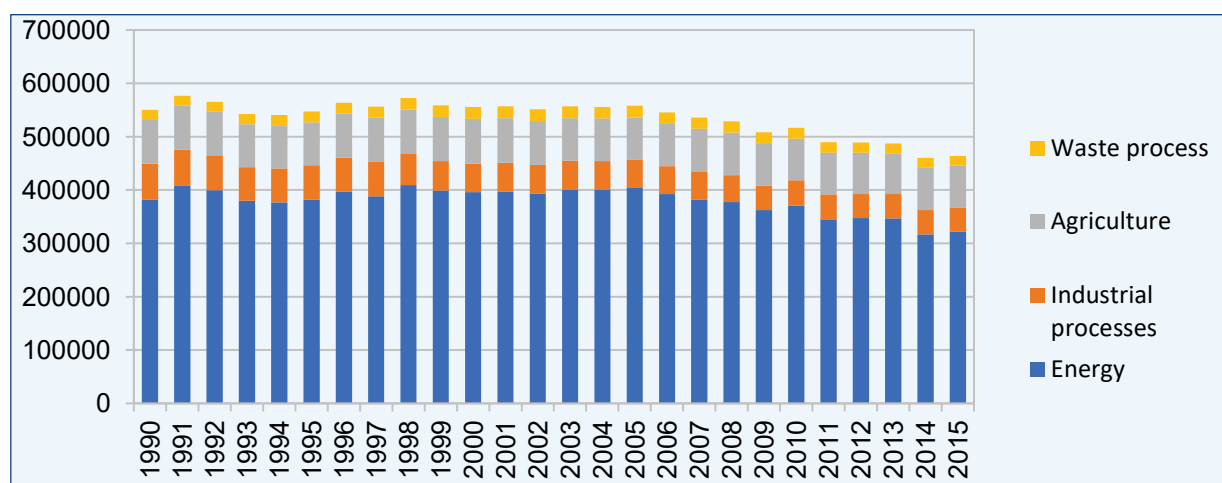


Figure 1.1: Emissions within the Scope of the Convention from 1990 to 2015 excluding the LULUCF sector in kt CO₂ e - Source: CITEPA / MTES 2017 Submission using Convention Parameters, CRF format

After a period of significant decrease between 2005 and 2009, due mainly to the establishment of the ETS market (European Emissions Quota Trading System), to energy efficiency policies and also to the

¹ French population as of 1st January 2015: 66,453,558 inhabitants-1990: 56,577,000 inhabitants

² <https://donnees.banquemondiale.org/indicateur/NY.GDP.MKTP.CN.AD?locations=FR>

economic crisis in 2008, greenhouse gas emissions stabilised between 2011 and 2013. The stability in emissions between 2011 and 2013 is due to the special climate conditions during those three years (especially the year 2011, which was very mild, and harsher than average temperatures in 2013). Notable reductions were observed for the year 2014: greenhouse gas emissions were 460 Mt eqt.CO₂, i.e. a decrease in emissions of 5.6% in 2014 compared to 2013. Around 50% of this decrease may be explained by the extremely mild climate conditions in 2014; the remainder of the gains may be attributed to reduction efforts since 2005. In 2015, emissions came to 463.7 Mt CO₂ e; an increase of 0.8% compared with 2014.

Further impetus was given to France's climate policy by the Energy Transition for Green Growth Act of 17th August 2015. This law confirmed the target of a 75% reduction in French emissions by 2050 compared to 1990 levels (this target was originally set in 2005 in the Energy Program Act, which established France's energy policy priorities, and renewed in the 2009 Grenelle Act). It introduced an intermediate reduction target of 40% by 2030 and set in place new measures to cover the various aspects of energy transition. Another major area of progress under this law was the establishment of a climate-related governance principle around a National Low-Carbon Strategy (SNBC) subject to enhanced Parliamentary and civil society oversight.

In July 2017 the Government published a new Climate Plan to accelerate energy and climate transition and the implementation of the Paris Agreement. This Plan sets ambitious priorities; in particular, the achievement of carbon neutrality towards the middle of the century, the elimination of “thermal sieves” within 10 years (with 4 billion euros earmarked for energy retrofit operations), discontinuing the sale of vehicles emitting greenhouse gases in 2040, shutting down the last coal-fired power stations by 2022, gradually phasing out hydrocarbon production in France by 2040, a faster increase in the price of carbon and redoubling of efforts in publicly-funded energy transition research. These priorities are included in the process of revising the National Low Carbon Strategy, which began in 2017 for publication at the end of 2018.

A consultation process is underway for the preparation of the 2nd National Adaptation Plan, to be published at the end of 2017, which serves to complement climate change mitigation policies.

B - Emissions using Kyoto Agreement parameters from 1990 to 2015

In 2015 France emitted 457.1 Mt eqt. CO₂ compared to 481.5 Mt eqt. CO₂ in 2013 and 453.5 Mt eqt. CO₂ in 2014 in its territories on the mainland, Guyana, Guadeloupe, Martinique, Reunion, Mayotte, and Saint-Martin (geographic scope of the Kyoto protocol). From 1990 to 2015, the reduction was 16.4%.

The two following tables present emissions for 2015 using both Convention and Kyoto parameters. The other tables relating to emissions are available in the submission made via the United Nations Framework Convention on Climate Change (UNFCCC) software program.

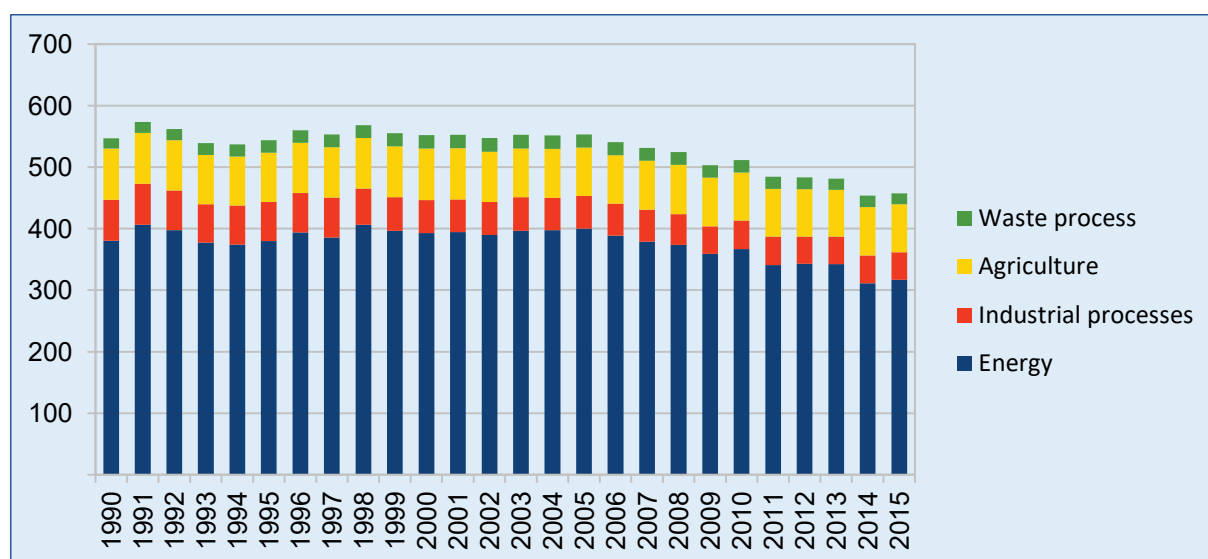


Figure 1.2: Emissions within the Kyoto scope from 1990 to 2015 excluding the LULUCF sector in kt CO₂ e - Source: CITEPA / MTES 2017 Submission in CRF format using Kyoto parameters

Table 1.1: Emissions by sector, using Convention parameters: *summary 2*

GREENHOUSE GAS SOURCE AND SINK CATEGORIES	CO ₂ ⁽¹⁾	CH ₄	N ₂ O	HFCs	PFCs	SF ₆	Unspecified mix of HFCs and PFCs	NF ₃	Total
	CO ₂ equivalent (kt)								
Total (net emissions)⁽¹⁾	297 500,68	60 015,52	43 467,25	19 263,86	540,18	520,70	NO,NA	10,63	421 318,82
1. Energy	310 205,22	2 910,24	3 745,38						316 860,83
A. Fuel combustion (sectoral approach)	307 245,10	1 708,94	3 730,71						312 684,75
1. Energy industries	41 799,00	28,43	260,25						42 087,68
2. Manufacturing industries and construction	50 034,93	106,48	364,03						50 505,44
3. Transport	130 731,02	164,67	1 606,43						132 502,13
4. Other sectors	84 680,15	1 409,35	1 500,00						87 589,50
5. Other	NO	NO	NO						NO
B. Fugitive emissions from fuels	2 960,12	1 201,30	14,66						4 176,08
1. Solid fuels	NO,NA	14,98	NO,NA						14,98
2. Oil and natural gas	2 960,12	1 186,32	14,66						4 161,10
C. CO ₂ transport and storage	NO,IE								NO,IE
2. Industrial processes and product use	2 2851,09	49,77	1 282,71	19 263,86	540,18	520,70	NO,NA	10,63	44 518,95
A. Mineral industry	10 624,61								10 624,61
B. Chemical industry	6 534,42	48,54	1 147,76	208,85	2,42	NO,NA	NO,NA	NO,NA	7 941,98
C. Metal industry	4 024,03	1,01	NA	NO,NA	62,15	37,64	NO,NA	NA	4 124,82
D. Non-energy products from fuels and solvent use	1 667,98	0,23	2,63						1 670,84
E. Electronic Industry				6,42	78,58	4,51	NO,NA	10,63	100,15
F. Product uses as ODS substitutes				19048,07					19 048,07
G. Other product manufacture and use	NA	NA	132,32	0,52	397,03	478,55	NA	NA	1 008,43
H. Other	0,05	NA	NA						0,05
3. Agriculture	2 005,60	40 929,68	35 437,66						78 372,94
A. Enteric fermentation		34 580,16							34 580,16
B. Manure management		6 219,19	1 858,70						8 077,88
C. Rice cultivation		81,37							81,37
D. Agricultural soils		NO	33 563,84						33 563,84
E. Prescribed burning of savannas		NO	NO						NO
F. Field burning of agricultural residues		48,96	15,13						64,09
G. Liming	862,72								862,72
H. Urea application	1 142,88								1 142,88
I. Other carbon-containing fertilizers	NO								NO
J. Other	NO	NO	NO						NO
4. Land use, land-use change and forestry⁽¹⁾	-39 087,21	1 110,35	2 167,10						-35 809,76
A. Forest land	-54 130,06	592,23	310,00						-53 227,83
B. Crop land	16 016,41	116,43	1 794,67						17 927,52
C. Grassland	-10 747,84	113,39	58,51						-10 575,94
D. Wetlands	498,29	9,16	0,75						508,20
E. Settlements	10 944,00	58,41	3,17						11 005,58
F. Other land	0,16	NO	NO,NE						0,16
G. Harvested wood products	-1 747,11								-1 747,11
H. Other	78,93	220,73	NA						299,66
5. Waste	1 525,99	15 015,48	834,40						17 375,86
A. Solid waste disposal	NA	12 553,33							12 553,33
B. Biological treatment of solid waste		242,18	331,03						573,20
C. Incineration and open burning of waste	1 525,99	27,90	46,83						1 600,71
D. Waste water treatment and discharge		2 192,07	456,55						2 648,61
E. Other	NO	NO	NO						NO
6. Other (as specified in summary 1.A)	NO	NO	NO	NO	NO	NO	NO	NO	NO
Memo items:⁽²⁾									
International bunkers	22 948,65	14,84	210,90						23 174,39
Aviation	17 308,42	2,11	167,57						17 478,10
Navigation	5 640,23	12,72	43,33						5 696,29
Multilateral operations	1,35	NE	NE						1,35
CO ₂ emissions from biomass	58 381,78								58 381,78
CO ₂ captured	NO,NE								NO,NE
Long-term storage of C in waste disposal sites									
Indirect N ₂ O			NO,NE						
Indirect CO ₂ ⁽³⁾	NO,IE,NA								
Total CO₂ equivalent emissions without land use, land-use change and forestry									457 128,58
Total CO₂ equivalent emissions with land use, land-use change and forestry									421 318,82
Total CO₂ equivalent emissions, including indirect CO₂, without land use, land-use change and forestry									NA
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II - THE NATIONAL SYSTEM

France has not changed its national inventory system since the last biennial report. The national inventory system complies with article 5.1 of the Kyoto Protocol (for more detail, see the description in the national inventory reports filed in 2016 and 2017) It is based on the regulatory provisions of the SNIEBA order issued on 24th August 2011.

Regarding the French national registry, there has been no change since the last biennial report. The Caisse des Dépôts was appointed in 2004 by decree n° 2004-1412 to administer the national registry and to develop information systems to operate it and ensure its security. Nonetheless, traceability has been greatly improved with a view to greater transparency.

Since migration to the European Union registry in June 2012, it is the responsibility of the European Commission to supply, maintain and secure the national registry information system in accordance with the commitments of European Member States as Parties to the Kyoto Protocol and to the Convention, and as participants in the European Union Emissions Trading Scheme for Greenhouse Gas Emission Quotas (EU-ETS Registry).

Chapter II

Emissions Reduction Targets in Figures

I - INTRODUCTION TO GOALS, GASES AND SECTORS COVERED

A - At European Level

The first international consultation on climate change goes back to 1992 during the Rio Summit, and then to 1997 with the signature of the Kyoto Protocol. For its part, the European Union set a range of greenhouse gas emission reduction goals in 2008 that were combined into an action plan entitled the “Climate-Energy Package”. The major objectives of this plan, referred to as the “3x20”, steers the energy policy of each European state. Within the framework of the Energy-Climate Package, the EU has established internal rules that underpin the implementation of this objective by 2020 under the Convention.

Goals of the Energy Package

The Energy-Climate package is a range of legislation adopted in December 2008 by the European Parliament. Through binding provisions, the legislation had the aim of becoming a global and sustainable environmental policy and combating climate change by drastically reducing greenhouse gas emissions by the year 2020. The main target set by the Union was set by the “3x20” directive:

- reducing EU countries’ greenhouse gas emissions by 20%;
- achieving a European energy mix that included 20% renewable energies;
- and achieving 20% energy savings

In order to reach that target, a certain number of directives were passed aimed at improving energy efficiency and reducing energy consumption in certain sectors (Directive on CO₂ Emissions Quota Trading System, Fuel Quality Directive, Regulations on CO₂ Emissions Reduction in New Cars, Renewable Energies Directive, “Shared Effort” Directive, and Carbon Capture and Storage Directive, etc.)

In France, the 3x20 target was adopted, with the share of renewable energy being raised to 23%.

The EU commitment intends to reduce greenhouse gas emissions by 20 % by the year 2020 compared with 1990 levels, in order to contribute to achieving the UNFCCC’s primary objective: “stabilising concentrations of greenhouse gases in the atmosphere at a level that prevents any man-made disturbance that is dangerous to the climatic system”³, or, in other words, limiting the increase of global temperatures to less than 2°C compared with pre-industrial levels (FCCC/CP/2010/7/Add.1). The EU has also committed to making reduction efforts beyond that, as far as 30%, on the condition that other developed countries also commit to comparable emissions reductions and that developing countries contribute to a level that

³ https://unfccc.int/essential_background/convention/items/6036.php

re-reflects their respective responsibility and capacity. This proposal was restated in the CCNUCC submission by the EU-28 and Iceland on 30 April 2014⁴.

As this goal, in the context of the convention, has only been submitted by the EU-28 and not by each of the Member States, there are no individual objectives for the member States in the context of the Convention. For this reason, France - as part of the EU-28 - has a quantified emissions reduction goal that is identical to that of all other Member States.

The energy-climate package introduces a clear approach for reducing total GHG emissions by 20% compared with 1990 levels, which is the equivalent of a 14% reduction in France compared to 2005 levels. This goal of a 14% reduction has been split into two sub-goals, one for ETS sectors (subject to the EU quota trading system) and another for non-ETS sectors (EU, 2009).

By virtue of the revised EU-ETS directive⁵, a single EU-ETS ceiling covers the EU member States and the three non-EU member States taking part (Norway, Iceland and Liechtenstein), meaning there are no longer any emissions caps differing by country. For quotas allocated to sectors included in the EU ETS, annual caps have been set for the period from 2013 to 2020; these drop by 1.74% per annum from the average level of the quotas issued by Member States during the second period of greenhouse gas trading (2008-2012). The annual cap involves intermediate emissions reduction goals in the sectors covered by the EU ETS for each year up to 2020. For more information on the EU ETS and information on the use of market mechanisms in the ETS, the biennial Europe report can be consulted (chapter 4.2.2).

Emissions not covered by the ETS are handled as part of the Effort Sharing Decision. The ESD covers emissions from all sources that do not come under the EU ETS, except emissions derived from international marine transport and from international and national air transport (which have been included in ETS since the 1st of January 2012) and emissions and absorptions derived from land use, changes of land use and forestry (LULUCF). It therefore covers a broad variety of small-scale emissions from a wide range of sectors: Transport (with road transport first and foremost), buildings (especially heating), services, small industrial facilities, emissions released from the energy sector, fluoride gas emissions, farming and waste. These sources currently represent about 60% of total greenhouse gas emissions in the EU.

Whilst the EU ETS goal must be achieved by the EU as a whole, the ESD goal has been split into national goals to be reached individually by each Member State. In the ESD decision, national emissions targets are set for 2020, expressed as a percentage of change compared with 2005 levels. Those changes have been converted into annual reduction target figures for the period from 2013 to 2020⁶, expressed as annual emissions allocations (AEAs). France's 2013 emissions level came to 394,076,347 AEA, with a goal to reach 359,293,095 AEA by 2020. In 2013, the emissions verified at fixed facilities covered by the EU ETS came to 115,477 t eqt. CO₂. With total greenhouse gas emissions reaching 491,191,869 t eqt. CO₂ (excluding LULUCF) in 2013, the share of ETS emissions came to 23%.

B - At National Level

At national level, France has also set targets to reduce greenhouse gas emissions and energy consumption. Those goals act to supplement the commitments made at European level, and were adopted under the law on Energy Transition enacted on 17th August 2015. They are incorporated in the French Energy Code, and include in particular:

⁴ http://ec.europa.eu/clima/policies/international/negotiations/docs/eu_submission_20140430_en.pdf

⁵ Directive n° 2009/29/CE dated 23/04/09 amended directive 2003/87/CE in order to improve and extend the Community Trading System for Greenhouse Gas Emissions Quotas

⁶ The Commission's decision of 26 March 2013 relating to the determination of annual allocations of emissions quotas for Member States, for the period from 2013-2020 in accordance with decision n° 406/2009/CE from the European Parliament and Council. Execution decision n° 2013/634/UE dated 31/10/13 pertaining to the determination of annual allocations of emissions quotas for Member States for the period from 2013-2020, in accordance with decision n° 406/2009/CE of the European Parliament and Council.

- goals to reduce greenhouse gas emissions compared with 1990 levels by 40% by 2030 and by 75% by 2050;
- a goal to reduce energy consumption by 20% by 2030 and by 50% by 2050, compared with 2012;
- goals for developing renewable energies, with a target of 32% of final energy consumption and 40% of energy production to be met by renewables by 2030.

Update on the objectives France has achieved

For the 2013-2016 period, French emissions that were not covered by the quota trading system were 8.8% less than the cap set by the energy-climate package; France has thus substantially complied with its European commitments.

The monitoring process is standardized for all European Member States by means of the regulations establishing a greenhouse gas emissions supervision mechanism⁷. The use of flexible mechanisms is possible under the ESD and ETS (for the use of Emission Reduction Units (URE) and Certified Emission Reduction Units (URCE) in the context of ETS, see the European Union biennial report).

The ESD enables Member States to use flexibility clauses to meet their annual obligations, with a limit of 3% for the use of credits based on the projects being carried out by each MS. If those credits are not used, the unused part for that year can be transferred to other Member States or set up as a reserve for the needs of the member state until 2020.

In addition, the European Council reached an agreement in October 2014, concerning the main items that form the EU energy-climate framework for 2030:

- A binding target for internal reduction of at least 40% of greenhouse gas emissions by 2030 compared to 1990 levels. This binding target was communicated to the UNFCCC as a 'planned contribution determined at national level of the EU.' This is based on a 43% reduction of emissions covered by the EU ETS in 2005 and on a 30% reduction of emissions from non-EU ETS sectors compared to 2005; These overall reductions are divided amongst Member States;
- A binding target of at least 27% of renewable energy use by 2030;
- An indicative energy efficiency target of at least 27% by 2030, which will be revised in 2020, keeping in mind a target of 30%.

To this end, the Commission has already suggested a revision of the ETS directive in July 2015 which is currently under discussion in the European Institutions, and which will be accompanied by legislative proposals for the non-ETS sectors. The Commission is also deploying initiatives outlined in the Energy Union Strategic Framework, including forthcoming proposals on renewable energy and on energy efficiency.

⁷ Regulation n° 525/2013 dated 21/05/13 relates to a system for monitoring and declaring greenhouse gas emissions, and for the declaration, at national level and within the European Union, of other information relating to climate change (thereby repealing decision n° 280/2004/CE)

Table 2(a)

FRA_BR2_v0.2

Description of quantified economy-wide emission reduction target: base year^a

Party	France	
Base year / base period	1990	
Emission reduction target	% of base year/base period	% of 1990 ^b
	20.00	20.00
Period for reaching target	BY-2020	

a Reporting by a developed country Party on the information specified in the common tabular format does not prejudice the position of other Parties with regard to the treatment of units from market-based mechanisms under the Convention or other market-based mechanisms towards achievement of quantified economy-wide emission reduction targets.

b Optional.

Comments: ETS sectors targets (emissions from stationary installations): Start in 2013 based on yearly reduction equal to 1.74% of the average allocation in the period 2008-2012, extrapolated starting in 2010 and leading to a -21% GHG reduction compared to 2005 in 2020

ESD sectors targets (sectors not included in the EU ETS such as transports, buildings, services, agriculture and waste): Members state specific targets start in 2013 based on average emissions 2008 to 2010 and lead to a collective reduction of around -10% compared to 2005 in 2020.

Table 2(b)

FRA_BR2_v0.2

Description of quantified economy-wide emission reduction target: gases and sectors covered^a

Gases covered		Base year for each gas (year):
CO ₂		1990
CH ₄		1990
N ₂ O		1990
HFCs		1990
PFCs		1990
SF ₆		1990
Other Gases (specify)		
Sectors covered ^b	Energy	Yes
	Transport ^f	Yes
	Industrial processes ^g	Yes
	Agriculture	Yes
	LULUCF	No
	Waste	Yes
	Other Sectors (specify)	

Table 2 (c)

Description of quantified economy-wide emission reduction target: global warming potential values (GWP)^a

Gases	GWP values ^b
CO ₂	4nd AR
CH ₄	4nd AR
N ₂ O	4nd AR
HFCs	4nd AR
PFCs	4nd AR
SF ₆	4nd AR
Other Gases (specify)	

Abbreviations: GWP = global warming potential

^a Reporting by a developed country Party on the information specified in the common tabular format does not prejudice the position of other Parties with regard to the treatment of units from market-based mechanisms under the Convention or other market-based mechanisms towards achievement of quantified economy-wide emission reduction targets.

^b Please specify the reference for the GWP: Second Assessment Report of the Intergovernmental Panel on Climate Change (IPCC) or the Fourth Assessment Report of the IPCC.

The powers of global warming used to convert greenhouse gas quantities expressed en masse in CO₂ equivalents are those from the 4th GIC report in accordance with the decisions of the Climate Convention.

The LULUCF sector has been estimated as a carbon sink throughout the entire 1990-2020 period, on both a French and EU-wide scale.

It has not been accounted for in the 2020 goals set by the European Union Convention (and neither, there-fore, by the French convention), but a European decision was adopted for this sector in 2013. This decision makes it compulsory for nations to implement action plans to provide information about initiatives established to reduce emissions, increase absorption and protect carbon stocks.

Table 2(d)

FRA_BR2_v0.2

Description of quantified economy-wide emission reduction target: approach to counting emissions and removals from the LULUCF sector^a

Role of LULUCF	LULUCF in base year level and target	Excluded
<i>Abbreviation:</i> LULUCF = land use, land-use change and forestry.		

^a Reporting by a developed country Party on the information specified in the common tabular format does not prejudice the position of other Parties with regard to the treatment of units from market-based mechanisms under the Convention or other market-based mechanisms towards achievement of quantified economy-wide emission reduction targets.

II - USE OF MARKET MECHANISMS

Flexible mechanisms are used, on the one hand, by operators within ETS and on the other hand by governments to achieve ESD goals presented above (for more information on their use in ETS, see the European Union biennial report).

At this time, the use of flexible mechanisms under the ESD can only be quantified for the year 2013. In 2013, only one Member State resorted to quota transfers from another Member State to comply with its commitments. As of the end of 2017, the assessment of compliance for the second year (2014) under the ESD is in progress, and will be followed by the assessment for the following years. Accordingly, no quantitative information can be given for the use of flexible mechanisms from 2014 onwards.

In any event, France has not resorted to the use of any flexible mechanism to comply with its 2013 and 2014 goals, and does not expect to use any for the following years for ESD purposes.

Table 2(e)l

FRA_BR2_v0.2

Description of quantified economy-wide emission reduction target: market-based mechanisms under the Convention^a

<i>Market-based mechanisms under the Convention</i>	<i>Possible scale of contributions</i>
	<i>(estimated kt CO₂ eq)</i>
CERs	0.00
ERUs	0.00
AAUs ⁱ	0.00
Carry-over units ^j	0.00
Other mechanism units under the Convention (specify) ^d	

Abbreviations:

AAU = assigned amount unit,
CER = certified emission reduction,
ERU = emission reduction unit.

^a Reporting by a developed country Party on the information specified in the common tabular format does not prejudice the position of other Parties with regard to the treatment of units from market-based mechanisms under the Convention or other market-based mechanisms towards achievement of quantified economy-wide emission reduction targets.

^d As indicated in paragraph 5(e) of the guidelines contained in annex I of decision 2/CP.17.

ⁱ AAUs issued to or purchased by a Party.

^j Units carried over from the first to the second commitment periods of the Kyoto Protocol, as described in decision 13/CMP.1 and consistent with decision XX/CMP.8.

Chapter III

Progress in achievement of quantified economy-wide emission reduction targets and relevant information

I - MITIGATION ACTIONS AND THEIR EFFECTS

Since the 1990s, France has set up a vast range of policies and measures intended to activate various mitigation factors in all sectors: transport, residential-services, energy, industry, waste, agriculture and forestry. The national measures complement the European measures applied by France as a European Union member state.

A full and detailed description of the mitigation policies and measures is provided in Chapter IV of the Seventh French National Communication. These are restated in full in CTF Table 3 attached to this submission. The table below only described the measures and policies adopted, implemented or envisaged since the last biennial report.

Table 3.1: Information about mitigation action adopted, implemented or envisaged since the second biennial report

Name of Mitigation Action ^a	Sector Affected	Greenhouse Gases Affected	Goal and/or Activity Affected	Instrument	Status	Brief Description	Year Implemented	Entity Responsible ^b	Estimated Emissions Reduction for a Given Year (ktCO ₂ eqt.) ^c				
									2015	2020	2025	2030	2035
Equipment targets set in terms of low emissions vehicles for car fleets managed by the State, its public bodies and local authorities*	Transport	CO ₂	Fostering the purchase of rechargeable electric and hybrid vehicles in public sector fleets	Regulations	Implementation	When replacing their vehicle stock, State and public sector organisations must include at least 50% low-emissions vehicles (i.e. rechargeable electric or hybrid vehicles in practice). For local and regional governments, the percentage must be at least 20%. Furthermore until 2020, taxi and chauffeured car operators are obliged to purchase 10% low emissions vehicles when replacing their vehicle stock.	2017	MTES	85 ^d	780	1,840	3,400	5,650
Requirement to fit part of car parks in new buildings pre-equipped for recharging facilities for electric vehicles*	Transport	CO ₂	Fostering the deployment of recharging facilities for electric vehicles	Regulations	Implementation	All construction of certain types of building with a car park must provide part of the car spaces pre-equipped to facilitate the later set up of recharging facilities for rechargeable electric or hybrid vehicles.	2017	MTES, MCT					
Consolidated regulatory framework for recharging facilities*	Transport	CO ₂	Fostering the deployment of recharging facilities for electric vehicles	Regulations	Implementation	All provisions relating to recharging facilities for electric vehicles are consolidated into a single document.	2017	MTES					
Tax arrangement to support investing in heavy goods vehicles running on NGV*	Transport	CO ₂	Fostering the purchase of heavy goods vehicles running on NGV	Tax	Implementation	Companies can deduct a sum equal to 40% of the original value of goods allocated to their business from their taxable results, and which they acquire as of 1 January 2016 and until 31 December 2017, when they fall into the class of vehicles of more than 3.5 tonnes which exclusively use natural gas and biomethane fuel.	2016	MTES	nd	nd	nd	nd	nd
Call for projects intended to support mobility using NGV*	Transport	CO ₂	Fostering the purchase of heavy goods vehicles running on NGV and promoting the deployment of supply facilities.	Economic	Implementation	Mobility using natural gas was encouraged in 2016 by the launch of a call for projects in the context of the investments for the future programme intended to support the emergence of solutions that combine the purchase of NGV heavy goods vehicles and the creation of points of supply.	2016	ADEME	nd	nd	nd	nd	nd
Low emission vehicle equipment goals when renewing the public sector fleet of vehicles devoted to public urban transport managed by the State and by local authorities*	Transport	CO ₂	Fostering the development of low emissions buses and coaches	Regulations	Implementation	An obligation exists for vehicles devoted to public urban transport managed by the State and by local authorities (buses and coaches) include at least 50% low-emissions vehicles when replacing their vehicle stock in the vehicles renewed from the 1st January 2020, and then for all vehicles renewed from the 1st January 2025. The criteria that define low emissions vehicles	2017	MTES, local authorities	nd	nd	nd	nd	nd

Name of Mitigation Action ^a	Sector Affected	Greenhouse Gases Affected	Goal and/or Activity Affected	Instrument	Status	Brief Description	Year Implemented	Entity Responsible ^b	Estimated Emissions Reduction for a Given Year (ktCO ₂ eqt.) ^c				
									2015	2020	2025	2030	2035
						(electrical, hybrid, biogas or biofuels that are very largely renewable) are set according to custom, the areas in which they will travel and the local capacities for supply of a given energy source.							
Measures to foster cycling (bicycle bonus, bicycle mileage payments, tax reductions, regulations for road sharing and the safety of cyclists, and bicycle parks)*	Transport	CO ₂	Supporting the modal changeover to cycling	Economics, Regulations	Implementation	Incentive measures in favour of the practice of cycling have been set up: a subsidy is allocated on purchasing a new electrically assisted bicycle (bike bonus); employers have the option of paying a bicycle mileage payment to their employees who come to work by bicycle; companies who make a fleet of bicycles available to staff for their home-work commute can benefit from tax reductions; new national regulations have been issued intended to share the roadways and to improve the safety of cycling in towns; measures have been taken to facilitate parking bicycles in towns, with a requirement to create secure parking for bicycles when building new offices or residential buildings, or when performing work in car parks, and a requirement to put the issue of work to enable the secure parking of bicycles on the agenda of annual general meetings of co-ownership properties.	2015	MTES	nd	nd	nd	nd	nd
Experiments with labelling as "Positive Energy and Carbon Reduction Buildings (E+C-)"**	Residential/Services Sector	CO ₂	Improving the energy efficiency of new buildings, decreasing their carbon footprint and fostering resorting to renewable energies.	Regulations, information (labelling), and sundries: experimentation	Implementation	This label puts an innovative environmental standard for new buildings in place, which combines requirements in terms of both energy and greenhouse gas emissions. Trials of the label initiated at the end of 2016 prepare the way for future environmental regulations for new buildings which will standardise positive energy buildings and the deployment of buildings with a low carbon footprint throughout their life cycle, from design to demolition.	2016	MTES, MCT	nd	nd	nd	nd	nd
Bonus Plot Ratio*	Residential/Services Sector	CO ₂	Improving the energy efficiency of new buildings, and fostering resorting to renewable energies.	Economic	Implementation	The relevant town planning authority may authorise exceeding the plot ratio by a maximum of 30% for new buildings that display exemplary energy or environmental features or that are energy positive. This arrangement will enable the economic balance of these transaction to be improved and for the extra costs connected with exemplary status to be partly absorbed.	2016	MTES, MCT	nd	nd	nd	nd	nd

Name of Mitigation Action ^a	Sector Affected	Greenhouse Gases Affected	Goal and/or Activity Affected	Instrument	Status	Brief Description	Year Implemented	Entity Responsible ^b	Estimated Emissions Reduction for a Given Year (ktCO ₂ eqt.) ^c				
									2015	2020	2025	2030	2035
Exemplary new Public Buildings*	Residential/Services Sector	CO ₂	Improving the energy efficiency of new buildings, and fostering resorting to renewable energies.	Regulations	Implementation	New public buildings (constructed on behalf of the State, including its public bodies and local authorities) must set exemplary environmental and energy standards, and where possible shall be energy-positive with a high environmental performance rating.	2017	MTES, MCT	nd	nd	nd	nd	nd
One Third Financing*	Residential/Services Sector	CO ₂	Incentives for energy upgrading of existing buildings	Economic	Implementation	A full legal framework has been put in place based on one third financing. One third financing is an energy upgrading offering that includes the funding of the transaction and after-work monitoring, in such a way that the owner has no outlay to fund since the future energy savings will gradually repay all or part of the investment.	2016	MTES, MCT	nd	nd	nd	nd	nd
Guarantee Fund for Energy Upgrading	Residential/Services Sector	CO ₂	Incentives for energy upgrading of existing buildings	Economic	Implementation	The guarantee fund for energy upgrading has the purpose of facilitating the funding of work to improve the energy performance of existing dwellings. It enables banking institutions to benefit from a guarantee when making loans to owners of existing dwellings with modest resources who are funding energy upgrading work.	2016	MTES, MCT	nd	nd	nd	nd	nd
Globalising individualised heating costs*	Residential/Services Sector	CO ₂	Encouraging the control of energy consumption in existing buildings	Regulations, information, economics	Implementation	The obligation to individualise heating costs has been widened to all residential buildings, and to the services sector, except in the case of technical impossibility or of the need to change the entire heating installation.	2016	MTES, MCT	nd	nd	nd	nd	nd
Obligation for thermal insulation when undertaking major building refurbishment work*	Residential/Services Sector	CO ₂	Increasing the number of energy upgrades in existing buildings	Regulations	Implementation	Legal requirement to carry out thermal insulation refurbishments during any major renovation projects (restoration of a building's façades, re-roofing, or the conversion of garages, attics and other undeveloped spaces into living quarters)	2017	MTES, MCT	0 ^a	663	1,480	2,287	3,087
Preferential pricing of electricity supply for power-intensive sites implementing an energy performance policy*	Industry	CO ₂	Increasing energy efficiency at power-intensive sites	Economic	Implementation	Companies that are heavy consumers of electricity can benefit from a reduction on the tariff for use of public electricity networks. In consideration, they must implement an energy efficiency programme	2016	MTES	nd	nd	nd	nd	nd
Multi-annual energy programme*	Energy	CO ₂	Developing renewable energy through setting quantitative targets	Other: Planning	Implementation	Multi-annual energy programming (French: PPE) sets quantitative goals for each renewable channel, over a period of 10 years except for the initial period due to cover the period 2016-2023. The PPE will be reviewed every 5 years, apart from the first revision which will take	2016	MTES	nd	nd	nd	nd	nd

Name of Mitigation Action ^a	Sector Affected	Greenhouse Gases Affected	Goal and/or Activity Affected	Instrument	Status	Brief Description	Year Implemented	Entity Responsible ^b	Estimated Emissions Reduction for a Given Year (ktCO ₂ eqt.) ^c				
									2015	2020	2025	2030	2035
						place in 2018.							
On Tap*	Energy	CO ₂	Developing renewable energy sources for electricity	Economic	Implementation	The on tap system creates the right to benefit from support for any eligible renewable energy production facility: a purchasing tariff for small scale facilities, and extra remuneration for large scale facilities. It enables producers to cover the costs of their facilities whilst ensuring normal returns from their project.	2016	MTES	nd	nd	nd	nd	nd
Tendering Procedures*	Energy	CO ₂	Developing renewable energy sources for electricity	Economic	Implementation	The minister in charge of energy has the option of initiating tendering procedures to develop new renewable power generating capacities in order to reach the goals set in the multi-annual energy programme.	2016	MTES	nd	nd	nd	nd	nd
Calls for Tender for Biogas*	Energy	CO ₂	Growing the biogas sector	Economic	Implementation	When the capacity for producing biogas for injection into the gas network fails to meet the calculated objectives in the multi-annual energy programme, the minister in charge of energy may resort to tender procedures.	2016	MTES	nd	nd	nd	nd	nd
4th energy savings certificate period	Energy	CO ₂	Making energy savings in various sectors	Regulations	Implementation	A 4th energy saving certificate obligation period is planned from 2018 to 2020, with a target set at 1600 TWh cumac, including 400 TWh cumac to benefit households experiencing energy poverty.	2018	MTES	nd	nd	nd	nd	nd
Speeding up the trajectory of the carbon component in energy taxation	Energy	CO ₂	Reducing fossil fuel energy demand	Taxation	Envisaged	The Climate Plan published in July 2017 provides for an accelerated increase in the carbon component. This could be set at €86.2 /tCO ₂ by 2022.	2022	MTES	nd	nd	nd	nd	nd
Tariff reconstruction system	Agriculture, energy	CO ₂	Support renewable energy production in rural areas	Economic	Adopted	The system for tariff reconstruction for connecting renewable energy production facilities to gas and electricity networks will enable up to 40% of the costs to be borne by the network managers. This will enable connection costs to be considerably reduced for agricultural facilities that are often far removed from the networks.	2017	MTES	nd	nd	nd	nd	nd
Agro-forestry Development Plan*	UTC/Forestry	CO ₂	Carbon stored in the ground and in biomass.	Research, regulations, economics and education	Implementation	The agro-forestry development plan is formed around five courses of action: enhancing knowledge, monitoring and research initiatives on agro-forestry; improving the regulatory and legal framework and increasing financial support; developing training and consultancy, promoting agro-forestry and	2016	MAA	nd	nd	nd	nd	nd

Name of Mitigation Action ^a	Sector Affected	Greenhouse Gases Affected	Goal and/or Activity Affected	Instrument	Status	Brief Description	Year Implemented	Entity Responsible ^b	Estimated Emissions Reduction for a Given Year (ktCO ₂ eqt.) ^c				
									2015	2020	2025	2030	2035
						enhancing its production; economically upgrading agro-forestry production and developing it across lands and territories; and promoting European and international approaches.							
National Forest and Timber Programme and Regional Forest and Timber Programmes	UTCf/Forestry	CO ₂	Improving forest management and fostering timber applications	Sundry: Planning	Adopted	The National Forest and Timber Programme sets the course for national forestry policy for the next decade (2016 - 2026). Its purpose is improved monitoring of forest management and optimising the pathways for firewood and timber materials taking account of the full carbon balance of the forest-wood sector. In particular, it sets the objective of an additional 12 Mm ³ of wood mobilisation by 2026 compared to 2015 levels. Regional forest and wood programmes are a regional application of the national forest and timber programme and they are in the course of drafting by the Regions.	2016	MAA	nd	nd	nd	nd	nd
National Biomass Mobilisation Strategy and Regional Biomass Mobilisation Schemes	Forests/UTCf, energy	CO ₂	Fostering the production and application of biomass	Sundry: Planning	Envisaged	The National Biomass Mobilisation Strategy defines strategic directions, recommendations and actions regarding the production and commercial sectors for biomass enhancement likely to be used in energy production, with the aim of increasing biomass production and mobilisation, while also monitoring their use and contribution to climate change offsetting. Regional biomass mobilisation schemes exist in order to adapt the SNMD to regional specificities.	2018	MAA	nd	nd	nd	nd	nd
Prohibition of single use plastic bags*	Waste	CO ₂ , CH ₄	Preventing Waste	Regulations	Implementation	Single use plastic bags have been prohibited since the 1st January 2016.	2016	MTES	nd	nd	nd	nd	nd
The fight against food waste*	Waste	CO ₂ , CH ₄	Preventing Waste	Regulations	Implementation	The fight against food waste has been identified as a national priority. The following measures have been taken: major food retailers now have an obligation to offer agreements to authorised charitable associations to gift unsold food products. Retailers are prohibited from deliberately making unsold food products unfit for consumption. The State, public bodies and local authorities are obliged to set up a system to combat food waste in the canteens and catering services they manage.	2016	MTES	nd	nd	nd	nd	nd

Name of Mitigation Action ^a	Sector Affected	Greenhouse Gases Affected	Goal and/or Activity Affected	Instrument	Status	Brief Description	Year Implemented	Entity Responsible ^b	Estimated Emissions Reduction for a Given Year (ktCO ₂ eqt.) ^c				
									2015	2020	2025	2030	2035
Requirement to sort waste from the economic activities of companies and administrations	Waste	CO ₂ , CH ₄	Encouraging sorting to increase the quantities of waste that is recycled.	Regulations	Implementation	There is an obligation to sort waste from economic activities (paper, cardboard, plastic, metals, wood, and glass) in view of material and energy recycling for waste from the economic activities of companies and administrations.	2016	MTES	0 ^d	1,800	3,600	4,000	4,200
Universal sorting of household biowaste by 2025	Waste	CO ₂ , CH ₄	Encouraging sorting to increase the quantities of waste that is recycled.	Regulations	Adopted	Universal sorting of household biowaste at source by 2025: each French national shall have solution for sorting kitchen and table waste, so it can be recycled.	2025	MTES	nd	nd	nd	nd	nd
Tariff incentives for the collection of household waste	Waste	CO ₂ , CH ₄	Encouraging sorting to increase the quantities of waste that is recycled.	Economic	Adopted	Deployment of tariff incentives for the collection of household and similar waste, that is to say introducing a variable element into the household waste collection tax to reward good sorters (goal: 15 million inhabitants covered by 2020, 25 million by 2025 as against 5 million in 2015).	2020	MTES	nd	nd	nd	nd	nd
Extending the system for sorting household packaging to all plastic packaging by 2022.	Waste	CO ₂ , CH ₄	Encouraging sorting to increase the quantities of waste that is recycled.	Regulations	Adopted	Extending the system for sorting household packaging to all plastic packaging by 2022, including plastic films and trays (to date, only plastic bottles and jars had to be sorted).	2022	MTES	nd	nd	nd	nd	nd
Gradual harmonisation of sorting rules and bin colouring by 2025	Waste	CO ₂ , CH ₄	Encouraging sorting to increase the quantities of waste that is recycled.	Regulations	Adopted	Gradual harmonisation of sorting rules and bin colouring by 2025: it will then be possible to more easily identify the appropriate container or bin, throughout France.	2025	MTES	nd	nd	nd	nd	nd
Set up of a building industry network of professional waste collection points*	Waste	CO ₂ , CH ₄	Encouraging sorting to increase the quantities of waste that is recycled.	Regulations	Implementation	Set up of a building industry network of professional waste collection points under the responsibility of building materials distributors, in order to take back pre-sorted waste from their clients.	2017	MTES	nd	nd	nd	nd	nd
Mandatory climate change reporting by large companies*	Transversal (across all sectors)	CO ₂ , CH ₄ , N ₂ O, HFC, PFC, SF ₆ , NF ₃	Improving information from companies on their greenhouse gas emissions and encouraging them to introduce action to reduce them	Regulation, information	Implementation	Company duties in terms of social, environmental and corporate responsibility have been strengthened as regards reporting requirements on climate change. Large companies must include information in their non-financial reports on the items that generate significant greenhouse gas emissions due to their activities, particularly through the use of the goods and services they produce.	2016	Ministry for the Economy, MTES	nd	nd	nd	nd	nd

Name of Mitigation Action ^a	Sector Affected	Greenhouse Gases Affected	Goal and/or Activity Affected	Instrument	Status	Brief Description	Year Implemented	Entity Responsible ^b	Estimated Emissions Reduction for a Given Year (ktCO ₂ eqt.) ^c				
									2015	2020	2025	2030	2035
Mandatory climate change reporting for investors*	Transversal (across all sectors)	CO ₂ , CH ₄ , N ₂ O, HFC, PFC, SF ₆ , NF ₃	Improving investor information on the carbon footprint of their investments and inviting them to decarbonise their portfolio	Regulation, information	Implementation	The regulatory system regarding the information provided by portfolio management companies about environmental, social and governance criteria used in their investment policies has been added to. Institutional investors must publish information regarding their contribution to climate change objectives and financial risks associated with the energy and ecological transition.	2016	Ministry for the Economy, MTES	nd	nd	nd	nd	nd

^a An asterisk (*) means that the measure is included in the “with existing measures” scenario

^b MTES: Ministry for Ecological and Inclusive Transition; MCT: Ministry for territorial Cohesion; ADEME: Environment and Energy Management Agency; MAA: Minister of Agriculture and Food

^c nd: assessment unavailable

^d Source: France 2017 Report in accordance with Article 13.1 of Regulation N° 525/2013 (pages 38-45)

^e Source: France 2017 Report in accordance with Article 13.1 of Regulation N° 525/2013 (pages 69-78)

^f Source: France 2017 Report in accordance with Article 13.1 of Regulation N° 525/2013 (pages 95-101)

II - LATEST CHANGES IN INSTITUTIONAL PROVISIONS FOR MONITORING AND ASSESSING PROGRESS TOWARDS ACHIEVING GOALS

The Energy Transition for Green Growth Act passed in August 2015 saw the establishment of a climate-related governance principle around a National Low-Carbon Strategy (SNBC) subject to enhanced Parliamentary and civil society oversight. The National Low-Carbon Strategy was adopted by decree on 18 November 2015 and is the result of a collegial work involving all the stakeholders concerned (professional organisations, research institutes, and representatives of civil society). It orchestrates the implementation of the transition towards a low carbon intensity economy and will be updated every 4-5 years. For the purposes of overall consistency, it includes long-term priorities and sectoral recommendations. It defines the emissions reduction trajectory, broken down by sector for indicative purposes, until factor 4 is reached in 2050 (-75% reduction of greenhouse gas emissions compared with 1990).

Regular monitoring of its implementation has been put in place by the Greenhouse Gas Combating Department (DLCES), on the one hand to report to the stakeholders involved in its development and on the other hand to feed the iterative process of reviewing the strategy every 5 years. A group of 150 indicators has been defined, with regard to which the policies and measures envisaged in the strategy are denoted, monitored and run. This is how the strategy will enable its targets to be reached, by providing all the means to orient oneself and by calling for any adjustments required in the sectoral and territorial policies whenever departures from the reference trajectory are observed. These monitoring indicators are reviewed and analysed annually by involving the Expert Committee on Energy Transition⁸. They are presented on a biennial basis to the stakeholders involved in preparing the strategy who can take part in its monitoring in this way. At the end of that biennial review, the indicators monitored will be published.

The SNBC review process was initiated in 2017 for publication at the end of 2018, after reviewing the results obtained during the period covered by the 1st carbon budget. Besides adjusting orientation, that review will enable the 4th carbon budget (for the period 2029-2033) to be set. It must also allow account to be taken of certain developments already observed (in particular the latest technological developments), incorporating the stakes of adapting to climate change into the strategy, extending projections work until 2050, and identifying the tools to be applied to reach carbon neutrality during the second half of the twenty-first century, which was a goal set in the climate plan passed in July 2017.

Furthermore, in the context of its European reporting commitments specified in the “MMR” regulation⁹, France is due to convey information about the measures adopted, implemented or forecast to reduce its GHG emissions to the European Commission every two years. It must also assess their impact (on GHG emissions and, whenever possible, on costs) and shall describe the prospects for reducing emissions in the medium term, especially by means of a scenario that takes account of the measures already implemented. This information is made public¹⁰.

The assessments of mitigation policies and measures published in the context of the “MMR” regulation are made by DLCES. All the assumptions, calculation methods and evaluation results in terms of

⁸ This committee was formed to give an opinion on carbon budget projects and the low carbon strategy. It is made up of a maximum of ten members, appointed by virtue of their skills.

⁹ Regulation (EU) No 525/2013 of the European Parliament and of the Council of 21 May 2013 on a mechanism for monitoring and reporting greenhouse gas emissions and for reporting other information at national and Union level relevant to climate change and repealing Decision No 280/2004/EC.

¹⁰ The reports on policies and measures and the forecasts made in 2017 by France to the European Commission are available at the following link: http://cdr.eionet.europa.eu/fr/eu/mmr/art04-13-14_lcds_pams_projections/.

greenhouse gas reduction and costs, are detailed in the following report, available in French and in English: “France 2017 Report in accordance with Article 13.1 of Regulation No. 525/2013”¹¹

In 2016, the DLCES developed a standardised methodological assessment sheet format. Each sheet consists of a description of the measure, the method of evaluation (specifying the underlying assumptions, the data used, the definition of the counterfactual scenario and the calculations performed) and of the assessment results together with an analysis (such as discussion on the consistency of the result's order of magnitude, identification of factors that might influence the result and influence of the other measures). The impacts of the measure on aspects other than greenhouse gases (co-benefits, possible negative impacts, and the costs of the measure) are also described and quantified according to available data. This format ensures the accuracy, consistency, comparability and completeness of the assessments. The publication of the methodological sheet for each assessment performed ensures transparency. The assessments are carried out by mobilising the most recent statistical data published by the departments in charge of these subjects, and in particular the statistical department of the Ministry for the Ecological and Inclusive Transition.

III - MINIMISING ADVERSE EFFECTS OF THE POLICIES AND MEASURES IMPLEMENTED ON DEVELOPING COUNTRIES

Each year, France implements several capacity building and technology transfer initiatives for developing countries. Those initiatives enable the adverse effects of policies and measures to be minimised. They are presented in detail in this biennial report and also each year in the national inventory report.

In addition to technology and expertise transfers, France helps developing countries to strengthen and enrich their systems for observing climate change via its climate observation network and also through its research and cooperation projects (see Chapter VIII of the Seventh French National Communication).

Regarding the policies and measures implemented in the context of European policies, as a Member State of the European Union France is obliged to transpose European law into its legal system. In the process of adopting European measures, Europe has put a system in place to enable estimates to be made of the positive and negative impact of the latter, including effects on other countries in the context of impact studies. Taking account of those impact studies is a key element in the final decision for defining policies and measures. It enables ensuring that the negative impact of European policies on developing countries are minimised and this ensuring that French legal provisions arising under European law comply with the commitments made under the Kyoto protocol, consistent with Section 3.14. All of the impact studies are published on this site: <http://ec.europa.eu/transparency/regdoc/?fuseaction=ia>.

The table below lists the direct and indirect estimated effects of certain French climate policies and measures.

¹¹ The French version of that report is available at the following link: http://cdr.eionet.europa.eu/fr/eu/mmr/art04-13-14_lcds_pams_projections/pams/envwm_t7a/Rapport_2017_France_MMR_article_13.pdf/manage_document. The English version is available at the following link: http://cdr.eionet.europa.eu/fr/eu/mmr/art04-13-14_lcds_pams_projections/pams/envwsc9fq/Report_2017_France_MMR_article_13_EN.pdf/manage_document

Table 3.2: Direct and indirect effects of the main French climate policies and measures on developing countries

Measure	Direct Effects			Indirect Effects		
	Social	Environmental	Economic	Social	Environmental	Economic
European emissions trading scheme			Potentially positive economic effect on countries outside the European Union in the case of competitiveness differences brought about by introducing a carbon price signal on European economic activity		Incentives for international firms subject to quotas to develop more efficient processes from an environmental viewpoint that are potentially transferable to developing countries	
Developing biofuels	Positive impact of maintaining or potentially creating jobs in biofuel exporting developing countries	Positive effect on condition that sustainability criteria are put in place especially as regards the issue of land use change	Positive effect on biofuel imports sourced from developing countries		Negative impact on deforestation and food resources. Setting up sustainability criteria for biofuels by means of agreements between the European Commission and developing countries	Effect of decreasing demand on fossil energies and potentially reduced price sensitivity
Promoting energy efficiency	Positive impact of maintaining or potentially creating jobs in developing countries that export energy efficiency generating equipment		Positive effect on imports from developing countries for energy efficiency generating equipment		Improving air quality in developing countries Developing more energy efficient equipment that is potentially transferable to developing countries	Effect of decreasing demand on fossil energies and potentially reduced price sensitivity
Promoting renewable energies	Positive impact of maintaining or potentially creating jobs in developing countries that export renewable energy generating equipment		Positive effect on imports from developing countries for renewable energy generating equipment		Improving air quality in developing countries Developing renewable energy generating equipment that is potentially transferable to developing countries	Effect of decreasing demand on fossil energies and potentially reduced price sensitivity
Measures to foster low greenhouse gas emitting vehicles	Positive impact of maintaining or potentially creating jobs in exporting developing countries		Fostering imports of low greenhouse gas emitting vehicles from developing countries		Improving air quality in developing countries	Increasing demand for raw materials and potentially increased price sensitivity
					Developing low emissions vehicles that are potentially transferable to developing countries	Effect of decreasing demand on fossil energies and potentially reduced price sensitivity

Chapter IV

Greenhouse Gas Emission Projections

I - DEFINING SCENARIOS: UPDATING THE SCENARIO WITH EXISTING MEASURES

Between April 2016 and February 2017 France carried out a scenario-based forecasting exercise for the period until 2035. A “with existing measures” or WEM scenario taking into account all policies and measures adopted and implemented before 1st July 2016 was developed. This scenario updates the 2014 WEM scenario, including all policies and measures adopted and implemented between 1st July 2014 and 1st July 2016. In particular, this scenario includes measures adopted under the Energy Transition act of August 2015.

All the policies and measures shown in table CTF3 and indicated by an asterisk (*) have therefore been adopted. The hypotheses of the various scenarios are presented in the national communications.

With respect to the latest WEM the principal modifications made are as follows:

Carbon Tax (Cross-cutting)

For non-ETS sectors, the WEM scenario includes a carbon component on domestic energy consumption taxes with a value of €7 /tCO₂ in 2014, €14.5 /tCO₂ in 2015, €22 /tCO₂ in 2016, €30.5 /tCO₂ in 2017 €39 /tCO₂ in 2018, €47.5 /tCO₂ in 2019, €56 /tCO₂ in 2020 followed by linear growth until €100 /tCO₂.

Energy Savings Certificates (Cross-cutting)

The energy saving certificates scheme has been extended until 2020, beyond which it will be discontinued.

Renewable Energies

The heat fund has been extended until 2020, beyond which it will be discontinued. Biofuels are incorporated at up to 7% for gasoline and diesel until 2022, and up to 9% beyond this date. Electric renewable energies are expected to grow at their current rate.

Transport

The WEM scenario takes into account the strengthening of measures for the deployment of electric vehicles arising under the Energy Transition and Green Growth act of 2015. The proportion of electric vehicles in new vehicle registrations will therefore increase from 1.1% in 2015 to 3.2% in 2020 and 12.1% in 2030. The proportion of plug-in hybrid vehicles should go from 0.4% in 2015 to 1.1% in 2020 and 4% in 2030.

With regard to thermal vehicles, the WEM scenario forecasts a significant increase in the performance of passenger cars and light commercial vehicles by 2020 thanks to the implementation of the European regulation on CO₂ emissions from new vehicles (UE Regulation No. 443/2009) and the maintenance of

the bonus-penalty scheme at national level. The theoretical target of 95 gCO₂/km should reach 95% by 2020, but a disparity between actual emissions and emissions measured under laboratory conditions has been taken into account. As such, consumption by new private vehicles should drop by 8.6% between 2015 and 2020. Beyond 2020, the average emissions of new private passenger cars should be almost stable (the average consumption in 2030 is expected to be 5.0 l/100 km for gasoline vehicles and 4.4 l/100 km for diesel vehicles).

Buildings

Regarding the energy efficient renovation of dwellings, the tax credit and subsidies for the energy efficient renovation of disadvantaged households are extended until the end of 2017. The eco-PTZ scheme (subsidized loans for individuals) has been extended until the end of 2018. The Eco-PLS scheme (subsidized loans for social housing renovations) is being applied at the current rate until 2020. The measures adopted since the previous WEM (energy renovation obligations during major works and individualising heating costs) have been taken into account.

Concerning the energy renovation of the tertiary sector, the measure (adopted since the previous WEM) involving the obligation to carry out energy renovation when major works are being done has been incorporated.

Agriculture and Forestry

The share of the agricultural area for field crops that is devoted to organic farming has increased to 13% as against 6% in the previous scenario.

Waste Management and Treatment

The scenario includes the impact of the strengthening of measures in favour of the separate collection and recovery of waste, adopted since the latest WEM. In addition, the rate of capture of biomethane increases by 10 points between 2015 and 2030. The portion of captured biomethane that is recovered remains stable at 70%.

II - PRESENTATION OF RESULTS

Within the scope of the Convention, emissions (excluding the LULUCF sector) represented 464 MtCO₂-eqt in 2015, that is, a 16% reduction compared to 1990. In projections, emissions decrease in the WEM scenario to:

- 434 MtCO₂-eqt in 2020, that is, a 21% reduction compared to 1990.
- 403 MtCO₂-eqt in 2030, that is, a 27% reduction compared to 1990.

Within the scope of the Kyoto Protocol, emissions (excluding the LULUCF sector) represented 457 MtCO₂-eqt in 2015, that is, a 16% reduction compared to 1990. In projections, emissions decrease in the WEM scenario to reach:

- 426 MtCO₂-eqt in 2020, that is, a 22% reduction compared to 1990 and a 23% reduction compared to 2005.
- 392 MtCO₂-eqt in 2030, that is, a 28% reduction compared to 1990.

French commitments at international level are on the scope of the Kyoto protocol. In this chapter the detailed results are presented within the scope of the Kyoto Protocol. Projections made within the scope of the convention are presented in appendix II.

A - Overall developments

Within the Kyoto Protocol scope, LULUCF emissions diminish by 22% between 1990 and 2020 and by 28% between 1990 and 2030. With LULUCF, emissions diminish by 28% between 1990 and 2020 and by 35% between 1990 and 2030.

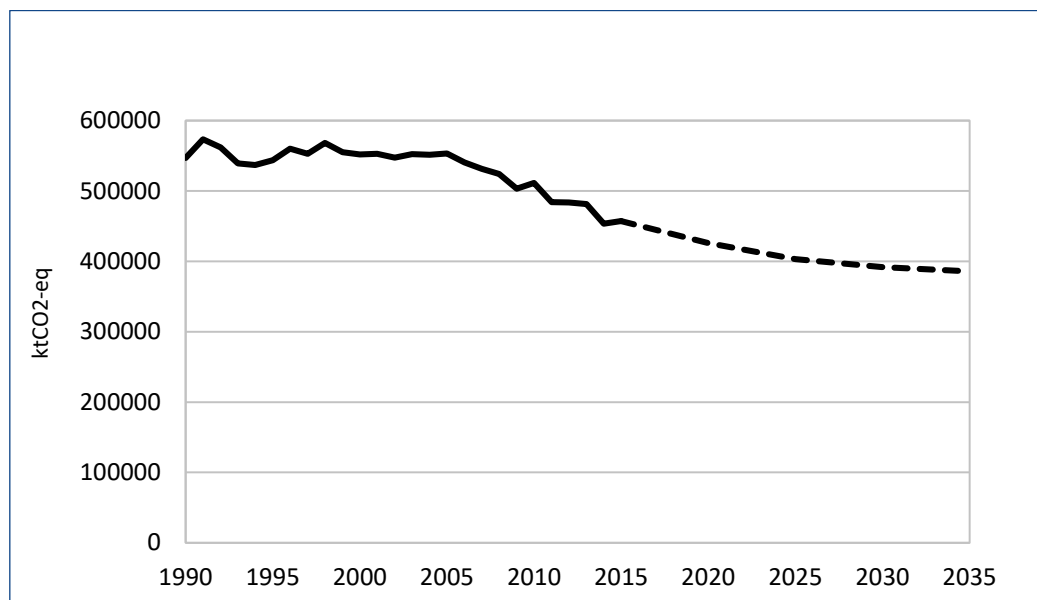


Figure 4.1: Projections in kt CO₂-eqt, excluding LULUCF, in the Kyoto format, WEM scenario
Source : UNFCCC, Citepa/MTES Inventory, 2017 Submission, and MTES Emissions Projections, 2017

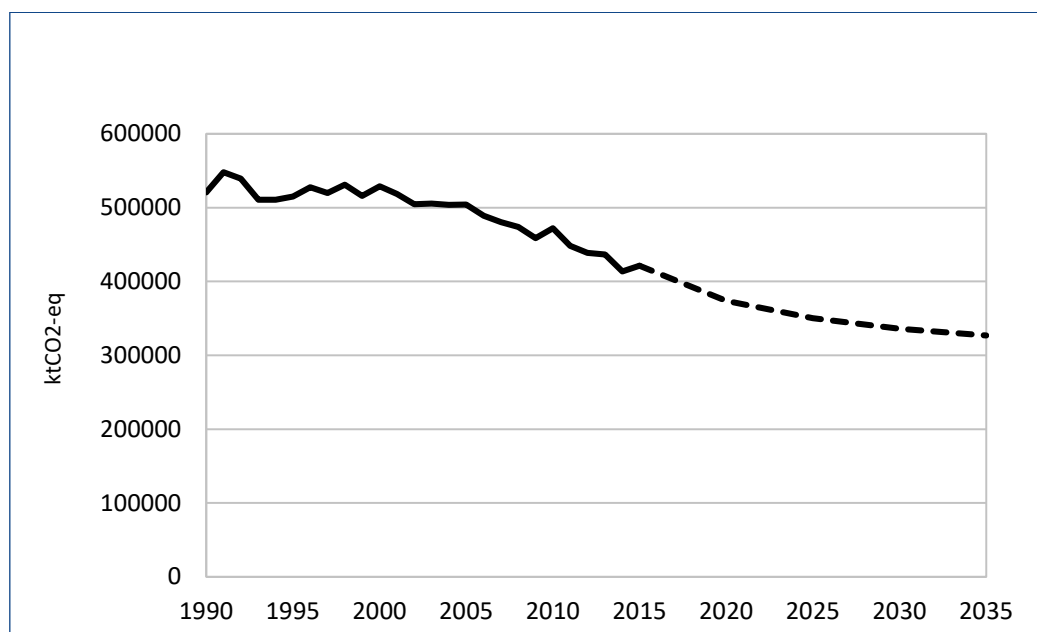


Figure 4.2: Projections in kt CO₂-eqt, including LULUCF, in the Kyoto format, WEM scenario
Source: UNFCCC, Citepa/MTES Inventory, 2017 Submission, and MTES Emissions Projections, 2017

B - Detailed analysis by sector and by gas

Evolutions by sector and by gas are presented in the following table (table CTF 6a). These evolutions are also presented in greater detail in the national communications.

CTF table 6(a): Information on updated greenhouse gas projections under a « with measures » scenario (scope of the Kyoto Protocol)

	GHG emissions and removals							GHG emission projections			
	(kt CO ₂ eq)							(kt CO ₂ eq)			
	Base year (1990)	1990	1995	2000	2005	2010	2015	2020	2025	2030	2035
Sector											
Energy	380 316	380 316	379 615	392 868	400 304	366 665	316 861	292 241	278 428	272 057	269 484
Transport ⁽¹⁾	IE	IE	IE	IE	IE	IE	IE	IE	IE	IE	IE
Industry / industrial processes	66 798	66 798	63 464	53 474	52 766	46 643	44 519	43 280	37 440	34 552	33 644
Agriculture (excluding energy)	83 105	83 105	80 563	83 696	78 602	77 781	78 373	75 255	74 275	73 176	71 999
LULUCF	-26 479	-26 479	-28 775	-23 084	-49 291	-39 345	-35 810	-51 889	-52 469	-55 683	-58 820
Waste management / waste	16 855	16 855	20 238	21 809	21 638	20 396	17 376	14 981	12 858	12 122	10 602
Other (specify)	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE
Gas											
CO ₂ emissions including net CO ₂ from LULUCF	399 551	399 551	397 735	414 590	424 221	387 984	336 588	313 511	300 231	294 442	292 546
CO ₂ emissions excluding net CO ₂ from LULUCF	369 744	369 744	362 945	387 555	371 638	345 234	297 501	258 346	244 487	235 485	230 452
CH ₄ emissions including CH ₄ from LULUCF	69 645	69 645	71 546	70 364	65 170	62 814	58 905	55 621	53 446	52 548	50 805
CH ₄ emissions excluding CH ₄ from LULUCF	70 592	70 592	75 209	72 029	66 369	63 996	60 016	56 729	54 554	53 655	51 913
N ₂ O emissions including N ₂ O from LULUCF	66 038	66 038	67 042	54 886	47 404	41 794	41 300	39 592	38 560	37 518	36 561
N ₂ O emissions excluding N ₂ O from LULUCF	68 419	68 419	69 395	57 171	49 497	44 016	43 467	41 759	40 727	39 685	38 728
HFCs	4 402	4 402	1 891	6 612	13 365	17 356	19 264	16 091	9 856	6 528	4 974
PFCs	5 202	5 202	3 065	2 997	1 760	617	540	499	460	423	394
SF ₆	2 218	2 218	2 595	2 377	1 358	888	521	434	436	438	440
Other (NF ₃)	16	16	6	20	31	32	11	11	11	11	11
Total (without LULUCF)	547 074	547 074	543 880	551 846	553 309	511 485	457 129	425 757	403 001	391 907	385 730
Total (with LULUCF)	520 595	520 595	515 105	528 762	504 018	472 139	421 319	373 868	350 532	336 224	326 911
Memo items											
International bunkers - aviation	8 698	8 698	10 745	14 515	15 826	16 197	17 478	17 115	19 200	21 518	24 103
International bunkers - navigation	8 223	8 223	7 352	9 713	8 928	8 064	5 696	7 771	7 934	8 000	8 078

(1) Transport is included in « energy »

Source: UNFCCC, Citepa/MTES inventory, 2017 Submission and MTES Emissions Projections, 2017

C - Achievement of France's objectives

Reaching the 2020 targets under the Kyoto protocol

Projected emissions in 2020 are 426 MtCO₂ eqt and are 23% lower than their 1990 level. Projected emissions from the sectors covered by the ETS are down 30% from their 2005 level, while projected emissions from non-ETS sectors are 20% lower than their 2005 level.

In 2010, the EU committed to reducing its greenhouse gas emissions by 20% by 2020 compared to 1990 levels. This objective was submitted by the EU-28 within the framework of the Convention, and there are no specific objectives for each Member State. Within the framework of the Energy-Climate Package, the EU has established internal rules that underpin the implementation of this objective. This is divided into two sub-objectives compared to 2005, one for the ETS sectors for the entire EU (target of -21% in 2020 compared to 2005 emissions) and the other for non-ETS sectors shared by each Member State (target of -14% in 2020 compared to 2005 emissions for France).

With non-ETS emissions forecast to show a 21% reduction by 2020 compared to 2005, existing policies and measures should enable France to reach its target by 2020.

Reaching the objectives set by France for 2030

Under the Paris Agreement, the EU has committed to reduce its greenhouse gas emissions by 40% by 2030. In the same way as for 2020, this reduction effort will be allocated between ETS and non-ETS sectors and shared between Member States. These texts are currently being adapted. France's reduction target for non-ETS sectors is -37% from 2005.

In addition, France has set itself a national reduction target for all its emissions of 40% by 2030 compared to 1990.

According to the WEM scenario, in 2030, projected emissions are expected to amount to 392 MtCO₂ eqt, i.e. a 29 % reduction from 1990. Projected emissions from the sectors covered by the ETS are down 31% from their 2005 level, while projected emissions from non-ETS sectors are 28% lower than their 2005 level.

By 2030, the existing measures taken into account in the WEM scenario will significantly reduce emissions. Additional efforts must be implemented beyond the measures already adopted. The July 2017 climate plan will enhance reduction efforts. The purpose of regularly revising the national low carbon strategy is to make the adjustments required to reach the targets.

III - EVOLUTION OF MODELS AND METHODOLOGIES

A - Modelling used

The models and methodologies used to draw up this WEM scenario 2016 are similar to those used to draw up the previous WEM scenario 2014. There have been no significant modifications in relation to the previous year.

The modelling of energy scenarios has been done with the aid of the energy simulation model for long term demand (Medpro) with input from the output of various sectoral models for the transport, building and agriculture sectors. The modelling of greenhouse gas emissions has then been carried out by Citepa (Centre Interprofessionnel Technique d'Etudes de la Pollution Atmosphérique) (= *Inter-Professional Technical Centre for the Study of Atmospheric Pollution*) using the results of energy scenarios, data from activity scenarios and complementary models (especially for fluorinated gases) in accordance with the methodologies for inventories.

The models and methodologies used and the way they are structured are described in greater detail in the national communications.

B - Baseline scenario assumptions

Table CTF5 shows the evolution of the key variables in the economic scoping (population, GDP, international energy prices and carbon price under ETS).

Population growth assumptions come from INSEE (the French National Institute of Statistics and Economic Studies), which produces the reference demographic projections for France.

The assumptions on economic growth are those recommended for France by the European Commission. These assumptions are also consistent with the assumptions used by the French Ministry of the Economy for long-term economic frameworks.

The assumptions made for the price of fossil fuels come from the economic framework proposed by the European Commission to all the countries of the Union.

Assumptions on the change in the price of carbon for companies included in the ETS come from the economic framework proposed by the European Commission to all the countries of the Union.

CTF table 5: Summary of key variables and assumptions used in the projection analysis

Key underlying assumptions	Unit	1990	1995	2000	2005	2010	2015	2020	2025	2030	2035
Population ⁽¹⁾	in thousands of inhabitants	57 996	59 281	60 508	62 731	64 613	66 391	67 820	69 093	70 281	71 417
GDP ⁽²⁾	Billion € constant 2010	1 440	1 535	1 772	1 923	1 998	2 095	2 268	2 419	2 594	2 822
International fuel import prices ⁽³⁾	€2013/boe	NE	NE	NE	NE	NE	48,2	75,0	85,2	93,8	97,9
International natural gas import prices ⁽⁴⁾	€2013/boe	NE	NE	NE	NE	NE	38,8	48,3	52,2	56,8	60,6
International natural coal import prices ⁽⁵⁾	€2013/boe	NE	NE	NE	NE	NE	11,5	14,3	17,1	20,5	21,7
EU ETS carbon price ⁽⁶⁾	€2013/tCO ₂	NE	NE	NE	NE	NE	7,5	15	22,5	33,5	42

(1): source: INSEE

(2): source: economic framework of the EU

(3): source: economic framework of the EU

(4): source: economic framework of the EU

(5): source: economic framework of the EU

(6): source: economic framework of the EU

Tests of sensitivity to the variables of population, GDP and international energy prices have been carried out. They are presented in the national communications (section A3 of chapter V).

Chapter V

Assistance Given to Developing Countries in the Form of Financial, Technological and Capacity Enhancement Resources

General Matters

In accordance with the commitments made in the context of the United Nations Framework Convention on Climate Change, France has identified, for the years 2015 and 2016, new and additional financial resources provided to developing countries in order to reduce their greenhouse gas emissions and to adapt to the effects of climate change. It has also supported technology transfers and capacity building in those countries in the context of its bilateral and multilateral initiatives.

During the United Nations General Assembly in September 2015, France announced an increase in its annual climate funding from €3 billion in 2015 to €5 billion in 2020, of which €1 billion will be dedicated to funding adaptation to climate change. The Interministerial Committee for International Cooperation and Development (CICID) confirmed this commitment on the 30th November 2016 and recalled the goal of doubling French funding for climate change adaptation to reach at least 1 billion euros per year by 2020. It further specified the strategic orientation for combating climate change, especially strengthening the French Development Agency (AFD) and developing its strategy and means of intervention to contribute to the implementation of the Paris Agreement targets and the commitments made by States through nationally determined contributions (NDCs). The CICID re-affirms its main focus of providing French development aid to Africa.

In 2016, France provided more than 3.3 billion euros (that is about 3.7 billion USD) of public funds for climate change mitigation and adaptation in developing countries through bilateral and multilateral sources. This level of commitment has shown a net increase compared with 2015 (+15% with a level of commitment of €2.9 Bn) and brings the total funding committed since 2005 for the climate to more than 24 billion euros, mainly through the activity of the French Development Agency group. All the financial support reported in the present report is considered to be new and additional, since it is made up of funding authorised for the year involved (for bilateral funding) and of disbursements made in the year reported on (for multilateral commitments). The total commitment for multilateral funding is therefore not reported but only the proportion paid out in 2016.

In addition, France provides technical cooperation and supports capacity building in developing countries through numerous channels described in this report.

The methodological rules used to calculate the reported data in the context of this report are explained in the appendix.

I - MOBILISING FINANCIAL RESOURCES FROM BILATERAL SOURCES

Financial support provided by the French Development Agency

France is a major player in bilateral development aid in the climate field with a very large field of intervention, a recognised level of expertise and substantial financial commitments. It is mainly based on the French Development Agency group (AFD and its subsidiary for the private sector PROPARCO), and on bilateral instruments dedicated in part to the climate stakes in developing countries: the French Facility for the Global Environment (FFEM), The Fund for Private Sector Studies and Aid (FASEP) and subsidized and unsubsidized Treasury loans.

The AFD group, the main operator in French bilateral public development aid, has developed an ambitious climate strategy for the period 2012-2016, based on three factors: annual “climate” commitment target figures (50% of its activity in developing countries for AFD, and 30% for PROPARCO), the systematic measurement of the climate footprint of the projects it funds, and a selective policy in accordance with that climate footprint.

In 2016, fundings with a “climate” co-benefit from the French Development Agency (AFD) Group amounted to 3.06 billion euros (i.e. USD 3.38 billion) as opposed to 2.66 billion euros in 2015. Finance granted by the Group in 2016 for mitigation purposes increased substantially (+31.5% from 2015), reaching almost €2.2 billion (excluding cross-cutting projects). Adaptation finance amounted to €334.5 million in 2016, accounting for 11% of the “climate” activities of the French Development Agency (excluding cross-cutting projects: the share of adaptation within cross-cutting projects is estimated to represent 166,4 M euros, which would bring the overall rate of adaptation finance of AFD to 16.4% of its total commitments in 2016). With a level of climate commitments in 2016 that corresponds to 52% of AFD activity (55% in 2015) and 36% of PROPARCO business (32% in 2015), the group also exceeded its annual targets.

In order to ensure that the finance provided meets the climate change mitigation and adaptation needs of recipient countries, local agencies of the French Development Agency identify the projects and needs of recipient countries jointly with the partners and project developers in recipient countries. It also relies on the signature of funding contracts with national and local authorities in the countries where there is intervention. In addition, AFD deployed, following COP21, several specific instruments to accompany the implementation of climate commitments by developing countries, for example an “NDC facility” of an amount of €30 M, intended to accompany some fifteen countries in converting voluntary emission reduction commitments and NAPs into investment plans, with a focus on Africa and on adaptation. Several other facilities, that resort to European Union co-financing, also aim to accompany the implementation of climate commitments in developing countries. By way of example, one can note a facility for renewable energy in Africa of €24 M, or the “CICLIA fund” provided with €12 M, intended to accompany African towns in implementing their policies for combating climate change, whose deployment will remain in progress until 2020.

France has estimated the private climate funding mobilised by the bilateral public funding provided by the AFD group in developing countries since 2013. **In total, the private funding mobilised in 2016 was estimated at about €1019 M (that is about USD 1130 M) and €691 M (that is about USD 767 M) in 2015.**

Financial support provided by the French Facility for the Global Environment

The French Fund for the Global Environment (FFEM) is a public bilateral fund created in 1994 and intended to foster environmental protection in developing countries, based around six topics: climate change, biodiversity, international waters, land degradation including desertification and deforestation, persistent organic pollutants and protecting the ozone layer. In the period 2015-2018, **the FFEM mobilised €90 M in funding, with the goal of allocating at least 35% of its funds to combating climate change, half of which is on the specific topic of adaptation. In 2016, FFEM allocated a total volume of commitments of €23.55 M, of which €11.86 M was devoted to combating climate change (that is 50% of its annual financial commitments).**

Financial support provided in the form of grants (FASEP) and loans from the French Treasury

Furthermore, the Ministry of Economy and Finance has contributed, in the form of grants, to funding feasibility studies, technical assistance and innovative technology demonstrators devoted to the environment and to sustainable development, in the context of study funds and assistance to the private sector (FASEP). This instrument funds services provided by French engineers and benefits public bodies in countries eligible for Official Development Aid (ODA) and for sustainable economic projects that meet the needs of those countries (better access to water, to renewable energies, and improved transport offerings, etc.).

The Ministry of Economy and Finance also supports, by means of highly concessional Treasury loans (grant element of at least 35% compared with reference market rates), infrastructure projects led by public bodies in emerging countries eligible for ODA. Non concessional loans can also be granted since 2015 across various geographic areas¹². The sectors involved mainly concern sustainable development and the topic of climate change (mass transport, water and the environment, renewable energy, etc.).

In 2016, €28 M were committed in the form of a highly subsidised loan in favour of climate change (1 project), €38 M committed in the form of a non-subsidised loan in favour of the climate (1 project), and €4.1 M in the form of grants in the context of FASEP (13 projects)¹³.

¹² This instrument is not accounted for in the French flows of public aid but as Other Public Sector Contributions (French: AASP).

¹³ Belarus, Turkey and the Ukraine, which are countries eligible for ODA, and thus to subsidised Treasury loans and those from FASEP, are however deemed to be developed countries within CCNUCC (countries in Appendix I), and are not considered in the context of the UNFCCC report.

II - MOBILISING FINANCIAL RESOURCES FROM MULTILATERAL SOURCES

With a contribution of 9.5 billion dollars in 2016, France is the fifth-largest donor in the world by volume among OECD countries in terms of official assistance for multilateral development¹⁴ and is in third place among G7 countries in terms of contribution related to gross national income. It considers that the multilateral system must be exemplary and drive the combat against climate change, with in particular the purpose of supporting the implementation of nationally determined contributions by developing country signatories to the Paris Agreement. France is one of the main contributors to financial institutions and multilateral funds devoted to the climate.

A substantial part of France's action is dedicated to its participation in multilateral development banks (MDB) and funds such as the International Development Association (IDA), a part of the World bank group dedicated to offering concessional loans and grants to the world's poorest developing countries, the African Development Fund (ADF), the African Development Bank concessional financing facility, the Asian Development Fund (AsDF), the IDB fund for special operations and the International Fund for Agricultural Development (IFAD). These banks and funds devote part of their resources to combating the effects of climate change. For the first time, France has accounted for the share attributable to the "climate" for its contribution to those subsidised funds. **In 2016, the amount of "climate" disbursements made in these institutions was estimated to be €103 million.**

France contributes up to 1 billion dollars to the Green Climate Fund, representing the fourth largest amount contributed and the fifth largest in grant equivalents. This contribution included €489 M in grants alone and €285 M in subsidised loans granted by the French State. After an initial payment of €104 M of grants in 2015, a second payment of €62 M was made in 2016, as an advance on commitments made. In accordance with the payment schedule, in 2017 France will continue its grant commitment of €162 M and in addition it will payout all the subsidised loans. The green climate fund aims at a balance between the funding devoted to mitigating climate change and that devoted to adaptation. On the 31st December 2016, out of a volume of commitments of 1.5 billion dollars, 47% of the funding commitments were intended for mitigation projects against 28% for adaptation. Cross-cutting projects represent 25% of the volume committed.

In addition, **France has contributed €200.7 M (\$300 M) to the Global Environment Facility for the period 2015-2018** (of which 28.4%, that is €57 M, have been specifically devoted to funding initiatives connected with climate change). Besides greenhouse gas emissions reduction, this fund intervenes in the fields of biodiversity protection, protection of international waters, combating the degradation of the ozone layer, soil degradation and persistent organic pollutants. France makes the fifth largest contribution in terms of value to this fund. All Global Environmental Facility (GEF) climate finance corresponds to climate change mitigation projects.

Lastly, France contributed **€15 M in grants in 2016 to the Least Developed Countries Fund**, which supports projects for adapting to climate change (a second additional payment of €10 M, which is not accounted for in the present report, will be made in 2017).

¹⁴ Source: <http://www2.compareyourcountry.org/oda?cr=oe&lg=fr>

Table 5.1: Summary of provision of financial and technology support to developing countries in 2016

Allocation channels	Climate-specific in euros			Climate-specific in dollars		
	Mitigation	Adaptation	Cross-cutting	Mitigation	Adaptation	Cross-cutting
Total contributions through multilateral channels	14,381,146	15,000,000	165,011,422	19,953,840	16,592,920	182,534,758
Multilateral climate change Funds	14,381,146	15,000,000	62,000,000	19,953,840	16,592,920	68,584,071
Multilateral financial institutions, including regional development banks	-	-	103,011,422	-	-	113,950,688
Total contributions through bilateral, regional and other channels	2,265,358,951	334,823,936	540,264,768	2,505,928,044	370,380,461	597,638,017
TOTAL climate specific by funding type	2,279,740,097	349,823,936	705,276,189	2,525,881,884	386,973,381	780,172,776
TOTAL climate specific finance	3,334,840,223			3,693,028,040		

Total climate specific by funding source - 2016	Euros	Dollars	Total climate specific by financial instrument	Euros	Dollars
ODA	2,805,262,218	3,107,211,663	Grant	191,446,623	215,822,730
OOF	529,578,005	585,816,378	Concessional loan	2,613,815,595	2,891,388,933
			Non concessional loan	529,578,005	585,816,378

Table 5.2: Summary of provision of financial and technology support to developing countries in 2015

Allocation channels	Climate-specific in euros			Climate-specific in dollars		
	Mitigation	Adaptation	Cross-cutting	Mitigation	Adaptation	Cross-cutting
2015						
Total contributions through multilateral channels	14,432,949	5,000,000	207,510,936	19,953,840	5,546,609	230,196,426
Multilateral climate change Funds	14,432,949	5,000,000	104,000,000	19,953,840	5,546,609	115,369,477
Multilateral financial institutions, including regional development banks	-	-	103,510,936	-	-	114,826,948
Total contributions through bilateral, regional and other channels	1,635,665,732	661,437,836	372,500,000	1,814,479,815	733,747,476	413,222,407
TOTAL climate specific by funding type	1,650,098,681	666,437,836	580,010,936	1,834,433,655	739,294,086	643,418,833
TOTAL climate specific finance	2,896,547,453			3,217,146,573		

Table 5.3: Provision of financial and technology support to developing countries in 2016: contribution through multilateral channels

Donor Funding	Core/general		Climate-specific		Status	Funding source	Financial instruments	Type of support	Sector
	Euros	USD	Euros	USD					
Multilateral climate change funds	50,637,838	70,260,000	91,381,146	105,130,831					
Global Environment Facility	50,637,838	70,260,000	14,381,146	19,953,840	provided	ODA	Grant	mitigation	mitigation
Least developed countries Fund	-	-	15,000,000	16,592,920	provided	ODA	Grant	adaptation	adaptation
Green climate Fund	-	-	62,000,000	68,584,071	provided	ODA	Grant	Cross-cutting	Cross-cutting
Multilateral financial institutions, including regional development banks	517,300,000	572,234,513	103,011,422	113,950,688					
African Development Fund	127,000,000	140,486,726	27,263,992	30,159,283	provided	ODA	Grant	Cross-cutting	-
AsDB Special Funds	23,100,000	25,553,097	3,866,970	4,277,622	provided	ODA	Grant	Cross-cutting	-
IDB Special Fund	9,500,000	10,508,850	763,114	844,153	provided	ODA	Grant	Cross-cutting	-
International Fund for Agricultural Development	11,800,000	13,053,097	8,285,752	9,165,655	provided	ODA	Grant	Cross-cutting	-
International Development Association	345,900,000	382,632,743	62,831,594	69,503,975	provided	ODA	Loan	Cross-cutting	-
Total contribution through multilateral channels	567,937,838	642,494,513	194,392,568	219,081,519					

Table 5.4: Provision of financial and technology support to developing countries in 2015: contribution through multilateral channels

	Core/general		Climate-specific						
Donor Funding	Euros	USD	Euros	USD	Status	Funding source	Financial instruments	Type of support	Sector
Total contribution through multilateral channels									
Multilateral climate change funds	50,820,241	70,260,000	123,432,949	140,869,927					
Global Environment Facility in 2015	50,820,241	70,260,000	14,432,949	19,953,840	provided	ODA	Grant	mitigation	mitigation
Adaptation Fund	-	-	5,000,000	5,546,609	provided	ODA	Grant	Adaptation	Adaptation
Green climate Fund in 2015	-	-	104,000,000	115,369,477	provided	ODA	Grant	Cross-cutting	Cross-cutting
Multilateral financial institutions, including regional development banks	511,658,696	567,594,196	103,510,936	114,826,948					
African Development Fund	152,469,332	169,137,569	32,731,674	36,309,963	provided	ODA	Grant	Cross-cutting	-
AsDB Special Funds	23,125,000	25,653,069	3,871,155	4,294,357	provided	ODA	Grant	Cross-cutting	-
IDB Special Fund	1,728,105	1,917,025	138,815	153,990	provided	ODA	Grant	Cross-cutting	-
International Fund for Agricultural Development	11,600,000	12,868,134	8,145,316	9,035,777	provided	ODA	Grant	Cross-cutting	-
International Development Association	322,736,259	358,018,399	58,623,976	65,032,861	provided	ODA	Loan	Cross-cutting	-
Total contribution through multilateral channels	562,478,937	637,854,196	226,943,885	255,696,875					

Table 5.5: Provision of public financial support: contribution through bilateral, regional and other channels in 2016

Recipient country/ region/project/programme	Total amount Climate specific		Status	Funding source	Financial instruments	Type of support	Sector
	EUR	USD					
FASEP - Morocco	340,952,	377,159	Committed	ODA	Grant	Mitigation	ENERGY GENERATION, DISTRIBUTION AND EFFICIENCY
Treasury loan - Morocco	28,000,000,	30,973,451	Committed	ODA	Concessional loan	Mitigation	TRANSPORT AND STORAGE
FASEP - Nigeria	437,370,	483,816	Committed	ODA	Grant	Mitigation	ENERGY GENERATION, DISTRIBUTION AND EFFICIENCY
FASEP - South Africa	347,410,	384,303	Committed	ODA	Grant	Mitigation	ENERGY GENERATION, DISTRIBUTION AND EFFICIENCY
Treasury loan - Senegal	38,000,000,	42,035,398	Committed	OOF	Non concessional loan	Mitigation	TRANSPORT AND STORAGE
FASEP - Brazil	195,588,	216,358	Committed	ODA	Grant	Mitigation	TRANSPORT AND STORAGE
FASEP - Mexico	159,626,	176,578	Committed	ODA	Grant	Mitigation	TRANSPORT AND STORAGE
FASEP - Morocco	165,779,	183,384	Committed	ODA	Grant	cross-cutting	ENERGY GENERATION, DISTRIBUTION AND EFFICIENCY
FASEP - Colombia	300,000,	331,858	Committed	ODA	Grant	Adaptation	WATER AND SANITATION
FASEP - Jordan	308,000,	340,708	Committed	ODA	Grant	Cross-cutting	WATER AND SANITATION
FASEP - Lebanon	226,942,	251,042	Committed	ODA	Grant	Adaptation	WATER AND SANITATION
FASEP - Djibouti	271,994,	300,879	Committed	ODA	Grant	Adaptation	WATER AND SANITATION
FASEP - Azeraïdjan	281,987,	311,932	Committed	ODA	Grant	cross-cutting	Other (WATER AND SANITATION / EFFICIENCY)
FASEP - Myanmar	700,000,	774,336	Committed	ODA	Grant	Mitigation	ENERGY GENERATION, DISTRIBUTION AND EFFICIENCY
FASEP - Kenya	350,000,	387,168	Committed	ODA	Grant	Mitigation	ENERGY GENERATION, DISTRIBUTION AND EFFICIENCY
FFEM - Bolivia	950,000	1,050,885	committed	ODA	grant	cross-cutting	AGRICULTURE / FORESTRY
FFEM - multi-country (Asia)	2,000,000	2,212,389	committed	ODA	grant	Mitigation	ENERGY GENERATION, DISTRIBUTION AND EFFICIENCY

Recipient country/ region/project/programme	Total amount Climate specific		Status	Funding source	Financial instruments	Type of support	Sector
	EUR	USD					
FFEM - multi-country (Africa)	2,000,000	2,212,389	committed	ODA	grant	cross-cutting	OTHER (URBAN DEVELOPMENT)
FFEM - Central Africa	2,000,000	2,212,389	committed	ODA	grant	cross-cutting	FORESTRY
FFEM - Guatemala	1,510,000	1,670,354	committed	ODA	grant	cross-cutting	OTHER (URBAN DEVELOPMENT)
FFEM - Burkina Faso and Mali	1,000,000	1,106,195	committed	ODA	grant	Adaptation	AGRICULTURE
FFEM - Senegal and Mauritania	1,500,000	1,659,292	committed	ODA	grant	cross-cutting	AGRICULTURE
FFEM - Mauritius	400,000	442,478	committed	ODA	grant	cross-cutting	ENERGY GENERATION, DISTRIBUTION AND EFFICIENCY
FFEM - Cameroon	500,000	553,097	committed	ODA	grant	Mitigation	ENERGY GENERATION, DISTRIBUTION AND EFFICIENCY
AFD - South Africa	100,000,000	110,619,469	committed	ODA	Concessional loan	Mitigation	ENERGY GENERATION, DISTRIBUTION AND EFFICIENCY
AFD - South Africa	20,465,001	22,638,275	committed	ODA	Concessional loan	cross-cutting	WATER AND SANITATION
AFD - Benin	50,000,000	55,309,735	committed	ODA	Concessional loan	Mitigation	ENERGY GENERATION, DISTRIBUTION AND EFFICIENCY
AFD - Burkina Faso	22,000,000	24,336,283	committed	ODA	Concessional loan	Adaptation	WATER AND SANITATION
AFD - Burkina Faso	13,000,000	14,380,531	committed	ODA	Grant	Adaptation	WATER AND SANITATION
AFD - Ivory coast	120,000,000	132,743,363	committed	ODA	Concessional loan	Mitigation	ENERGY GENERATION, DISTRIBUTION AND EFFICIENCY
AFD - Guinea	9,900,000	10,951,327	committed	ODA	Grant	Adaptation	AGRICULTURE
AFD - Madagascar	3,500,000	3,871,681	committed	ODA	Concessional loan	Adaptation	WATER AND SANITATION
AFD - Madagascar	280,000	309,735	committed	ODA	Grant	Adaptation	WATER AND SANITATION
AFD - Madagascar	22,000,000	24,336,283	committed	ODA	Concessional loan	Adaptation	OTHER (URBAN DEVELOPMENT)
AFD - Madagascar	3,000,000	3,318,584	committed	ODA	Grant	Adaptation	OTHER (URBAN DEVELOPMENT)
AFD - multi-countries	4,000,000	4,424,779	Committed	ODA	Grant	Mitigation	BANKING AND FINANCIAL SERVICES

Recipient country/ region/project/programme	Total amount Climate specific		Status	Funding source	Financial instruments	Type of support	Sector
	EUR	USD					
AFD - multi-countries (Africa)	1,410,000	1,559,735	committed	ODA	Grant	cross-cutting	GENERAL ENVIRONMENTAL PROTECTION
AFD - Namibia	45,000,000	49,778,761	committed	ODA	Concessional loan	Mitigation	BANKING AND FINANCIAL SERVICES
AFD - Namibia	1,000,000	1,106,195	committed	ODA	Grant	Mitigation	BANKING AND FINANCIAL SERVICES
AFD - Niger	8,100,000	8,960,177	committed	ODA	Concessional loan	Adaptation	AGRICULTURE
AFD - Niger	1,890,000	2,090,708	committed	ODA	Grant	Adaptation	AGRICULTURE
AFD - Senegal	64,400,000	71,238,938	committed	ODA	Concessional loan	Adaptation	WATER AND SANITATION
AFD - Senegal	700,000	774,336	committed	ODA	Grant	Adaptation	WATER AND SANITATION
AFD - Senegal	100,000,000	110,619,469	committed	ODA	Concessional loan	Mitigation	TRANSPORT AND STORAGE
AFD - Bolivia	60,000,000	66,371,681	committed	ODA	Concessional loan	Mitigation	ENERGY GENERATION, DISTRIBUTION AND EFFICIENCY
AFD - Bolivia	66,000,000	73,008,850	committed	ODA	Concessional loan	Mitigation	ENERGY GENERATION, DISTRIBUTION AND EFFICIENCY
AFD - Brasil	70,000,000	77,433,628	committed	OOF	Non concessional loan	Mitigation	ENERGY GENERATION, DISTRIBUTION AND EFFICIENCY
AFD - Colombia	182,000,000	201,327,434	committed	ODA	Concessional loan	cross-cutting	GENERAL ENVIRONMENTAL PROTECTION
AFD - Dominican Republic	50,000,000	55,309,735	committed	ODA	Concessional loan	Mitigation	BANKING AND FINANCIAL SERVICES
AFD - Ecuador	39,169,001	43,328,541	committed	ODA	Concessional loan	cross-cutting	WATER AND SANITATION
AFD - Haiti	210,000	232,301	committed	ODA	Grant	Adaptation	AGRICULTURE
AFD - Mexico	12,000,000	13,274,336	committed	ODA	Concessional loan	cross-cutting	OTHER (RURAL DEVELOPMENT)
AFD - Mexico	250,000,000	276,548,673	committed	ODA	Concessional loan	Mitigation	TRANSPORT AND STORAGE
AFD - Myanmar	10,750,000	11,891,593	committed	ODA	Concessional loan	Adaptation	WATER AND SANITATION
AFD - China	25,600,000	28,318,584	committed	ODA	Concessional loan	Mitigation	ENERGY GENERATION, DISTRIBUTION AND EFFICIENCY
AFD - China	75,000,000	82,964,602	committed	ODA	Concessional loan	cross-cutting	GENERAL ENVIRONMENTAL PROTECTION
AFD - China	25,000,000	27,654,867	committed	ODA	Concessional loan	Mitigation	OTHER (WASTE MANAGEMENT)
AFD - China	25,000,000	27,654,867	committed	ODA	Concessional loan	Mitigation	ENERGY GENERATION, DISTRIBUTION AND EFFICIENCY

Recipient country/ region/project/programme	Total amount Climate specific		Status	Funding source	Financial instruments	Type of support	Sector
	EUR	USD					
AFD - India	180,000,000	199,115,044	committed	ODA	Concessional loan	Mitigation	TRANSPORT AND STORAGE
AFD - India	130,000,000	143,805,310	committed	ODA	Concessional loan	Mitigation	TRANSPORT AND STORAGE
AFD - Laos	795,000	879,425	committed	ODA	Grant	Adaptation	AGRICULTURE
AFD - multi-countries	4,000,000	4,424,779	committed	ODA	Grant	Adaptation	GENERAL ENVIRONMENTAL PROTECTION
AFD - Pakistan	75,000,000	82,964,602	committed	ODA	Concessional loan	Mitigation	ENERGY GENERATION, DISTRIBUTION AND EFFICIENCY
AFD - Pakistan	21,000,000	23,230,088	committed	ODA	Concessional loan	cross-cutting	GENERAL ENVIRONMENTAL PROTECTION
AFD - Pakistan	105,000	116,150	committed	ODA	Grant	cross-cutting	GENERAL ENVIRONMENTAL PROTECTION
AFD - Pakistan	90,000,000	99,557,522	committed	ODA	Concessional loan	Mitigation	ENERGY GENERATION, DISTRIBUTION AND EFFICIENCY
AFD - Sri Lanka	30,000,000	33,185,841	committed	ODA	Concessional loan	Mitigation	ENERGY GENERATION, DISTRIBUTION AND EFFICIENCY
AFD - Vietnam	100,000,000	110,619,469	committed	ODA	Concessional loan	cross-cutting	GENERAL ENVIRONMENTAL PROTECTION
AFD - Egypt	100,000,000	110,619,469	committed	ODA	Concessional loan	Mitigation	TRANSPORT AND STORAGE
AFD - Egypt	60,736,000	67,185,841	committed	OOF	Non concessional loan	Mitigation	BANKING AND FINANCIAL SERVICES
AFD - Egypt	50,000,000	55,309,735	committed	ODA	Concessional loan	Mitigation	WATER AND SANITATION
AFD - Jordania	32,000,000	35,398,230	committed	ODA	Concessional loan	Adaptation	WATER AND SANITATION
AFD - Morocco	34,000,000	37,610,619	committed	ODA	Concessional loan	Adaptation	WATER AND SANITATION
AFD - Morocco	40,000,000	44,247,788	committed	ODA	Concessional loan	Adaptation	WATER AND SANITATION
AFD - Morocco	1,000,000	1,106,195	committed	ODA	Grant	Adaptation	WATER AND SANITATION
AFD - Morocco	30,000,000	33,185,841	committed	ODA	Concessional loan	Mitigation	TRANSPORT AND STORAGE
AFD - Morocco	500,000	553,097	committed	ODA	Grant	Mitigation	TRANSPORT AND STORAGE
AFD - Morocco	20,000,000	22,123,894	committed	ODA	Concessional loan	Mitigation	BANKING AND FINANCIAL SERVICES
AFD - Tunisia	60,000,000	66,371,681	committed	ODA	Concessional loan	Adaptation	WATER AND SANITATION
AFD - Tunisia	75,000,000	82,964,602	committed	ODA	Concessional loan	Mitigation	TRANSPORT AND STORAGE
AFD - Tunisia	650,000	719,027	committed	ODA	Grant	Mitigation	TRANSPORT AND STORAGE

Recipient country/ region/project/programme	Total amount Climate specific		Status	Funding source	Financial instruments	Type of support	Sector
	EUR	USD					
AFD - multi-countries	80,000,000	88,495,575	committed	ODA	Concessional loan	cross-cutting	AGRICULTURE
AFD - multi-countries	1,500,000	1,659,292	committed	ODA	Grant	Adaptation	WATER AND SANITATION
AFD - Senegal	34,500,000	38,163,717	committed	OOF	Non concessional loan	Mitigation	ENERGY GENERATION, DISTRIBUTION AND EFFICIENCY
AFD - El Salvador	26,242,000	29,028,761	committed	OOF	Non concessional loan	Mitigation	ENERGY GENERATION, DISTRIBUTION AND EFFICIENCY
AFD - Armenia	13,394,000	14,816,372	committed	OOF	Non concessional loan	Mitigation	BANKING AND FINANCIAL SERVICES
AFD - multi-countries (Asia)	6,888,000	7,619,469	committed	OOF	Non concessional loan	Mitigation	ENERGY GENERATION, DISTRIBUTION AND EFFICIENCY
AFD - multi-countries (Africa)	17,494,001	19,351,771	committed	OOF	Non concessional loan	Mitigation	ENERGY GENERATION, DISTRIBUTION AND EFFICIENCY
AFD - India	986,000	1,090,708	committed	OOF	Non concessional loan	Mitigation	ENERGY GENERATION, DISTRIBUTION AND EFFICIENCY
AFD - Guatemala	1,513,000	1,673,673	committed	OOF	Non concessional loan	Mitigation	ENERGY GENERATION, DISTRIBUTION AND EFFICIENCY
AFD - Jordania	44,373,000	49,085,177	committed	OOF	Non concessional loan	Mitigation	ENERGY GENERATION, DISTRIBUTION AND EFFICIENCY
AFD - Jordania	35,499,000	39,268,805	committed	OOF	Non concessional loan	Mitigation	ENERGY GENERATION, DISTRIBUTION AND EFFICIENCY
AFD - Panama	17,270,000	19,103,982	committed	OOF	Non concessional loan	Mitigation	ENERGY GENERATION, DISTRIBUTION AND EFFICIENCY
AFD - multi-countries (Africa)	13,633,001	15,080,753	committed	OOF	Non concessional loan	Mitigation	ENERGY GENERATION, DISTRIBUTION AND EFFICIENCY
AFD - multi-countries	15,000,000	16,592,920	committed	OOF	Non concessional loan	Mitigation	ENERGY GENERATION, DISTRIBUTION AND EFFICIENCY
AFD – Senegal	18,433,001	20,390,487	committed	OOF	Non concessional loan	Mitigation	ENERGY GENERATION, DISTRIBUTION AND EFFICIENCY

Recipient country/ region/project/programme	Total amount Climate specific		Status	Funding source	Financial instruments	Type of support	Sector
	EUR	USD					
AFD - Chile	37,764,000	41,774,336	committed	OOF	Non concessional loan	Mitigation	BANKING AND FINANCIAL SERVICES
AFD - Sri Lanka	8,000,000	8,849,558	committed	OOF	Non concessional loan	Mitigation	BANKING AND FINANCIAL SERVICES
AFD - Brasil	11,309,001	12,509,957	committed	OOF	Non concessional loan	Mitigation	ENERGY GENERATION, DISTRIBUTION AND EFFICIENCY
AFD - Morocco	25,000,000	27,654,867	committed	OOF	Non concessional loan	Mitigation	BANKING AND FINANCIAL SERVICES
AFD - multi-countries (mediterranean)	4,789,001	5,297,567	committed	OOF	Non concessional loan	Mitigation	ENERGY GENERATION, DISTRIBUTION AND EFFICIENCY
AFD - multi-countries	23,948,001	26,491,151	committed	OOF	Non concessional loan	Mitigation	ENERGY GENERATION, DISTRIBUTION AND EFFICIENCY
AFD - Pakistan	4,807,000	5,317,478	committed	OOF	Non concessional loan	Mitigation	ENERGY GENERATION, DISTRIBUTION AND EFFICIENCY
Total contributions through bilateral, regional and other channels	3,140,447,655	3,473,946,522					

Table 5.6: Provision of public financial support: contribution through bilateral, regional and other channels in 2015

Recipient country/ region/project/programme	Total amount Climate specific		Status	Funding source	Financial instruments	Type of support	Sector
	EUR	USD					
AFD - Africa	21,225,544	23,545,961	Committed	OOF	Non concessional loan	Mitigation	Renewable energies (without hydro)
AFD - Africa	31,556,448	35,006,259	Committed	OOF	Non concessional loan	Mitigation	Hydroelectricity
AFD - Africa	3,000,000	3,327,966	Committed	ODA	Concessional loan	Adaptation	Water
AFD - Africa	50,000,000	55,466,095	Committed	ODA	Concessional loan	Adaptation	Water
AFD - Africa	80,000,000	88,745,752	Committed	ODA	Concessional loan	Mitigation	Renewable energies (without hydro)
AFD - Africa	10,000,000	11,093,219	Committed	ODA	Concessional loan	Mitigation	Waste
AFD - Africa	90,000,000	99,838,971	Committed	ODA	Concessional loan	Mitigation	Hydroelectricity
AFD - Africa	166,000,000	184,147,435	Committed	ODA	Concessional loan	Mitigation	Energy efficiency or Renewable energy
AFD - Africa	90,000,000	99,838,971	Committed	ODA	Concessional loan	Mitigation	Energy Distribution
AFD - Africa	35,000,000	38,826,266	Committed	ODA	Concessional loan	Mitigation	Urban mass transport
AFD - Africa	18,000,000	19,967,794	Committed	ODA	Grant	Adaptation	Urban planning
AFD - Africa	500,000	554,661	Committed	ODA	Grant	Adaptation	Water
AFD - Africa	5,300,000	5,879,406	Committed	ODA	Grant	Adaptation	Agriculture
AFD - Africa	5,000,000	5,546,609	Committed	ODA	Grant	Mitigation	Forestry
AFD - Africa	430,000	477,008	Committed	ODA	Grant	Mitigation	Waste
AFD - Latin America and the Caribbean	87,197,447	96,730,038	Committed	OOF	Non concessional loan	Mitigation	Renewable energies (without hydro)
AFD - Latin America and the Caribbean	59,541,462	66,050,648	Committed	OOF	Non concessional loan	Mitigation	Energy efficiency or Renewable energy
AFD - Latin America and the Caribbean	36,761,409	40,780,237	Committed	ODA	Concessional loan	Adaptation	Water
AFD - Latin America and the Caribbean	21,000,000	23,295,760	Committed	ODA	Concessional loan	Adaptation	Energy efficiency or Renewable energy
AFD - Latin America and the Caribbean	40,000,000	44,372,876	Committed	ODA	Concessional loan	Mitigation	Cross-cutting
AFD - Latin America and the Caribbean	93,659,268	103,898,276	Committed	ODA	Concessional loan	Mitigation	Energy distribution
AFD - Latin America and the Caribbean	275,000,000	305,063,522	Committed	ODA	Concessional loan	Cross-cutting	Cross-cutting

Recipient country/ region/project/programme	Total amount Climate specific		Status	Funding source	Financial instruments	Type of support	Sector
	EUR	USD					
AFD - Latin America and the Caribbean	50,000,000	55,466,095	Committed	ODA	Concessional loan	Cross-cutting	Agriculture
AFD - Latin America and the Caribbean	105,000,000	116,478,799	Committed	OOF	Non concessional loan	Mitigation	Energy efficiency or Renewable energy
AFD - Asia	7,577,108	8,405,452	Committed	OOF	Non concessional loan	Mitigation	Renewable energies (without hydro)
AFD - Asia	27,685,493	30,712,123	Committed	OOF	Non concessional loan	Mitigation	Energy efficiency or Renewable energy
AFD - Asia	18,720,000	20,766,506	Committed	ODA	Concessional loan	Adaptation	Urban planning
AFD - Asia	126,700,000	140,551,084	Committed	ODA	Concessional loan	Adaptation	Water
AFD - Asia	63,750,000	70,719,271	Committed	ODA	Concessional loan	Adaptation	Water
AFD - Asia	52,500,000	58,239,400	Committed	ODA	Concessional loan	Adaptation	Irrigation
AFD - Asia	50,000,000	55,466,095	Committed	ODA	Concessional loan	Adaptation	Cross-cutting
AFD - Asia	84,000,000	93,183,039	Committed	ODA	Concessional loan	Mitigation	Cross-cutting
AFD - Asia	20,000,000	22,186,438	Committed	ODA	Concessional loan	Mitigation	Energy efficiency or Renewable energy
AFD - Asia	29,600,000	32,835,928	Committed	ODA	Concessional loan	Mitigation	Waste
AFD - Asia	130,000,000	144,211,847	Committed	ODA	Concessional loan	Mitigation	Hydroelectricity
AFD - Asia	40,000,000	44,372,876	Committed	ODA	Concessional loan	Mitigation	Energy efficiency or Renewable energy
AFD - Asia	20,000,000	22,186,438	Committed	ODA	Concessional loan	Mitigation	Cross-cutting
AFD - Asia	112,500,000	124,798,714	Committed	ODA	Concessional loan	Mitigation	Transport
AFD - Asia	1,000,000	1,109,322	Committed	ODA	Grant	Adaptation	Water
AFD - Asia	4,000,000	4,437,288	Committed	ODA	Grant	Adaptation	Irrigation
AFD - Asia	200,000	221,864	Committed	ODA	Grant	Mitigation	Hydroelectricity
AFD - Mediterranean	20,000,000	22,186,438	Committed	OOF	Non concessional loan	Mitigation	Renewable energies (without hydro)
AFD - Mediterranean	38,123,947	42,291,729	Committed	ODA	Concessional loan	Adaptation	Water
AFD - Mediterranean	50,000,000	55,466,095	Committed	ODA	Concessional loan	Adaptation	Agriculture
AFD - Mediterranean	117,432,480	130,270,421	Committed	ODA	Concessional loan	Adaptation	Water
AFD - Mediterranean	4,500,000	4,991,949	Committed	ODA	Concessional loan	Mitigation	Energy efficiency
AFD - Mediterranean	50,000,000	55,466,095	Committed	ODA	Concessional loan	Mitigation	Energy efficiency or Renewable energy

Recipient country/ region/project/programme	Total amount Climate specific		Status	Funding source	Financial instruments	Type of support	Sector
	EUR	USD					
AFD - Mediterranean	66,000,000	73,215,245	Committed	ODA	Concessional loan	Mitigation	Energy efficiency or Renewable energy
AFD - Mediterranean	99,665,280	110,560,877	Committed	ODA	Concessional loan	Mitigation	Cross-cutting
AFD - Mediterranean	42,000,000	46,591,520	Committed	ODA	Concessional loan	Cross-cutting	Water
AFD - Mediterranean	1,500,000	1,663,983	Committed	ODA	Grant	Adaptation	Agriculture
AFD - Mediterranean	30,000	33,280	Committed	ODA	Grant	Mitigation	Energy efficiency
AFD - Mediterranean	245,000	271,784	Committed	ODA	Grant	Mitigation	Energy efficiency or Renewable energy
AFD - Mediterranean	5,000,000	5,546,609	Committed	OOF	Non concessional loan	Mitigation	Energy efficiency or Renewable energy
AFD - multi-country	3,500,000	3,882,627	Committed	ODA	Grant	Cross-cutting	Cross-cutting
FFEM - Burkina Faso	125,610	139,342	Committed	ODA	Grant	Mitigation	Energy
FFEM - Colombia	1,500,000	1,663,983	Committed	ODA	Grant	Mitigation	Transport
FFEM - Philippines	1,510,000	1,675,076	Committed	ODA	Grant	Adaptation	Capacity-building / Coastal zone management
FFEM - Asia	2,000,000	2,218,644	Committed	ODA	Grant	Cross-cutting	Energy
FFEM - Cameroun	1,500,000	1,663,983	Committed	ODA	Grant	Adaptation	Cities
FFEM - Rwanda	300,000	332,797	Committed	ODA	Grant	Mitigation	Energy
FASEP - Haïti	271,900	301,625	Committed	ODA	Grant	Mitigation	Renewable energy
FASEP - Philippines	231,305	256,592	Committed	ODA	Grant	Mitigation	Waste
FASEP - Egypte	100,000	110,932	Committed	ODA	Grant	Mitigation	Urban transport
FASEP - Côte d'Ivoire	140,000	155,305	Committed	ODA	Grant	Adaptation	Water
FASEP - Tunisie	77,917	86,435	Committed	ODA	Grant	Mitigation	Marine energies
FASEP - Tanzanie	260,031	288,458	Committed	ODA	Grant	Mitigation	Public transport
FASEP - Liban	77,162	85,597	Committed	ODA	Grant	Mitigation	Renewable energies
FASEP - Serbie	463,557	514,234	Committed	ODA	Grant	Mitigation	Renewable energies - geothermal
FASEP - Jordanie	420,000	465,915	Committed	ODA	Grant	Mitigation	Electric vehicles
FASEP - Serbie	225,200	249,819	Committed	ODA	Grant	Mitigation	Waste
Total contributions through bilateral, regional and other channels	2,669,603,569	2,961,449,698					

The Action Agenda as a contributor to financial and technological support and to capacity building in developing countries

The Action Agenda is a multi-player platform that brings together States and non-State actors that engage in climate action to find synergies and to develop concrete local or global solutions, and to accelerate the transition to a low carbon economy. It fits into a worldwide dynamic, mobilising non-state players, and constitutes decisive support for the implementation of the Paris Agreement and national commitments (NDC), because they form a reservoir of practical, technological, political and financial solutions, and in particular enable a significant drop in the cost of low-carbon technology.

The Action Agenda coalitions are characterised by great diversity both at the level of the format of the action performed and the kinds of actors involved, because they can be centred on advocacy, project implementation, capacity building, structuring goals in a sector or on innovation.

Accordingly, certain coalitions take part in the financial commitment of developed countries in supporting developing countries, by funding projects or assisting access to climate funding in multilateral and bilateral programmes. The “NDC Partnership” launched at the COP22, intends for example to strengthen the cooperation between countries so they can access the technical knowledge and financial support they need to reach their goals in the spheres of the climate and sustainable development. It contributes to improved access to climate funding, especially through technical assistance and shared knowledge, analytical tools and good practices.

Other coalitions take part in capacity building in developing countries, to help them increase their skills and devise and implement policies to reduce emissions and adapt to climate change. For example, the programme for energy efficiency in buildings (PEEB), launched by the French Development Agency, the GIZ and ADEME at COP22, aims at creating a new international facility devoted to energy efficiency in buildings, for developing and emerging countries. Other examples illustrate the financial support and the contribution to capacity building, such as the initiative “Mobilise your City”, which helps cities and States provide themselves with low carbon policies, or the initiative on the early warning systems for climate change resilience (CREWS), which acts on improving early warning systems for natural disasters in the less advanced countries, with the goal of mobilising 100 million dollars by 2020 for this topic which is little represented in multilateral or bilateral aid.

Two other initiatives concerning renewable energy, in which France is very much involved and is a driver, very clearly illustrate how the action agenda takes part in the financial and technological support of developing countries: *The African Renewable Energy Initiative (AREI)*, which works on projects by channelling 10 billion euros from various fund donors with the goal of reaching at least 10 GW of new and additional energy production capacity from renewable energy sources by 2020, and at least 300 GW by 2030, and the *International Solar Alliance*, which intends to harmonise and aggregate requests for funding, technology and innovation in order to massively reduce the cost of solar energy for the 121 countries in the intertropical zone.

III - TECHNOLOGICAL COOPERATION

In addition to bilateral and multilateral channels for public aid for development, France is also committed to various projects and international forums that generate large scale international cooperation with a host of actors. This cooperation is to be understood as a transfer in the widest sense of know-how, methods, and tools that are necessary to implement the transfer to low-carbon technologies.

There have been major developments in technology since the sixth national communication. Low-carbon industries have developed and been deployed on a large scale in the renewable energy and energy efficiency sector. An increasing number of countries wish to implement these technologies both in the North and in the South, as it is estimated that more than 164 countries have set a renewable energy¹⁵ production target, half of which are developing countries.

On a bilateral level, technical cooperation has taken place through work particularly with Africa, and also in countries such as Brazil, Indonesia and China. In particular this involves strategic cooperation in the area of renewable energy and energy efficiency.

In this phase of public policy implementation, the private sector and decentralised cooperation play a particularly important role as the operational stakeholders developing the capacity required on the ground to set up low-carbon projects and contributing to this technology transfer. French companies and authorities are especially active in the field and are developing both mature and innovative projects in an increasing number of countries. On 21 May 2015, Mr Laurent Fabius, Minister of Foreign Affairs and International Development, and Mr Matthias Feki, Secretary of State for Foreign Trade, Promoting Tourism, and the French Abroad, appointed Mr Jean Ballandras, the Secretary General of AKUO ENERGY as the Export Coordinator for “Renewable Energy”. His mission is to promote the French approach to renewable energy internationally, and accelerate the deployment of practical solutions on the ground. This initiative will enable technological cooperation with a certain number of countries to be reinforced in the field of renewable energy.

At the multilateral level, French technological cooperation is performed through major international energy partnerships, like the International Energy Agency (AIE), and especially within the international AIE platform on low carbon technologies established in October 2010, the CEM (Clean Energy Ministerial) or the IPEEC (International Partnership for Energy Efficiency Cooperation). In this context of wider organisation of the SE4All (Sustainable Energy for All) initiative, the rise of IRENA (International Renewable Energy Agency), a recent agency that has a strong mission to support countries and within which France is the sixth largest contributor, is worthy of being saluted. It is also worth referring to large scale multilateral treaties, foremost amongst which is the United Nations Framework Convention on Climate Change (UNFCCC) which enables countries to support and accelerate technology transfers and shared experience. A Mechanism in favour of technology transfers to support mitigating and adapting to climate change for developing countries was created under the UNFCCC and is now fully operational. The work of UNEP (United Nations Environment Programme) and that of the FAO (Food and Agriculture Organisation) also foster the sharing of experience and tools useful for a low carbon transition.

Technological cooperation such as that represented in Table CTF 8 must be understood in the widest sense, and in particular incorporates know-how, method and tool transfers that are required for implementing low carbon transition technologies. Table CTF 8 presented here has no aim of being exhaustive, but is rather intended to demonstrate via a few examples how the French public and private sectors have addressed the issue at all levels. This enables wide-scale technological cooperation to be generated beyond the classic bilateral and multilateral channels for public development aid.

¹⁵ REN 21, 2015

Table 5.7: Provision of technology development and transfer support^{a,b}

Country or Region	Objective	Measures and Activities Connected to Technology Transfer	Sector ^c	Funding Source	Activities Under-taken by:	Status	Additional Information ^d
Kazakhstan	Mitigation	Since 2011, a consortium of French manufacturers has been undertaking a project in Kazakhstan to provide turnkey factories across the whole solar panel manufacturing process. This defining industrial programme has been able to emerge thanks to State financial support through a FASEP programme allocation to the CEIS company and the scientific and institutional support from the CEA public research body.	Energy, Industry	Private and Public	Public	Installed	The solar panel manufacturing factories are vertically integrated. With a total capacity of 60 MW, the various production technologies (wafers, cells and modules) have been transferred from the French companies ECM Technologie and SEMCO Engineering, under CEIS coordination. This project, for a total amount of €165 M, combines the supply of equipment manufactured in France by ten or so SMEs, and a transfer of technology and know-how by those companies. A training component has further been set up in France to train the Kazakh operating teams in advance of each stage. The initial production stages have been started in this way, enabling Kazakhstan to now appear among the industrial players that produce panels for solar power.
Chile	Mitigation	Engie's Research Directorate is supporting a concentrated solar power pilot scheme, with the aim of capitalising on this experiment at full scale. This initiative enables local development and innovation to be reinforced.	Energy	Private	Private	Installed	This global pilot scheme called EOS I, for 2.5 MW, consists of directly injecting steam produced by a concentrated solar facility into a high-pressure turbine at an existing coal fired electricity production unit at Mejillones, in northern Chile. This technology enables 800 kg of coal to be saved per second in this 2.5 MW unit.
Chile	Mitigation	The DCNS company, a world leader in renewable marine energy, is the head of an international consortium to build a research centre on renewable marine energy in Chile.	Energy	Private	Private and Public	Installed	The consortium includes ENDESA, the largest Chilean Energy company, and Chilean universities, research institutes and centres of the first order, and technology developers. It was selected in October 2014 by CORFO (Corporación de Fomento de la Producción), the economic development body for the Chilean government, to set up an International Centre of Excellence for research and development in the field of marine energy, called MERIC Marine Energy Research and Innovation).

Country or Region	Objective	Measures and Activities Connected to Technology Transfer	Sector ^c	Funding Source	Activities Under-taken by:	Status	Additional Information ^d
Brazil	Mitigation	Tractebel, a subsidiary of the Engie group is developing a prototype converter for wave energy into electricity together with the Research Institute of the University of Rio de Janeiro, the National Electrical Energy Agency and Brazilian companies.	Energy	Private	Private and Public	Installed	Whilst this project demonstrates that it is possible to capture wave energy, research must still be continued in order to improve the technology and to bring it to maturity.
Brazil	Adaptation	The Climate Energy Territory Adaptation Plan is co-financed by AFD, the ADEME and the Nord Pas de Calais Region. One of the sections of the PCET deals with the development of renewable energy on the Minas Geiras territory.	Other (Cross-cutting)	Public	Public	In progress	Modelled on PACE at Rio Grande do Sul, the State of Minas Gerais launched its Territorial Climate Energy Plan in September 2013 in the context of decentralised cooperation (Nord Pas de Calais Region, ADEME and AFD). A cooperation agreement dealing with accompaniment for devising a global integrated climate strategy was signed in November 2013 by ADEME, FEAM and the Nord Pas de Calais Region. This project involves, on the one hand, making a diagnosis of GHG emissions and the vulnerability of the territory and on the other, preparing a Territorial Climate Energy Plan devoted to adapting to climate change and reducing emissions. In the end this plan should lead to implementing practical action.
Indonesia	Mitigation	The Indonesian company PT Pertamina and the French company Akuo Energy signed an agreement in February 2015 for developing and deploying in Indonesia new electrical production stations based exclusively on renewable energy. The goal is reaching a total portfolio of 560 MW in operation.	Energy	Private	Private	Installed	The partnership aims at jointly building and deploying fully integrated business lines that will cover both wind and solar power and Ocean Thermal Energy (OTE). DCNS will be the industrial partner for Akuo Energy on the latter technology.
Indonesia	Mitigation	In Indonesia, Engie is using its know-how in the field of geothermal energy.	Energy, Industry	Private	Private	In progress	Engie is developing 3 projects (at Muara Laboh, Rajabasa and Rantau Dedap) in cooperation with the local company PT Suprem Energy. Located on the island of Sumatra, these projects have total power of 680 MW.

Country or Region	Objective	Measures and Activities Connected to Technology Transfer	Sector ^c	Funding Source	Activities Under-taken by:	Status	Additional Information ^d
India	Mitigation	Several French solar companies are active on the Indian market, and in particular EDF New Energy which entered the Indian solar power market in December 2013 by creating a joint venture with a local partner (ACME Cleantech with 50%) and a French partner (EREN, with 25%).	Energy	Private	Private and Public	Installed	After a year of work, ACME Solar, with 30 MWc in operation and 150 MW commissioned in July (NSM and Odisha) and about 420 MW awarded in various highly competitive tenders managed by various Indian States, is one of the most active and successful operators in the local market.
WATER	Mitigation	Total is taking part, in partnership with other companies, in the Shams Power Company joint venture that has enabled the building and development of Shams 1 in March 2013, the largest concentrated solar power station in the world, fitted with parabolic mirrors.	Energy	Private	Private	Installed	The solar thermal power station with a capacity of 100 MW will supply 20,000 households in the United Arab Emirates (UAE) and will enable avoiding 175,000 tons of CO ₂ emissions per year. By incorporating the latest cylindrical and parabolic technologies, together with a dry cooling system that significantly reduces water consumption, Shams 1 illustrates the efficiency of cooperation between various companies to result in large scale energy solutions that respect the environment, that make it possible to meet the increase worldwide demand for energy and diversifying the energy mix. Indeed, Total has contributed 20%, Abengoa Solar 20% and Masdar 60%.
Algeria	Mitigation	The French company Vincent Industrie and the Algerian company Aurès Solar (in which Vincent Industrie is a 49% shareholder) are setting up a production factory for very high yield solar panels called NICE (New Industrial Cells Encapsulation) at Batna. This €10 M project will enable annual production of 25 MW of NICE solar panels (about 100,000 panels).	Energy, Industry	Private	Private	In progress	NICE technology was developed in partnership between the Apollon Solar company and Vincent Industrie, which is specialised in the manufacturing of automatic machines and equipment. The production line for solar panels will be set up in the industrial area at Ain Yagout in Batna.

Country or Region	Objective	Measures and Activities Connected to Technology Transfer	Sector ^c	Funding Source	Activities Under-taken by:	Status	Additional Information ^d
Morocco	Mitigation	Engie is developing Africa's largest wind farm in partnership with the Moroccan energy company Nareva. The Tarfaya station has been designed to provide the National Electricity and Drinking Water Office (ONEE) in Morocco with electricity.	Energy, Industry	Private	Private	Installed	The wind farm was built by the Tarfaya Energy Company (TAREC), a jointly owned company held 50/50 by the two partners. Commissioning took place on 8 December 2014, at Tarfaya. The farm produces 301MW thanks to 130 2.3 MW wind turbines. Project funding amounted to 450 million Euros, and loan financing was provided by a consortium of three Moroccan banks. It was finalised in December 2012.
Gabon	Mitigation	Redeveloping the "Anguilla" offshore drilling platform opened in 1966 and held by Total Gabon (75% under Gabon law - 58% held by the Total group and 25% by the Republic of Gabon)	Energy, Industry	Private	Private	Installed	This project will considerably reduce GHG emissions arising from the gas burnt off using the flare. During the two initial project stages, a large part was performed by Gabon companies. The third stage enabled the installation of a low-pressure gas turbine for the neighbouring "Torpile" facility. Gabon teams are thus benefiting from the experience of the TOTAL group in order to limit the flared gas. They will be in charge of everyday operations of the facility.
Africa	Mitigation and Adaptation	The French Fund for the World Environment (FFEM) (€1.5 M) and the French Development Agency (AFD) (€1.5 M) are funding the support programme for defining low carbon and climate change resistant development strategies Africa4Climate created in 2012 for a 4-year term. It has a technology transfer section and a marked adaptation component.	Other (Cross-cutting)	Public	Public	Installed	The strategy for low carbon and climate change resistant development aims at creating a global integrated framework, providing an overview of the priority channels and creating synergies between them. The programme focuses on four countries: Uganda, Benin, Gabon and Kenya, and then it will be extended to other countries. In each target country, the project will incorporate a stage for identifying the technology and institutional structure needed, a stage for implementing the technical assistance and capacity building programmes initially defined, and a capitalisation stage.

Country or Region	Objective	Measures and Activities Connected to Technology Transfer	Sector ^c	Funding Source	Activities Undertaken by:	Status	Additional Information ^d
Africa	Adaptation and Mitigation	Creation by EDF with the support of ADEME of 6 decentralised service companies (SSD) in 5 countries: South Africa, Botswana, Mali, Morocco and Senegal. This involves ensuring the viability of electrification projects in rural areas and their long-term productivity. These projects have brought electricity to more than 450,000 inhabitants since 2013.	Other (Cross-cutting)	Private and Public	Private	Installed	The purpose is selling decentralised energy services, improving everyday life of households in rural areas, health and the environment. The SSD is responsible for installing, and maintaining electricity facilities for local authorities from 60 to 150,000 inhabitants. The SSD's strength is its capacity to integrate at the local level, working with local companies and staff. EDF has the intention of extending these projects to 1 million extra inhabitants - mainly in Africa and Asia - over the next 5 years.
Africa, Asia	Mitigation and/or Adaptation	A joint statement on Franco-Chinese partnerships in third party markets was passed in June 2015 by France and China. Among the projects that have been implemented in this context, those that form part of the worldwide struggle against climate change will be encouraged. The implementation of that declaration should be an opportunity to witness the capacity of the two countries to put in place innovative funding in the sphere of the climate.	Energy	Private and Public	Private and Public	In progress	In particular, the statement refers to the field of renewable energy, energy efficiency, and preventing, warning about and reducing natural disasters. New projects will be identified during the coming months in a CP21 perspective; the funding terms for the projects will form the scope of specific correspondence between France and China.
Islands of the Indian Ocean	Adaptation	The French Fund for the World Environment (FFEM), the French Ministry of Foreign Affairs, the French Development Agency (AFD) and the region of Reunion Island are funding the ACClimate project to the tune of 1.7 million Euros. This project deals with adapting to climate change in the Indian Ocean Islands.	Other (Cross-cutting)	Public	Public	Installed	Launched in 2008 on an initiative from the member states of the Indian Ocean Commission, ACClimate is the first project of its kind in the south-west of the Indian ocean. It mainly aimed at: - Better understanding climate change at regional level; - Identifying vulnerability to the impact of climate change; - Preparing a regional adaptation strategy that enables those vulnerabilities to be reduced. It ended on 31 December 2012. A framework document for that regional climate change adaptation strategy was adopted by the IOC council. A request from Secretary General Jean-Claude to Estrac was prepared to seek for financial resources to ensure the continuity of initiatives.

Country or Region	Objective	Measures and Activities Connected to Technology Transfer	Sector ^c	Funding Source	Activities Under-taken by:	Status	Additional Information ^d
Worldwide	Mitigation	France hosts the International Energy Agency (AIE) in Paris and it is a founder member. In particular, this agency enables supporting and accelerating technology transfers, and the sharing of experience in the fields of energy and energy efficiency.	Energy	Public	Public	Installed	<p>Founded by the OECD in 1974, following the first oil crisis, its initial mission was coordinating the measures to be taken at times of crisis in oil supplies. Whilst that remit remains at the heart of its activity, its remit has gradually widened to take energy safety, economic and sustainable development and more recently, climate stakes into consideration.</p> <p>The AIE facilitates the coordination of energy policies in its 29-member countries, which work to ensure reliable, clean and affordable energy supplies for their citizens. The AIE is the reference organisation in the field of energy, and each year produces the reference report on energy at a global level, the World Energy Outlook (WEO).</p>
Worldwide	Mitigation and Adaptation	Through human and financial support, and constructive cooperation, France works actively within IRENA (International Renewable Energy Agency) to facilitate energy transitioning in developing countries, towards low carbon growth. In addition, France is the sixth largest contributor to the Agency (1.4 M USD in 2012).	Energy	Public	Public	Installed	<p>The rise to the fore of the agency, created in 2009 and now including more than one hundred members, deserves being saluted. This agency intends to be operational by supplying a support platform to countries that wish to implement renewable energy. It enables the development and sharing of tools that foster the deployment of renewable energy at a large scale and in all countries. The support it provides specifically to developing countries, including the least advanced and small islands, is deemed to be a priority by France. Nowadays, this Agency incorporates its action in the overall context of the Sustainable Energy for All (SE4All) proposed by the United Nations Secretary General. Promoting three major targets for low carbon development, this large-scale initiative has enabled action to be catalysed by offering a shared framework and increased visibility to those stakes. France participates actively in that initiative, directly by providing human support or by mobilising its actors in cooperation on the ground, or indirectly through the action of the European Union and the funding facilities put in place. Access to energy is an important issue for France which it supports through its cooperation initiatives.</p>

Country or Region	Objective	Measures and Activities Connected to Technology Transfer	Sector ^c	Funding Source	Activities Undertaken by:	Status	Additional Information ^d
Worldwide	Mitigation and Adaptation	France is one of the main financers for the United Nations Programme for the Environment. (PNUE). The latter contributes to the distribution of technologies and know-how to combat climate change via several programmes, such as for example the ten-year planning framework on sustainable modes of consumption and production (10FYP). PNUE is also the host of the Climate Technology Centre and Network, which is the military arm of the Technological CCNUCC Mechanism.	Other (Cross-cutting)	Public	Public	Installed	<p>The main aims of the PNUE are:</p> <ul style="list-style-type: none"> - Promoting international cooperation in the field of the environment and recommending policies oriented in that direction; - Studying the environmental situation in the world in order to ensure that issues at an international scale in this field form the scope of appropriate study on the part of governments; - Handling the resources of the Fund for the Environment, which funds the PNUE action programme. It should be noted that France is the 4th largest contributor to that fund, with an annual contribution of 5,850,000 USD in 2012. <p>At 10YFP level, France was actively involved in preparing that framework and steered one of the seven process working groups in Marrakesh, the one on sustainable tourism. Nowadays, France holds the vice-presidency (2013-2015) of the World Sustainable Tourism Partnership after two years as president. France has also invested in other 10FYP programmes, especially those dealing with consumer information and sustainable buildings.</p>
<p>a To be reported to the extent possible.</p> <p>b The tables should include measures and activities since the last national communication or biennial report.</p> <p>c Parties may report sectoral disaggregation, as appropriate.</p> <p>d Additional information may include, for example, funding for technology development and transfer provided, a short description of the measure or activity and co-financing arrangements.</p>							

IV - CAPACITY ENHANCEMENT

The thematic breadth of France's capacity building has become wider over the years. The second biennial report is an opportunity to bring to the fore the progress made in the sphere of discussions and sharing on the framework and tools for mitigating and adapting to the effects of climate change.

Adapting to Climate Change

France is committed to projects aimed at sharing its own experience in planning adaptation policies with developing countries. Indeed, France has an adaptation strategy in place since 2006. In 2011, a national adaptation plan was published. An assessment of the national plan was made in 2015.

In this context, France has taken part in several projects including the one that dealt with Indian Ocean Islands, especially through the continuation of the project (ACClimate) which aimed to build climate change adaptation capacities for its members. Relying on the studies made, a regional adaptation policy has been prepared jointly by Acclimate and by the IOC countries¹⁶. This strategy was approved in January 2013 during the 28th IOC Council of Ministers. The cooperation project is continuing with the goal of setting up a data sharing network amongst countries in the western part of the Indian Ocean (see site <http://www.acclimate-oi.net/>).

Launched in 2012 and provided with a budget of 3 million euros over 3 years, funded by AFD and FFEM, the Africa4Climate project intends to strengthen capacities in four African countries in taking account of climate change in their national policies. The innovative approach of this project rests on privileged access to national and international expertise to support local partners. In order to do this, since the project's launch, Expertise France has mobilised thirty or so experts specialised in analysing and taking account of the causes and consequences of climate change. Africa4Climate has the aim of weaving linkages between locally developed initiatives and providing the authorities with the tools and skills required for actually incorporating the stakes involved in climate change into the initiatives they undertake. In the longer term, Africa4Climate could be adapted for other countries.

Preparing and Implementing the Intended Nationally Determined Contributions (INDC)

In January 2015, the French Development Agency (AFD) funded an initial facility with 3.5 million euros of grants in order to assist 26 developing countries, including African countries and Small Island Developing States (SIDS), to prepare their Intended Nationally Determined Contributions (INDC). All of the countries that have benefited from that support have filed their INDC with the CCNUCC secretariat before COP21.

In order to take part in making the Paris Agreement operational, responding to demands from developing countries in terms of support in implementing their NDC, especially for the adaptation aspect, and in order to enable an increase in investments for adapting to climate change in those countries, the AFD has decided to set up a new "AdaptaCtion" facility aimed at preparing the implementation of commitments made by countries in their NDC.

Launched in May 2017, AdaptaCtion, with a total amount of 30 million euros (of grants) to be deployed over 4 years, is intended to accompany some fifteen African countries and SIDSs in the achievement of

¹⁶ The Indian Ocean Commission (IOC) is a regional intergovernmental cooperation commission that brings together five Member States: Comores, France/Reunion, Madagascar, Mauritius, and Seychelles.

their “climate” goals, especially as regards adapting to climate change, via running capacity building activities and technical assistance in accordance with 3 main themes:

- Theme 1: Support for “climate” capacity building and governance to consolidate, implement and monitor the NDC; this component is implemented by Expertise France.
- Theme 2: Support for improved NDC commitment integration into sectoral public policies;
- Theme 3: Support for structural project/programme preparation in the field of adaptation and renewable energy.

In the context of the first stage of AdaptaCtion, identification assignments will be performed in the various partner countries in order to determine needs with local counterparts in terms of institutional support that has to be funded by AdaptaCtion.

Setting up a National Reporting System (GHG Inventory, Projections and Preparing NAMAs)

Since 2014 France has taken part, technically and financially, in the activity of the “French-speaking cluster” by jointly financing with Belgium and Germany, capacity building workshops intended for French-speaking developing countries. The French-speaking Cluster is an initiative from the International Mitigation Partnership and the MRV. It was created after the French language workshop for Africa on Measurement, Reporting and Verification (MRV) issues held at Gammarth, in Tunisia on the 17th and 18th December 2013. It has the aim of enabling information, know-how and experience sharing between French-speaking partners, developing and developed countries, concerning the inventory of GHGs, the development of NAMA, the MRV process and the formulation of intended nationally determined contributions (INDC). Several workshops have been organised since 2013 (see <http://mitigationpartnership.net/cluster-francophone>). A side event to present experience feedback from those workshops took place during COP21 in Paris. In 2015, two workshops were held (Paris and Rabat); in 2016, 2 workshops also took place in Abidjan and in Casablanca, and a workshop was organised in Rome in 2017 during a week. That workshop enabled 57 experts from 22 French speaking Parties to work together. Citepa, a public-sector expert operator recognised at global level, a specialist in French inventories since their foundation, is a major player in the French-speaking cluster and runs these workshops.

The Franco-Chinese Center

CTIEPA and its Chinese partner CRAES, which comes under the Ministry for pollutant control, met for the first time in Beijing in 2014. They signed a framework agreement on the 1st August 2015 for 5 years in order to incorporate GHGs and pollutants in order to permit a synergy between urban air quality and combating climate change. This cooperation, based on the knowledge, quantification, reporting and projections of emissions in China, aims at the gradual integration of air-climate-energy issues. A report was published in 2015 on the fruits of this joint work, which led to the creation of the Franco-Chinese centre for pollutants, GHG emissions and their reduction. The centre promotes good practice in listing, measuring, reporting and verifying GHG emissions at the service of public policy. These initiatives were presented during a specific side event at the 5th international Franco-Chinese international conference on the atmospheric environment which was held in Xi'an in October 2016. A workshop was also held in Paris in May 2017.

The table below sets out a few capacity building initiatives.

Table 5.8: Provision of capacity building support

Recipient country/ region	Targeted area	Programme or project title	Description of programme or project ^{b,c}
Benin, Gabon, Uganda, Kenya	Mitigation, adaptation, INDC	Africa4Climate	Support for preparing and implementing low carbon development strategies that are resilient to climate change in Africa, funded by AFD and FFEM and implemented by Expertise France.
South Pacific	Adaptation	Climate change week 2015	Feedback and testimony on the implementation of the national adaptation policy
West Indian Ocean	Adaptation	Indian Ocean Commission	ONERC support in 2014 for defining a shared data network in the West Indian Ocean area with all national delegations in the area.
Africa	Multiple Areas	AMMA	Regarding SMOC in Africa, the AMMA international experiment has been extended beyond 2010. AMMA-CATCH, an observation system for monitoring the long-term impact of the monsoon in West Africa, has been maintained. It was initiated by MESR and benefited from the support of IRD (Institute for Research and Development) and the INSU (National Institute for Sciences of the Universe). In 2015, data collection continues.
Mediterranean Basin	Multiple Areas	MISTRALS	Launched in 2008, for a term forecast until 2020, MISTRALS mushroomed on the ground in 2010. This is an international fundamental research and systematic interdisciplinary observation meta-programme devoted to understanding environmental changes and functioning in the Mediterranean basin under the pressure of global anthropogenic change in order to forecast future developments. Beyond its academic scope, MISTRALS also has the aim of transforming the goals and results of research into concepts and data that are accessible to decision makers, and to territorial actors and managers, in order to identify national and trans-national needs and to meet the societal, environmental and economic stakes involved in sustainable development of the countries and populations that share the Mediterranean area. http://www.mistrals-home.org/spip/spip.php?rubrique39
Africa, SIDS	Mitigation, adaptation	French INDC Preparation Facility	Preparing INDCs for some thirty countries
Africa	Mitigation	French-speaking Cluster	Training on NAMAs, GHG inventory and INDCs - 3 workshops in 2013-2014-2015
China	Mitigation	Franco-Chinese Centre	Creation of a Franco-Chinese centre devoted to integrating GHG emissions inventory systems with air pollutants, by combining French expertise (CITEPA) with Chinese ones (Chinese Research Academy in Environmental Sciences in Beijing - CRAES), following contacts made in 2014.
Southern Europe, Mediterranean Basin, Europe, Vietnam	Adaptation	Bilateral and Multi-lateral Cooperation	The National Observatory for the Effects of Global Warming took part in various works: <ul style="list-style-type: none"> - The adaptation steering group set up by the European Commission for preparing a community strategy for adapting to climate change (2013-2014-2015); - In the context of the work of the European Environment Agency: <ul style="list-style-type: none"> - Updating the Climate-Adapt platform - Taking part in drafting topic-based reports - Multilateral meetings between European countries for sharing experience in assessing public adaptation policy (Copenhagen 2015); - Several interventions in seminars and conferences organised in the context of COP21, including for example: Oslo, Prague, Sofia, Bucharest, Zagreb, Algiers, etc. - Welcoming delegations from countries such as Bosnia, Japan, and Turkey; <ul style="list-style-type: none"> a. multilateral dialogue with countries bordering the Alps in the context of the Alpine Convention (Vienna, 2013, 2014 and 2015); b. bilateral workshop on Poland-France adaptation policies (Warsaw, 2014); c. Joint presidency of the Franco-Chinese high-level experts group on climate change (Paris June 2014, Beijing, April 2015) Météo-France and the ministries involved take part in works to set up the global framework for climate services in the context of OMM.

Recipient country/ region	Targeted area	Programme or project title	Description of programme or project ^{b,c}
Latin America and the Caribbean Morocco, Algeria, Tunisia and Lebanon		Support for the set-up of an energy efficiency monitoring system (energy efficiency indicators and energy efficiency assessment)	Continuing the European Odyssey Mure project that has been run for more than 20 years and which has enabled the development and implementation in the European Union of an assessment method for energy savings based on energy efficiency indicators, ADEME has supported the application of that method: <ul style="list-style-type: none"> - In Morocco, Algeria, Tunisia and the Lebanon from 2012 to 2014 in the context of MEDENER (Mediterranean Association of National Energy Control Agencies); - Since 2014, in some twenty or so Latin American and Caribbean countries with CEPAL-UN (United Nations Economics Commission for Latin America and the Caribbean) in the context of IPEEC (International Partnership for Energy Efficiency Cooperation); - Since 2016, more detailed work has been performed with Mexico in the context of cooperation with CONUEE (Comisión Nacional para el Uso Eficiente de la Energía) supported by AFD.
Morocco	Energy efficiency	Institutional twinning between ADEME and ADEREE on energy efficient buildings.	Between 2012 and 2014, this twinning, supported by the European Commission and which had energy efficiency as its central topic, enabled expertise sharing between ADEREE and fifty-odd experts including those from ADEME, around energy efficiency and renewable energies in buildings, industry, transport, farming and urban areas. In particular it has enabled: <ul style="list-style-type: none"> - Supporting and training practitioners in facilitating the application of new thermal regulations for limiting energy consumption in new buildings; - Preparing an energy labelling project to inform consumers of the performance of energy consuming equipment such as air conditioners and refrigerators; - Preparing an energy programme in industry: training trainers in performing energy audits, defining a system for approving consulting engineers, etc.
Africa	Cities, Mitigation and Adaptation	CICLIA	This was decided on in 2016, and funded in part by AFD and by a delegation to AFD of European Union and SECO funds for <ul style="list-style-type: none"> - technical assistance activities for urban Climate planning - preparing shared benefit Climate projects - assistance and capacity building with local project managers
Namibia	Mitigation	Sunref Technical Assistance	Grant in 2016 from AFD for funding technical assistance operations in order to optimise the use of credit lines and to stimulate the emergence of an institutional and sectoral environment favourable to energy mastery (renewable energy and energy efficiency) and the reasoned management of natural resources in Namibia.

Appendices

Appendix I

Contributions to the 3rd biennial report to the UNFCCC

Chapitre I: Pascale Vizy (MTES/DGEC/SCEE/DLCES/BEPM)

Chapitre II: Pascale Vizy (MTES/DGEC/SCEE/DLCES/BEPM), Yves André (CDC), Sik-Keat Lao (CDC)

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Appendix II

Projections - scope of the Convention

In addition to Table CTF 6a) to the Kyoto scope presented in the body of the text, this table presents the projections to the scope of the Convention.

CTF table 6(a): Information on updated greenhouse gas projections under a « with measures » scenario (scope of the Convention)

	GHG emissions and removals							GHG emission projections			
	(kt CO ₂ eq)							(kt CO ₂ eq)			
	Base year (1990)	1990	1995	2000	2005	2010	2015	2020	2025	2030	2035
Sector											
Energy	382 526	382 526	382 416	395 884	404 106	371 059	322 395	300 141	287 742	282 933	281 800
Transport ⁽¹⁾	IE	IE	IE	IE	IE	IE	IE	IE	IE	IE	IE
Industry / industrial processes	67 034	67 034	63 764	53 812	53 059	47 008	44 957	43 345	37 514	34 679	33 816
Agriculture (excluding energy)	83 529	83 529	80 942	84 086	78 957	78 109	78 695	75 577	74 597	73 498	72 321
LULUCF	-26 479	-26 479	-28 775	-23 084	-49 291	-39 345	-35 810	-51 889	-52 469	-55 683	-58 820
Waste management / waste	16 979	16 979	20 375	21 967	21 810	20 591	17 603	15 217	13 097	12 358	10 637
Other (specify)	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE
Gas											
CO ₂ emissions including net CO ₂ from LULUCF	401 974	401 974	400 796	417 896	428 238	392 652	342 459	321 359	309 485	305 249	304 783
CO ₂ emissions excluding net CO ₂ from LULUCF	372 167	372 167	366 006	390 861	375 655	349 902	303 372	266 195	253 741	246 292	242 689
CH ₄ emissions including CH ₄ from LULUCF	70 059	70 059	71 939	70 788	65 587	63 233	59 352	56 079	53 908	53 010	51 067
CH ₄ emissions excluding CH ₄ from LULUCF	71 007	71 007	75 602	72 454	66 786	64 415	60 462	57 186	55 015	54 117	52 174
N ₂ O emissions including N ₂ O from LULUCF	66 192	66 192	67 193	55 037	47 546	41 932	41 442	39 752	38 727	37 694	36 745
N ₂ O emissions excluding N ₂ O from LULUCF	68 573	68 573	69 546	57 323	49 639	44 155	43 609	41 919	40 894	39 861	38 912
HFCs	4 402	4 402	1 898	6 630	13 408	17 410	19 324	16 148	9 921	6 643	5 134
PFCs	5 202	5 202	3 065	2 997	1 760	617	540	499	460	423	394
SF ₆	2 222	2 222	2 599	2 380	1 360	889	522	434	437	439	441
Other (NF ₃)	16	16	6	20	31	32	11	11	11	11	11
Total (without LULUCF)	550 068	550 068	547 496	555 748	557 931	516 766	463 650	434 281	412 949	403 468	398 575
Total (with LULUCF)	523 589	523 589	518 721	532 664	508 640	477 421	427 840	382 391	360 480	347 785	339 755
Memo items											
International bunkers - aviation	8 997	8 997	10 921	14 695	16 156	16 484	17 750	17 389	19 507	21 862	24 489
International bunkers – navigation	8 417	8 417	7 441	9 856	9 103	8 236	5 808	5 810	7 926	8 093	8 160

(1) Transport is included in « energy »

Source: UNFCCC, Citepa/MTES inventory, 2017 Submission and MTES Emissions Projections, 2017

Appendix III

Methodologies for the reporting of France's climate finance in the third biannual report, 2015-2016 data

V.1.1 Definitions

- **Currency exchange rates:** Data is reported in euros and dollars. Official monthly average OECD currency exchange rate for each relevant year (except for funds disbursed in USD, where the amount reported is the amount disbursed in USD and its budgetary counterpart in euros. This is notably applicable for France's contribution to the GEF).
- **Sectors:** France's reporting is based as closely as possible on the DAC definitions. The sectors were determined at project level for bilateral contributions (each institution/instrument might use a slightly different methodology).
- **Climate relevant, adaptation and mitigation:** For multilateral reporting, DAC definitions are used. For bilateral contributions, this was done at project level (each institution/instrument uses a slightly different methodology). Indeed, the Agence Française de développement (AFD), representing the major part of France's bilateral climate commitments, has developed a robust methodology to determine the climate-specific funding for each relevant project and whether its activities are mitigation, adaptation or cross-cutting. This methodology is also applied by the French Facility for Global Environment (FFEM).

AFD defines a "climate" project as a development project with one or more of the following three types of co-benefits with regard to climate issues: (i) mitigation, (ii) adaptation, (iii) support for the implementation of climate policies. A project contributes to mitigation when the emission reductions it brings about are higher than the emissions it generates during its lifespan.

A project is recognized as a "climate/mitigation" project when: (1) either the estimation of its carbon footprint shows that it reduces or avoids (for renewable energy projects) GHG emissions; (2) or, if the carbon footprint cannot be estimated when the commitment is approved, this financing is devoted to actions which contribute to mitigation (studies, capacity building and intermediated bank credit lines for renewable energy and energy efficiency projects). This methodology is strictly compatible with the Common Principles for Climate Change Adaptation Finance Tracking approved by the International Development Finance Club (IDFC) and multilateral development banks (MDBs).

A project (or project component) contributes to adaptation when it limits or reduces the vulnerability of assets, people and ecosystems to the consequences of climate change. AFD's accounting approach for adaptation financing is based on the Common Principles for Climate Change Adaptation Finance Tracking approved by the International Development Finance Club (IDFC) and multilateral development banks (MDBs). A project (or project component) is accounted for under "climate/adaptation" on the basis of (1) the analysis of the context of vulnerability to climate change in the project implementation area; (2) the demonstration of the beneficial impact of the actions planned for the project on the issues of vulnerability to climate change identified in the geographical area; (3) the fact that the project documentation sets out the objective of addressing the identified climate risks and vulnerabilities to climate change.

There are three possibilities for the recognition of budget support and sector-specific aid: (1) Budget support specifically for the climate (climate loans or support for national climate plans) is 100% recognized; (2) For the other budget support or for the support for local authorities, the methodology used aims to reflect the content of the political and sector-specific dialogue with the counterpart (joint monitoring of indicators) and the impacts on the fight against climate change from the integrated approach that this

promotes. This method is based on a proportional accounting of the climate monitoring indicators compared to all the indicators in the monitoring matrix for the public policies implemented. It is backed up by a positive list of actions which, by their nature, are considered to have a climate co-benefit; (3) In the absence of standardized indicators shared with the counterpart to monitor its public policies, there is the possibility to take into account up to 40% of the financing provided there is a cross-cutting “climate” activity that allows the dynamics underlying the action of the local authority or government to be apprehended.

For the two other instruments, FASEP and concessional loans from the French Treasury, France has intended to identify projects matching the RIO marker of the OECD Creditor reporting system (CRS) data base, that suggests to use the MDB/IDFC positive list to identify which projects can be counted as mitigating climate change is used. For adaptation the AFD/FFEM methodology is used as a framework, as it is not possible, at least at this stage, to conduct a thorough analysis of the actual vulnerability of the geographical area. Once the review of the projects is made, the amount considered as climate financing is counted as 100% of the commitment if the RIO marker is flagged as “principal” and 40% if flagged as “significant”. Whenever possible, a finer percentage is applied.

- **Double counting:** We have made a risk assessment and identified at this stage that the only risk of double counting concerned the delegated funds from the European Union to AFD, which we excluded from our reporting.

- **Recipients:** We have taken into account OECD-DAC ODA eligible recipients excluding Annex I countries (Turkey, Ukraine and Belarus).

- **New and additional financial resources:**

In the absence of a universally accepted definition of “new and additional financial resources” in article 4, paragraph 3 of the Convention, France defines additionality as all new commitments from bilateral sources or disbursement made for multilateral instruments which represent an increase over climate-related financial support reported for 2013-2014. This takes into account the fact that the budget and overall spending are negotiated every year. With respect to this definition, all climate finance flows reported in this report are considered new and additional, except France’s financial support related to the *Clean Technology Fund*, for which the loan contribution has been disbursed in 2010.

- **Financing source:** France distinguished flows recordable as ODA from flows recordable as OOF according to DAC definitions.

V.1.2 Core-general/Climate specific (for multilateral channels)

- **Climate specific:** France reported on multilateral climate-specific contributions, taking into account the contributions to multilateral climate funds or environment funds with dedicated climate activity. For the first time, France also reports on the imputed climate-relevant contributions to the multilateral development banks (MDBs). We only account for concessional funds (see methodological elements below). For the GEF, the amount provided has been multiplied by 28,4%, which is the percentage corresponding to the programming for the climate change focal area for the 2015-2018 period.

V.1.3 Provided/committed/pledged

We reported on the amount provided (disbursements) for multilateral entities and committed for bilateral projects: board approval commitment for the AFD flows and FFEM instruments; and financial closure for the FASEP/Treasury loans (commitment according to the DAC definition). We think this gives the clearest view of the state of our contributions to climate change. The total 1bn dollar pledge made by France for the 2015-2018 period to the GCF has not been reflected in the tables (only annual disbursements are reported) and that the commitment made to the Least Developed Countries fund for 2017 is not reflected either. Furthermore, we do not report on the concessional loan made to the World Bank’s Clean Investment Fund (USD 300M), which has been entirely executed prior to 2015.

V.1.4 Level of detail

For bilateral reporting, France reported to the finest detail level possible considering the information available and the specific processes of each institution. This level of detail ranges from a regional approach for some instruments (AFD) to a project level detail for the French Fund for the Global Environment (FFEM) and the French Treasury (FASEP and RPE instruments).

V.1.5 Technology transfer and capacity building

Technology transfer and capacity building are embedded in the activities of multilateral funds and also in the projects and programmes bilaterally undertaken. Some technology projects and programmes are included in the tables below, within the finance provided to developing countries, as these are cross-cutting issues embedded in the different bilateral instruments' activities and project financing.

V.1.6 Measurement of climate-relevant share on concessional contributions to MDBs

France reports for the first time on its climate-relevant share on contributions to several concessional financing instruments: IDA, the African Development Fund, the Asian Development Fund, the IDB special fund and IFAD.

France considers its core contribution to the concessional arms of the multilateral development banks and multiplies it by the average imputed multilateral shares, based on the adjusted shares communicated to the OECD ([http://www.oecd.org/dac/financing-sustainable-development/development-finance-top-ics/Imputed multilateral shares.xlsx](http://www.oecd.org/dac/financing-sustainable-development/development-finance-top-ics/Imputed%20multilateral%20shares.xlsx)). For 2016, we use the average share for 2014/2015 because the MDBs have not yet communicated at the date of realization of this report. In addition, while data on the repartition between mitigation and adaptation is often available at the MDB level, there is no specific share for the concessional funds taken into consideration. Consequently, all climate-relevant share of France's contribution to MDBs is considered cross-cutting. The grant elements of development loans is not recorded.

V.1.7 Private finance

France has been reporting the estimated amount of private climate finance mobilized by its public support since 2015 (covering the years 2013, 2014 and 2015). With regard to policies and measures in place to promote the scaling up of private investment in mitigation and adaptation activities in developing countries, the AFD group has re-commissioned in 2017 a study to identify the private finance leveraged towards mitigation and adaptation activities in developing countries and policies/measures/actions that promote the scaling up of private investment. The work is limited to the French bilateral instrument of AFD, which concentrates more than 91,5 % of France's climate finance provided in 2016.

The methodological approach of this study is similar to that of the 2015 study. However, a few minor changes have been made, reflecting new developments under the aegis of the DAC Working Party on Development Finance Statistics and the OECD DAC Research Collaborative on tracking private climate finance.

Despite significant improvements on methodologies to estimate private climate finance mobilized by AFD climate interventions, some aspects still rely on normative approaches, such as credit lines. For this reason, the figures presented should be considered as estimates. For credit lines, no data is available at sub-project level. A specific methodology based on proxies is therefore used. As for 2015, guarantees were not included.

Key methodological choices

Definitions:

- o Categorization of actors based on >50% public ownership according to OECD-DAC definition, with a filter extracting out French state-owned enterprises acting as "prudent investors"
- o 100% of finance deployed by these institutions are considered public finance
- o No apportioning - 100% of the finance provided by the entity recorded either as public or as private (applying the first point)

■ ■ Classifying developed and developing countries:

o Use existing UNFCCC Annex I, non-Annex I, Annex II categories

• Assigning a geographical origin to finance:

- o Geographical origin is assigned using the concept of “residence” where possible, based on the trans-actor’s centre of economic interest (rather than nationality or legal criteria), as defined in the OECD work on FDIs (Foreign Direct Investments).
- o Pro rata if multiple country ownership
- o All private climate finance flows count (incl. domestic), but distinguish that originating from Annex I countries.

• Types of public interventions:

- o We distinguish between Policy and Project preparation and support. Only the project support (project finance) is included in the calculations

• Specific instruments:

- o Credit lines: a dedicated methodology is developed for credit lines based on assumptions
- o Impact of TA or grants for policy support of project preparation are not included in the numbers.
- o Guarantees are not included either.

• Currency and conversion:

- o USD – OECD conversion rate methodology

• Point of measurement:

- o AFD and Proparco: board approval
- o FFEM: board approval
- o RPE-FASEP: board approval and disbursement

• Value of public interventions:

- o All instruments are calculated at face value.

• Boundaries and value of total private finance

- o Include all private finance (co-financing) within the scope of a particular project (and apply pro-rata, based on the share of the French public finance in the total amount of public finance for the project)

• Data availability:

- o Collect data at project-level.
- o For credit lines proxies are used.
- o Review period: **2015-2016**

- **Causality:** all private finance identified (co-financing) is assumed to have been mobilised by the public intervention. When other public donors involved it is attributed pro-rata based on the share of the French public finance in the total amount of public finance for the project.

- **For credit lines**, there are three options possible to determine public or private status for local banks:

- a. To follow the OECD definition of >50% public ownership and treat all banks with over 50% public shareholders as public finance
- b. As all these local banks (public or not, development bank or not) operate under strict commercial rules similar to private banks we calculate all of it as private finance
- c. To make a difference between local public development banks as public finance because of the explicit public development goal but the other local banks (even when >50% publically owned) as private local finance. For the purposes of this report, the numbers presented are following the first option, more conservative.

