



29 October 2018

**Compilation of information on the minimization of adverse  
impacts in accordance with Article 3, paragraph 14, of the Kyoto  
Protocol, 2018**

**Note by the secretariat**

## Contents

	<i>Page</i>
I. Mandate .....	4
II. Approach .....	5
III. Observations .....	5
IV. Compilation of information on the minimization of adverse impacts in accordance with Article 3, paragraph 14, of the Kyoto Protocol .....	5
1. Australia .....	5
2. Austria .....	6
3. Belgium .....	7
4. Bulgaria .....	7
5. Croatia .....	7
6. Czech Republic .....	7
7. Denmark .....	7
8. Estonia .....	7
9. European Union .....	9
10. Finland .....	12
11. France .....	13
12. Germany .....	21
13. Greece .....	21
14. Hungary .....	26
15. Iceland .....	26
16. Ireland .....	26
17. Italy .....	26
18. Japan .....	29
19. Latvia .....	29
20. Liechtenstein .....	31
21. Lithuania .....	31
22. Luxembourg .....	32
23. Monaco .....	32
24. Netherlands .....	34
25. New Zealand .....	36
26. Norway .....	36
27. Poland .....	38
28. Portugal .....	38
29. Romania .....	39
30. Russian Federation .....	39
31. Slovakia .....	41
32. Slovenia .....	43
33. Spain .....	43

34. Sweden .....	43
35. Switzerland.....	43
36. Ukraine .....	44
37. United Kingdom of Great Britain and Northern Ireland.....	46

## I. Mandate

1. The Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol (CMP), by Decision 15/CMP.1,<sup>1</sup> requested the secretariat to compile annually the supplementary information referred to in paragraph 3 and 4 below.
2. In accordance with Article 3, paragraph 14, of the Kyoto Protocol, each Party included in Annex I to the Convention (Annex I Party) shall strive to implement the commitments mentioned in Article 3, paragraph 1, of the Kyoto Protocol, in such a way as to minimize adverse social, environmental and economic impacts on developing country Parties, particularly those identified in Article 4, paragraphs 8 and 9, of the Convention.
3. In accordance with decision 15/CMP.1,<sup>2</sup> Annex I Parties, which are also Parties to the Kyoto Protocol, shall provide the supplementary information as referred to in paragraph 2 above. Parties included in Annex II to the Convention, and other Annex I Parties that are in a position to do so, shall incorporate information in their submissions on how they give priority, in implementing their commitments under Article 3, paragraph 14, of the Kyoto Protocol, to the following actions, based on the relevant methodologies referred to in decision 31/CMP.1:<sup>3</sup>
  - (a) The progressive reduction or phasing out of market imperfections, fiscal incentives, tax and duty exemptions, and subsidies in all greenhouse-gas-emitting sectors, taking into account the need for energy price reforms to reflect market prices and externalities; The progressive reduction or phasing out of market imperfections, fiscal incentives, tax and duty exemptions, and subsidies in all greenhouse-gas-emitting sectors, taking into account the need for energy price reforms to reflect market prices and externalities;
  - (b) Removing the subsidies associated with the use of environmentally unsound and unsafe technologies;
  - (c) Cooperating in the technological development of non-energy uses of fossil fuels and supporting developing country Parties to this end;
  - (d) Cooperating in the development, diffusion and transfer of lower-greenhouse-gas-emitting advanced fossil-fuel technologies and/or technologies relating to fossil fuels that capture and store greenhouse gases, encouraging their wider use, and facilitating the participation of least developed countries and other Parties not included in Annex I to the Convention in this effort;
  - (e) Strengthening the capacity of developing country Parties identified in Article 4, paragraphs 8 and 9, of the Convention to improve efficiency in upstream and downstream activities relating to fossil fuels, taking into consideration the need to improve the environmental efficiency of these activities;
  - (f) Assisting developing country Parties, which are highly dependent on the export and consumption of fossil fuels, in diversifying their economies.
4. Where the information referred to above has been provided in earlier submissions, Annex I Parties shall include information on any changes that have occurred compared with the information reported in their last submissions.
5. One of the purposes of this compilation is to facilitate the detailed examination by an expert review team of the supplementary information incorporated in the annual inventory during an in-country visit, in conjunction with the review of the national communication, in accordance with decision 22/CMP.1.<sup>4</sup>

---

<sup>1</sup> Decision 15/CMP.1 annex. I.H, paragraph 26.

<sup>2</sup> Decision 15/CMP.1, annex, I.H, paragraph 23.

<sup>3</sup> In accordance with decision 31/CMP.1, paragraph 11, secretariat organized a workshop on reporting methodologies in the context of Article 3, paragraph 14, of the Kyoto Protocol, which was held in Abu Dhabi, United Arab Emirates, from 4 to 6 September 2006. The workshop report is contained in document FCCC/SBI/2006/27.

<sup>4</sup> Decision 22/CMP.1, annex, paragraph 125.

## II. Approach

6. As of 6 June 2018, thirty-seven Parties submitted information in their national inventory reports (NIR) on the minimization of adverse impacts in accordance with Article 3, paragraph 14, of the Kyoto Protocol. The information contained in section IV of this document is reproduced as received from Parties in their 2018 NIRs. The secretariat has, however, made minimal changes to the format of the information to ensure consistency in presentation.

7. There are four different types of presentation:

(a) In the case that majority of the information provided in the 2018 NIR differs from the information provided in the 2017 NIR, the complete text as included in the 2018 NIR is presented in the compilation;

(b) In the case that only a small part of the information provided in the 2018 NIR differs from the information provided in the 2017 NIR, only the difference is presented.

(c) In the case that additional information is provided in the 2018 NIR on top of the information provided in the 2017 NIR, only the additional part is presented;

(d) In the case that no difference was found between the 2018 and 2017 NIRs, it is stated “No additional information was included in the NIR for 2018”.

## III. Observations

8. Out of the NIRs from the thirty-seven Parties, it is observed that thirteen Parties (Australia, Estonia, European Union, France, Greece, Latvia, Lithuania, Monaco, Netherlands, New Zealand, Norway, Russia, United Kingdom of Great Britain and Ireland) provided major changes and/or additional information, twelve Parties provided minor changes or updates, and twelve Parties provided the same information as contained in last year’s NIRs.

## IV. Compilation of information on the minimization of adverse impacts in accordance with Article 3, paragraph 14, of the Kyoto Protocol

### 1. Australia

The following additional information was provided in Australia's NIR for 2018.

#### **How Australia addresses domestic impacts of response measures**

Australia’s is playing its role in global efforts to reduce emissions, while maintaining a strong economy and realising the benefits of the transition to a lower-emissions future. Central to this are the consultation processes that typically accompany policy development in Australia and that enable those potentially affected to raise concerns and present ideas. For example, in conducting the 2017 review of Australia’s climate change policies, Departmental officials consulted widely with businesses across all sectors of the economy and with the community. This included the release of a discussion paper which generated over 350 public submissions. The Department also met with more than 270 stakeholders and the Minister for the Environment and Energy hosted two roundtables attended by 42 business, community, environmental and Indigenous stakeholders.

#### **How Australia addresses the international impacts of Response measures**

Australia looks forward to the upcoming session on the use of economic modelling tools related to the areas of the work programme to take place during SB48, as effective understanding of how to use economic modelling tools can help countries best manage the necessary economic transition to meet Paris Agreement commitments while ensuring quality jobs and strong economies. Since the last submission, Australia has helped develop the G20 Hamburg Climate and Energy Action Plan for Growth in 2017, which highlighted the need to implement the UNFCCC, the Paris Agreement

and the 2030 Agenda for Sustainable Development in a coherent and mutually supportive manner that takes advantage of the significant opportunities for modernising economies, enhancing competitiveness and stimulating employment and growth.

Sustainable economic growth, poverty reduction and the promotion of prosperity are at the heart of Australia's aid program and the Australian Government is committed to integrating climate action throughout the program. For example, this means anticipating what future jobs might look like in a low emissions global economy when supporting education and livelihood programs. The Australian aid program includes targets for promoting prosperity, engaging the private sector and reducing poverty, and mandatory safeguards requirements on all Australian aid investments, including bilateral climate finance programme, ensure potential adverse social and environmental impacts are identified and adequately addressed (new information since the last submission).

Australia provides a range of assistance to support the development and deployment of low emissions technologies in developing countries and to build countries' capacities to implement low emissions development strategies.

For example, Australia is supporting:

- The NDC Partnership, which provides targeted and coordinated technical assistance so that countries can effectively develop and implement robust climate and development plans that enable scaling up of ambitions and impacts of climate actions.

Australia is a member of the NDC Partnership's Steering Committee and has been heavily involved in the development of the Regional Pacific NDC Hub, announced in Germany in November 2017;

## 2. AUSTRIA

The following information was updated in Austria's 2018 NIR compared to its 2017 NIR.

---

The main focus of the assessments is on effects at the national level, but this does not rule out that assessments also consider international effects. In fact, economic effects of measures cannot be analysed in isolation and will necessarily address trade-related effects as well. We note that effects (impacts) of climate change response measures can be both positive and negative, and that maximising positive economic, social and environmental impacts (co-benefits) through good policy design is an important aspect in incentivising climate action at the national, regional and global level. Austria strives to phase out market imperfections that run counter to the objective of the Convention and to take into account externalities. In this relation Austria, as part of the internal market of the European Union, is determined by EU policies to a considerable extent.

- **Market imperfections**

Removing market imperfections is an important target of EU policy. Financial support provided by the Member States to undertakings is regulated at the level of the European Union. The EU Treaty pronounces a general prohibition of "State aid", but exemptions may be granted if they are in the common interest for the EU, for example in favour of environmental protection. The EU has made significant progress in removing imperfections and taking into account externalities e. g. in the energy market and in agriculture.

- **Fiscal incentives**

- **Air Transport Levy**

In December 2010 the Air Transport Levy Act was passed within the Budget Act of the Republic of Austria. From April 2011 all flights starting from an Austrian Airport have to pay a fee at a specific amount per passenger (very few exceptions are granted, e.g. like military or humanitarian flights). An amendment of the Act in 2017 has led to the following fees:

Short distance (within Austria, as well as e.g. Sweden, Cyprus): 3,50 Euros  
Medium Distance (e.g. Iraq, Sudan): 7,50 Euros  
Long Distance (Brazil, Indonesia): 17,50 Euros

### 3. BELGIUM

No additional information was included in Belgium's NIR for 2018.

### 4. BULGARIA

No additional information was included in Bulgaria's NIR for 2018.

### 5. CROATIA

No additional information was included in Croatia's NIR for 2018.

### 6. CZECH REPUBLIC

No additional information was included in the Czech Republic's NIR for 2018.

### 7. DENMARK

No additional information was included in Denmark's NIR for 2018.

### 8. ESTONIA

The following additional information was provided in Estonia's NIR for 2018.

---

Estonia strives to implement its commitments under the Kyoto Protocol in a way that social, environmental and economic impacts on other countries, including developing countries, are minimised. To ensure that European Union's new policy initiatives potential adverse social, environmental and economic impacts on various stakeholders, including developing country Parties, are identified and minimized, an impact assessment of new policy initiatives has been established. Specific guidelines for the impact assessment have been adopted in 2009, called "Impact Assessment Guidelines"<sup>5</sup>. The Impact Assessment guidelines were revised in May 2015, since then called "Better Regulation Guidelines"<sup>6</sup>.

#### **Estonian low-carbon strategy General Principles of Climate Policy until 2050**

In Estonia, impact assessments (which include the environmental impacts) are carried out in the early stages of the policy making process.

For example, a thorough impact assessment was performed on Estonian low-carbon strategy General Principles of Climate Policy until 2050 (GPCP 2050). The results of the impact assessment showed that the overall goal of the GPCP 2050 is achievable and that it will likely to have a positive impact on the economy and energy security.

GPCP 2050 is a vision document that sets a long term GHG emissions reduction target and policy guidelines for adapting to the impact of climate change or ensuring the preparedness and resilience to react to the impact of climate change. Principles and guidelines in the document have to be taken into account when renewing and implementing the cross-sectoral and sectoral strategies and national development plans.

Estonia will be transformed into an attractive environment mainly for the development of innovative technologies, products and services reducing the emission of GHG. In addition, the export and global implementation of such technologies, products and services shall be facilitated for the resolution of global problems.

---

<sup>5</sup> [http://ec.europa.eu/smart-regulation/impact/commission\\_guidelines/docs/iag\\_2009\\_en.pdf](http://ec.europa.eu/smart-regulation/impact/commission_guidelines/docs/iag_2009_en.pdf)

<sup>6</sup> [https://ec.europa.eu/info/better-regulation-guidelines-and-toolbox\\_en](https://ec.europa.eu/info/better-regulation-guidelines-and-toolbox_en)

### **Estonian Energy Development Plan until 2030**

The Government of Estonia approved the *Estonian Energy Development Plan until 2030* (EEDP 2030+) on 19 October 2017. The development plan is aimed at ensuring an energy supply that is available to consumers at a reasonable price and effort and with an acceptable environmental condition, while observing the terms and conditions established in the long-term energy and climate policy of the EU. The most beneficial economic competitiveness aspects must be observed for the purposes of the implementation of EEDP 2030+. The new plan also drafts the benchmarks for renewable energy and energy efficiency operational programmes and the vision for the renovation of buildings.

Expected outcomes of the EEDP 2030+ include:

- reduction of GHG emission in energy sector by 70%;
- renewable energy sources account 50% of final energy consumption (and 28% of domestic primary energy consumption);
- final energy consumption in 2020 and 2030 at the same level as in 2010 (in accordance with the programme Estonia 2020); and
- primary energy supply: 57.7 TWh.

The EEDP 2030+ also includes plans for regional cooperation, particularly with Latvia and Lithuania in terms of security of Energy supply.

### **Co-operation projects with developing countries**

Estonia, among other developed countries, contributes to the cross-border mitigation of climate change and adaptation to its effects within the framework of development cooperation, including, if possible, the best know-how of the country.

Estonian development cooperation has always focused on safeguarding human rights and environmental friendliness. Estonia considers it important to observe the principles of empowering women and gender equality in all activities of development cooperation and humanitarian aid, to ensure the performance and sustainability of development cooperation. Estonia intends to continue to contribute to development cooperation according to its capabilities. The general goal of Estonia's development cooperation is to contribute to the eradication of world poverty and to attain the Sustainable Development Goals. Environmental protection is also one of the three main measures of sustainable development.

Estonia will continue supporting environmentally sustainable development of partner countries by contributing to bilateral projects and multilateral organisations and area funds. The main focus will be on alleviating climate change and adapting to it, for example by supporting renewable energy sources, energy efficiency or transport and industry efficiency projects, as well as by strengthening administrative capacity regarding climate action or supporting solutions of adapting to climate change.

### **Long-term Climate Finance**

The work programme on long-term finance launched by the Conference of the Parties (COP) at its seventeenth session and extended at its eighteenth session, concluded its work at COP 19 in Warsaw with a decision to continue deliberations on long-term finance with three core elements for the period 2014 to 2020. At COP 21 United Nations Climate Change Conference Paris, a number of climate funding announcements were made by developed countries, including Estonia. Estonia pledged to contribute 1 million euros annually until the year 2020 for financing international climate cooperation by supporting environmentally sustainable development in developing countries through contributing to bilateral projects, multilateral organisations and regional funds. The main focus is planned to be on climate change mitigation and adaptation, for example by supporting renewable energy, energy efficiency, sustainable transport and industry efficiency projects, as well as by strengthening administrative capacity regarding climate action or supporting solutions for adapting to climate change.

### **15.2. Information on how Estonia gives priority, in implementing the commitments under Article 3, paragraph 14, to specific actions**



- *The progressive reduction or phasing out of market imperfections, fiscal incentives, tax and duty exemptions and subsidies in all greenhouse-gas-emitting sectors, taking into account the need for energy price reforms to reflect market prices and externalities*

- Pollution charges

The Environmental Charges Act provides the grounds for determining the natural resource charges, the rates of the pollution charge, the procedure for calculation and payment thereof, and the grounds and specific purposes for using state budget revenue obtained from environmental use. Environmental charges are established and imposed based on the need for environmental protection, the economic and social situation of the state and, in the events specified in the Act, also based on the value created by natural resources subject to the charge. A mineral resource extraction charge that exceeds the minimum rates provided for in the Act is established based on the state's goal of earning revenue. In the case of an energy mineral resource, the added value generated by the energy mineral resource is relied upon in addition to the goal of earning revenue. In Estonia a pollution charge for releasing CO<sub>2</sub> into the ambient air was introduced in 2000. Since 2009 the rate of the CO<sub>2</sub> charge has been 2 EUR/t. Installations that emit nitrous oxide, SO<sub>2</sub>, particular matter and heavy metals into the ambient air also pay a pollution charge. The charge varies around 122 and 150 euros per tonne. CH<sub>4</sub> and fluorinated gases (HFC – hydrofluorocarbons, PFC and SF<sub>6</sub>) are not subject to pollution charges. As an exception, the Environmental Charges Act provides the option of replacing the pollution charge (incl. the CO<sub>2</sub> charge) with environmental investment by enterprises. The financing replaces the pollution charge if the polluter implements, at its own expense, environmental protection measures that reduce pollutants or waste by 15% from their initial value.

- *Cooperating in the technological development of non-energy uses of fossil fuels, and supporting developing country Parties to this end.*

One of the steps for that is to organise application rounds in order to support climate projects in developing countries.

- *Strengthening the capacity of developing country Parties identified in Article 4, paragraphs 8 and 9, of the Convention for improving efficiency in upstream and downstream activities relating to fossil fuels, taking into consideration the need to improve the environmental efficiency of these activities.*

Since 2009 Estonia has contributed to the Eastern Europe Energy Efficiency and Environment Partnership Fund (E5P). The E5P Fund has supported energy efficiency and environmental sustainability projects mainly in Ukraine, but since 2013 the activities of the Fund have been extended also to Georgia, Moldova and Armenia and in 2018 also to Belarus. Estonia has taken a long-term commitment to support Ukraine with 160 000 euros, during the period 2013-2018 to support Moldova with 200 000 euros and Georgia with 150 000 euros, between 2018-2019 Estonia has committed to support Belraus with 60 000 euros.

- *Assisting developing country Parties which are highly dependent on the export and consumption of fossil fuels in diversifying their economies*

[.....] For the years 2017-2019 an additional 1M EUR unearmarked support has been decided. Trust Fund supports strengthening of infrastructure interconnections between the EU and its neighbors in the areas of transport and energy, addressing common environmental concerns and supports other relevant activities.

## 9. EUROPEAN UNION

The following additional information was provided in the European Union's NIR for 2018.

---

**15.1 Information on how the EU is striving, under Article 3, paragraph 14, of the Kyoto Protocol, to implement the commitments mentioned in Article 3, paragraph 1, of the Kyoto Protocol in such a way as to minimize adverse social, environmental and economic impacts on developing country Parties, particularly those identified in Article 4, paragraphs 8 and 9, of the Convention**

**Impact assessment of EU policies**

The EU's Third Biennial Report provides a detailed overview of the European policies and measures to mitigate GHG emissions in all sectors. All key strategies and climate policies have been subject to impact assessments as described above. All impact assessments and all opinions of the Impact Assessment Board are published online. (<http://ec.europa.eu/transparency/regdoc/?fuseaction=ia&year=2018&serviceId=10269&s=Suche&error=noresult&CFID=16972558&CFTOKEN=7ce03bad2962e268-DBC06E67-04FA-143C-58603848AD05CA33> since 2017 and [http://ec.europa.eu/smart-regulation/impact/ia\\_carried\\_out/cia\\_2016\\_en.htm#clima](http://ec.europa.eu/smart-regulation/impact/ia_carried_out/cia_2016_en.htm#clima) for years before)

#### **Directive on the promotion of the use of renewable energy - Promotion of biomass and biofuels**

The European Commission has so far (April 2018) recognised 16 voluntary schemes: International Sustainability and Carbon Certification (ISCC), Bonsucro EU, Round Table on Responsible Soy (RTRS EU RED), Roundtable of Sustainable Biofuels (RSB EU RED), Biomass Biofuels voluntary scheme (2BSvs), Red Tractor Farm Assurance Combinable Crops & Sugar Beet Scheme, SQC (Scottish Quality Farm Assured Combinable Crops (SQC) scheme), Red Cert, NTA 8080, RSPO RED (Roundtable on Sustainable Palm Oil RED), NTA 8080, Roundtable on Sustainable Palm Oil RED (RSPO RED), Biograce GHG calculation tool, HVO Renewable Diesel Scheme for Verification of Compliance with the RED sustainability criteria for biofuels, Gafta Trade Assurance Scheme, KZR INIG System, Trade Assurance Scheme for Combinable Crops and Universal Feed Assurance Scheme<sup>7</sup>.

#### **Communication on a policy framework for climate and energy in the period from 2020 to 2030**

As another step in delivering on the EU's target to reduce greenhouse gas emissions by at least 40% domestically by 2030 (with the sectors covered by the ETS having to reduce their emissions by 43% compared to 2005) in line with the 2030 climate and energy policy framework the European Commission is the reform of the EU emissions trading system (ETS) for the period after 2020 which was approved by the Council on 27 February 2018. The emissions trading system is reformed by introducing the following elements:

- The cap on the total volume of emissions will be reduced annually by 2.2% (linear reduction factor).
- The number of allowances to be placed in the market stability reserve will be doubled temporarily until the end of 2023.
- A new mechanism to limit the validity of allowances in the market stability reserve above a certain level will become operational in 2023.

#### **Regulation for energy efficiency labelling**

In July 2017 a Regulation setting a framework for energy efficiency labelling and repealing Directive 2010/30/EU was adopted.<sup>8</sup>

#### **15.2 Information on how the EU gives priority, in implementing the commitments under Article 3, paragraph 14, to specific actions**

- *The progressive reduction or phasing out of market imperfections, fiscal incentives, tax and duty exemptions and subsidies in all greenhouse-gas-emitting sectors, taking into account the need for energy price reforms to reflect market prices and externalities*

[.....] The revised ETS directive adopted in 2018 also contains a number of new provisions to protect industry against the risk of carbon leakage and the risk of application of a cross-sectoral correction factor:

- The share of allowances to be auctioned will be 57%, with a conditional lowering of the auction share by 3% if the cross-sectoral correction factor is applied. If triggered, it will be applied consistently across the sectors.
- Revised free allocation rules will enable better alignment with the actual production levels of companies, and the benchmark values used to determine free allocation will be updated. The sectors at highest risk of relocating their production outside the EU will receive full

<sup>7</sup> <https://ec.europa.eu/energy/en/topics/renewable-energy/biofuels/voluntary-schemes>

<sup>8</sup> [http://ec.europa.eu/smart-regulation/impact/ia\\_carried\\_out/docs/ia\\_2015/com\\_2015\\_0341\\_en.pdf](http://ec.europa.eu/smart-regulation/impact/ia_carried_out/docs/ia_2015/com_2015_0341_en.pdf)

free allocation. The free allocation rate for sectors less exposed to carbon leakage will amount to 30%. A gradual phase-out of that free allocation for the less exposed sectors will start after 2026, with the exception of the district heating sector.

- The new entrants' reserve will initially contain unused allowances from the current 2013-2020 period and 200 million allowances from the market stability reserve. Up to 200 million allowances will be returned to the market stability reserve if not used during the period 2021-2030.
- *Cooperating in the development, diffusion, and transfer of less-greenhouse-gas-emitting advanced fossil-fuel technologies, and/or technologies, relating to fossil fuels, that capture and store greenhouse gases, and encouraging their wider use; and facilitating the participation of the least developed countries and other non-Annex I Parties in this effort;*

In 2017 a new Technology Roadmap was released by the Carbon Sequestration Leadership Forum. This road map indicates that CCS has been proven to work and has been implemented in the power and industrial sectors, but that a number of important challenges remain that must be addressed to achieve widespread commercial deployment of CCS. A number of meetings and workshops are held each year. In 2017 the CSLF held its 7th Ministerial Meeting in Abu Dhabi. The highlight of the meeting was the Ministerial Conference on December 6, which was focused on advancing the business case for carbon capture, utilization, and storage (CCUS). Ministers and designates who attended the conference identified key actions needed to accelerate the large-scale deployment of CCUS. These included the following:

- Working together to ensure that CCUS is broadly accepted and supported as part of the suite of clean energy technologies, along with other low-emission energy solutions.
- Leveraging the success of operational CCUS projects worldwide while emphasizing the urgency of developing and executing new CCUS projects in the future.
- Encouraging the development of regional strategies that strengthen the business case for CCUS and accelerate its deployment.
- Exploring new utilization concepts beyond carbon dioxide (CO<sub>2</sub>) enhanced oil recovery (EOR) that have the potential to add commercial value.
- Supporting collaborative research and development (R&D) on innovative, next-generation CCUS technologies with broad application to both the power and industrial sectors.
- Expanding stakeholder engagement and strengthening links with other global clean energy efforts to increase public awareness of the role of CCUS and build momentum.

Increasing global shared learnings on CCUS by disseminating best practices and lessons learned from CCUS projects and strengthening coordination on R&D efforts globally. The portfolio of CSLF-recognized projects, as of October 2016 was 54 projects spread out over five continents, one additional project was added in 2017.

- *Assisting developing country Parties which are highly dependent on the export and consumption of fossil fuels in diversifying their economies.*

The EU actively undertakes a large number of activities aiming at reducing dependence on the consumption of fossil fuels, in particular the EU supports activities for the promotion of renewable energies and energy efficiency in developing countries contribute to reduction of dependence on fossil fuels, meeting rural electricity needs, and the improvement of air quality. As explained in more detail in the EU's 6th national communication and 1st, 2nd and 3rd Biennial Reports several support programmes exist in this respect. These include:

- Africa, Caribbean and the Pacific (ACP-E) Energy Facility

The ACP-EU Energy Facility (EF) was established in 2005 to co-finance projects on increasing access to modern and sustainable energy services for the poor in African, Caribbean and Pacific (ACP) countries, especially in rural and peri-urban areas. Following the successful implementation of the first Energy Facility, it was decided to create a second Energy Facility, which has later been extended to include more projects than originally foreseen.

Therefore, a total of four Calls for Proposals (CfP) have been made under the EF: under the first EF (9th EDF) only one CfP was launched committing EUR 196 million to supporting projects; under the second EF (10th EDF), EUR 100 million was allocated to the first CfP, EUR 132 million to the second (targeting rural electrification) and EUR 15 million to the third call (targeting fragile states).

A total of 173 projects were selected to receive support to increase access to energy in Africa, the Caribbean and the Pacific, and a total project budget of approximately EUR 800 million has been provided by the EU and other donors. Most projects of the first EF have now ended or are about to be finalized. In addition, many of the projects from the first CfP under the second EF have ended or been extended. Subsequent projects are either about to start or are being implemented. A specific website for the monitoring of the ACP-EU Energy Facility was created under <http://www.energyfacilitymonitoring.eu/>. The present website emphasizes the dissemination of project results. It allows the EU to:

- contribute to the quality in implementation through the dissemination of results, success stories and lessons learned from the Energy Facility projects;

- encourage a community of practice that fosters the exchange of experience between projects.

- Latin America Investment Facility (LAIF)

In 2009-2016 the Facility has had at its disposal a total budget of approximately €323 million, made available under the EU's Development Cooperation Instrument (DCI). Of this amount, LAIF has approved almost €305 million in grants to projects with a combined investment cost of over €8 billion.

### **15.3 EU neighbourhood policy**

[...]. The 2015 review of the EU neighbourhood policy, emphasised strong support to give energy cooperation a greater place in the ENP, both as a security measure (energy sovereignty) and as a means to sustainable economic development and to support greater energy independence through support to diversification of energy sources, better cooperation on energy efficiency, and transition to the low carbon economy (European Commission 2015c).

## **10. FINLAND**

The following additional information was provided in the Finland's NIR for 2018 .

---

Finland's development policy has as one of its core objectives to diversify the economies of developing countries, including developing countries that are highly dependent on the export and consumption of fossil fuels. Finland supports the business environment of developing countries through legal and regulatory reforms as well as economic infrastructure. Finland also provides direct support to companies active in developing countries. During the current cabinet period (2015 to 2019) especially the direct support instruments that strengthen private sector financing, capacity and global technology and trade networks have been developed further and have received additional financing.

Finland promotes policy coherence for sustainable development at the national, EU and global levels. Global responsibility and policy coherence are key principles in the Government report submitted to the Parliament in 2017 on the implementation of the 2030 Agenda. Finland's Development Policy is largely based on the 2030 Agenda. Policy coherence on themes, such as food security, trade and development, tax and development, and security and development, have been strengthened both nationally and internationally. Specific action plans exist in tax and development (present) and trade and development (past).

Finland has consistently and in the long term worked to reform harmful fossil fuel subsidies for both climate and wider environmental, social and economic reasons. We are part of the Friends of Fossil Fuel Subsidy Reform (FFFSR), playing an active role in all relevant policy arenas on behalf of reform. In addition, in our Action Programme on Tax and Development 2016 to 2019 we recognize fossil fuel subsidy reform as part of the effective management of public resources.

**Table 15.1-1** Summary of specific actions to minimise the adverse impact of response measures in developing countries

<i>Action</i>	<i>Implementation in Finnish policy</i>
(a) The progressive reduction or phasing out of market imperfections, fiscal incentives, tax and duty exemptions and subsidies in all greenhouse-gas-emitting sectors, taking into account the need for energy price reforms to reflect market prices and externalities.	[...] Finland is member to the Friends of Fossil Fuel Subsidy Reform group.

## 11. FRANCE

The following additional information was provided in France's NIR for 2018 .

### 15.1 Description des externalités potentielles des politiques et mesures de la France

Les parties doivent selon l'article 3.14 du protocole de Kyoto faire en sorte que la mise en oeuvre de leurs politiques nationales dans le cadre du protocole de Kyoto ne nuise pas aux autres parties. De nouvelles actions entreprises ont été menées en 2015.

#### Impacts des politiques et mesures

La France met en oeuvre chaque année de nombreuses actions de renforcement de capacité des pays en développement et de transfert de technologie. Ces actions permettent de minimiser les effets adverses des politiques et mesures. Elles sont présentées de façon détaillée dans ce rapport bisannuel mais également chaque année dans le rapport national d'inventaire.

En plus du transfert de technologie et d'expertise, la France aide les pays en développement à renforcer et à enrichir leurs systèmes d'observation du changement climatique via son réseau d'observation du climat mais également ses projets de recherche et de coopération (voir le chapitre VIII de la septième communication nationale).

Le tableau ci-dessous liste les effets directs et indirects estimés de certaines politiques et mesures climatiques de la France.

Le tableau à l'adresse Internet suivante liste les effets directs et indirects estimés de certaines politiques et mesures climatiques de la France, page 24:

[http://unfccc.int/national\\_reports/annex\\_i\\_natcom/submitted\\_natcom/items/10138.php](http://unfccc.int/national_reports/annex_i_natcom/submitted_natcom/items/10138.php)

#### Renforcement de capacité

Le spectre thématique du renforcement de capacité de la France s'élargit avec les années. La septième communication nationale et le troisième rapport bisannuel de la France, publiés en janvier 2018, sont l'occasion de mettre en avant les progrès réalisés en matière d'échanges et de partages sur les cadres et outils d'atténuation et d'adaptation aux effets du changement climatique. Les principaux éléments sont repris ici et dans le NIR.

#### L'adaptation au changement climatique et l'intégration des questions climatiques dans les politiques nationales

La lutte contre le changement climatique est une priorité nationale et les mesures nécessaires pour limiter son ampleur, par la baisse de nos émissions de gaz à effet de serre (i.e. l'atténuation du changement climatique), font l'objet du Plan climat de la France, mis à jour régulièrement, la dernière version a été publiée en juillet 2017. Préparé à la demande du Président de la République et du Premier ministre, le Plan Climat vise à mobiliser l'ensemble du gouvernement sur les mois et années à venir pour faire de l'Accord de Paris une réalité pour les Français, pour l'Europe et pour l'action diplomatique de la France. Avec le Plan Climat, la France accélère l'application opérationnelle de l'Accord de Paris.

La France est engagée dans différentes coalitions qui participent au renforcement des capacités des pays en développement, pour les aider à monter en compétence et élaborer et mettre en oeuvre des politiques de réduction des émissions et d'adaptation au changement climatique. Par exemple, le programme pour l'efficacité énergétique dans les bâtiments (PEEB), lancé par l'Agence Française de Développement, la GIZ et l'ADEME à la COP22, vise à créer une nouvelle facilité internationale dédiée à l'efficacité énergétique dans les bâtiments, pour les pays en développement et émergents. D'autres exemples illustrent le soutien financier et la contribution au renforcement de capacités, tels que l'initiative « Mobilise your City », qui aide les villes et les États à se doter de politiques urbaines bas carbone, ou encore l'initiative sur les systèmes d'alerte précoce pour la résilience au changement climatique (CREWS), qui agit pour l'amélioration des systèmes d'alertes précoces face aux catastrophes naturelles dans les pays les moins avancées, avec pour objectif la mobilisation de 100 millions de dollars d'ici 2020 pour ce sujet peu représenté dans les aides multi ou bilatérales.

La France a participé à plusieurs projets visant à renforcer les capacités d'adaptation au changement climatique de ses membres. Des exemples figurent dans le tableau ci-dessous.

<i>Bénéficiaire Pays/ Région</i>	<i>Champ</i>	<i>Programme ou titre du projet</i>	<i>Description du programme ou du projet</i>
Bénin, Gabon, Ouganda, Kenya	Mitigation, adaptation, INDC	Africa4Climate	Appui à l'élaboration et la mise en oeuvre des stratégies de développement sobres en carbone et résilientes aux changements climatiques en Afrique, financé par l'AFD et le FFEM et mis en oeuvre par Expertise France.
Océan indien occidental	Adaptation xxxxx	Indian Ocean Commission	Appui de l'Onerc en 2014 à la définition d'un réseau d'échange de données dans la zone de l'Océan Indien ouest auprès de toutes les délégations nationales de la zone.
Afrique	Multiple Areas	AMMA	Concernant le SMOC en Afrique, l'expérience internationale AMMA s'est prolongée depuis 2010. AMMA-CATCH, système d'observation pour un suivi à long terme des impacts de la mousson en Afrique de l'Ouest a été maintenu. Il avait été initié par le MESR et il bénéficie du soutien de l'IRD (Institut de recherche pour le développement) et de l'INSU (L'Institut national des sciences de l'Univers).
Bassin méditerranéen	Multiple Areas	MISTRALS	Lancé en 2008 pour une durée prévue jusqu'en 2020, MISTRALS a pris de l'ampleur sur le terrain en 2010. C'est un méta-programme international de recherches fondamentales et d'observations interdisciplinaires et systématiques dédié à la compréhension du fonctionnement et de l'évolution de l'environnement dans le bassin méditerranéen sous les pressions du changement global anthropique pour en prédire l'évolution future. Au-delà de sa vocation académique, MISTRALS a également pour ambition de transformer les objectifs et résultats de recherche en

<i>Bénéficiaire Pays/ Région</i>	<i>Champ</i>	<i>Programme ou titre du projet</i>	<i>Description du programme ou du projet</i>
			<p>concepts et données accessibles aux décideurs, acteurs territoriaux et gestionnaires, afin d'identifier les besoins et nécessités nationaux et transnationaux et de répondre aux enjeux sociétaux, environnementaux et économiques pour le développement durable des pays et des populations partageant l'aire méditerranéenne.</p> <p><a href="http://www.mistrals.home.org/spip/spip.php?rubrique39">http://www.mistrals.home.org/spip/spip.php?rubrique39</a></p>
Afrique, SIDS	Mitigation, Adaptation	Facilité française de préparation aux INDC	Préparation des INDC d'une trentaine de pays
Europe du Sud, Bassin méditerranéen, Europe, Vietnam	Adaptation	Bilateral and multilateral cooperation	<p>L'Observatoire National sur les Effets du Réchauffement Climatique, a participé à différents travaux :</p> <ul style="list-style-type: none"> <li>-l'adaptation steering group installé par la Commission européenne pour l'élaboration d'une stratégie communautaire d'adaptation au changement climatique (2013-2014-2015)</li> <li>-dans le cadre des travaux de l'agence européenne de l'Environnement: <ul style="list-style-type: none"> <li>-Mise à jour de la plate-forme Climate-Adapt</li> <li>-Participation à la rédaction des rapports thématiques</li> <li>-Rencontre multilatérale de pays d'Europe pour le partage d'expériences en matière d'évaluation des politiques publiques d'adaptation (Copenhague, 2015);</li> <li>-Interventions nombreuses à des séminaires et conférences organisées dans le cadre de la COP21, dont par exemple: <ul style="list-style-type: none"> <li>Oslo, Prague, Sofia, Bucarest, Zagreb, Alger...</li> <li>- Accueil de delegations de pays tels que Bosnie, Japon, Turquie, <ul style="list-style-type: none"> <li>a. dialogue multilateral avec les pays riverains de l'arc alpin dans le cadre de la convention alpine (Vienne, 2013, 2014 et 2015);</li> <li>b. atelier de travail bilatéral sur les politiques d'adaptation Pologne-France (Varsovie, 2014);</li> </ul> </li> </ul> </li> </ul> </li> </ul>

<i>Bénéficiaire Pays/ Région</i>	<i>Champ</i>	<i>Programme ou titre du projet</i>	<i>Description du programme ou du projet</i>
			<p>c Co-présidence du groupe franco-chinois d'experts de haut niveau sur le changement climatique (Paris Juin 2014, Peking Avril 2015)</p> <p>Météo-France et les ministères concernés participent aux travaux de mise en place du cadre mondial pour les services climatiques dans le cadre de l'OMM.</p>
Afrique	Cities, Mitigation and adaptation	CICLIA	<p>Décidé en 2016, financement en partie par l'AFD ainsi qu'en délégation à l'AFD de fonds de l'Union Européenne de de SECO d'activités</p> <ul style="list-style-type: none"> <li>- d'accompagnement technique à la planification Climat des villes</li> <li>- de preparation de projets à co-bénéfices Climat</li> <li>- d'assistance et de renforcement de capacité auprès des maîtrises d'ouvrage locales</li> </ul>
Océan indien occidental	Adaptation	Maurice	Projet ACCION (Adapation to Climate Change action in Mauritius) porté par l'AFD en septembre 2016

La France participe depuis 2014, techniquement et financièrement, aux activités du « cluster francophone » en cofinçant avec la Belgique et l'Allemagne des ateliers de renforcement de capacité à l'intention des pays en développement francophones. Le Cluster francophone est une initiative du Partenariat International sur l'Atténuation et le MRV. Il a été créé en 2013. Il a pour but de permettre des échanges d'informations, d'expertises et d'expériences entre partenaires francophones, pays en voie de développement et pays développés, concernant les inventaires de GES, le développement de NAMA, le processus MRV et la formulation des contributions prévues déterminées au niveau national (INDC en anglais). Plusieurs ateliers ont été organisés entre 2013 et 2015 (voir <http://mitigationpartnership.net/cluster-francophone>). Un side event de présentation du retour d'expérience de ces ateliers a eu lieu lors de la COP 21 de Paris. En 2016, deux nouveaux ateliers ont été organisés, le premier en avril à Abidjan et le second en décembre à Casablanca. En 2017, un nouvel atelier a été organisé à Rome.

## 15.2 Ressources financières

Lors de l'Assemblée Générale des Nations Unies, en septembre 2015, la France a annoncé une augmentation de ses financements climat annuels de 3 Md€ en 2015 à 5 Md€ en 2020, dont 1 Md€ seront consacrés au financement de l'adaptation aux changements climatiques. Le Comité interministériel de la coopération internationale et du développement (CICID) du 30 novembre 2016 a confirmé cet engagement et rappelé l'objectif de doubler les financements français en faveur de l'adaptation au dérèglement climatique pour atteindre au moins 1 milliard d'euros par an en 2020. Il a en outre précisé les orientations stratégiques en matière de lutte contre les changements climatiques, notamment le renforcement de l'Agence française de développement (AFD) et l'évolution de sa stratégie et de ses modes d'intervention pour contribuer à la mise en oeuvre des



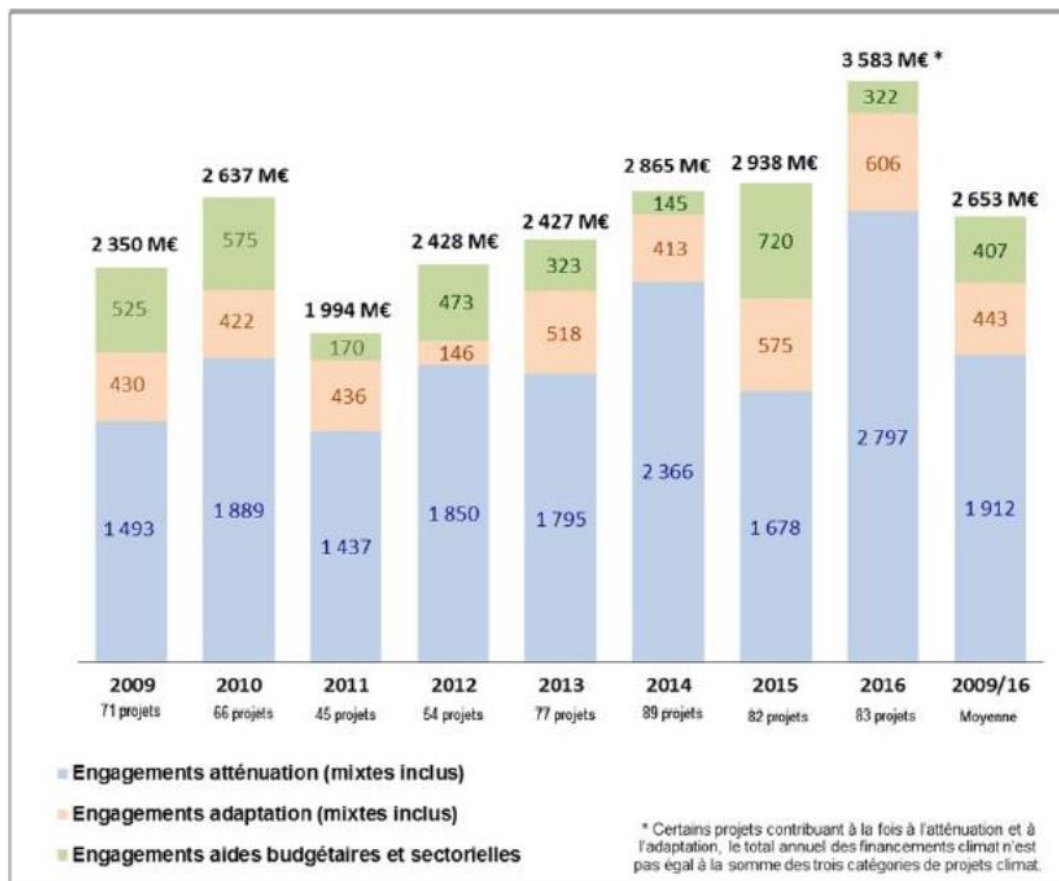
objectifs de l'Accord de Paris et des engagements pris par les Etats au travers des contributions déterminées au niveau national (CDN). Le CICID réaffirme également l'orientation prioritaire de l'aide au développement française vers l'Afrique.

Entre 2013 et 2016, la France a augmenté de 48,5% ses financements publics pour l'atténuation et l'adaptation aux changements climatiques dans les pays en développement, à travers des sources bilatérales et multilatérales. En 2016, le volume total de financements fournis par la France s'établissait ainsi à plus 3,3 milliards d'euros (3,7 md USD), contre 2,2 milliards d'euros en 2013 (3 md USD).

- Coopération bilatérale

#### *Soutien financier fourni par le groupe Agence française de développement*

La France est un acteur majeur de l'aide bilatérale au développement dans le domaine du climat avec un champ d'intervention très vaste, un niveau d'expertise reconnu et un engagement financier substantiel. Elle s'appuie principalement sur le groupe Agence française de développement (AFD et sa filiale pour le secteur privé PROPARCO), opérateur principal de l'aide publique bilatérale au développement français avec plus de 24 milliards d'euros de financements en faveur du climat engagés depuis 2005.



En 2016, les autorisations de financement « à co-bénéfice climat » du Groupe AFD s'élèvent à 3,06 milliards d'euros de financements (soit 3,38 Mds USD), contre 2,6 milliards d'euros en 2015. Les financements du Groupe octroyés en 2016 en faveur de l'atténuation ont connu une forte hausse (+31,5% par rapport à 2015) et atteignent près de 2,2 Mds€ (hors projets mixtes atténuation/adaptation). Les engagements dans le domaine de l'adaptation représentent 334,8 M€ en 2016 et représentent 11% de l'activité « climat » de l'AFD (hors projets mixtes atténuation/adaptation dont le prorata dédié à l'adaptation est estimé représenter 166,4 M€, portant les financements dédiés à l'adaptation à 16,4% des engagements totaux du groupe AFD). Avec un niveau d'engagements climat en 2016 correspondant à 52% de l'activité de l'AFD (55% en 2015) et 36% de l'activité de PROPARCO (32% en 2015), le groupe a par ailleurs dépassé ses objectifs annuels.

Afin de s'assurer que les financements fournis répondent aux besoins des pays récipiendaires en matière d'atténuation et d'adaptation aux changements climatiques, les agences locales de l'AFD identifient les projets et besoins des pays récipiendaires en lien avec les partenaires et maîtrise d'ouvrage assurée par ces pays. Elle s'appuie également sur la signature de contrats de financement avec les autorités nationales et locales des pays d'intervention. En outre, l'AFD a déployé, à la suite de la COP21, plusieurs instruments spécifiques permettant d'accompagner la mise en oeuvre des engagements climatiques des pays en développement, à l'exemple d'une « facilité CDN », d'un montant de 30 M€, visant à accompagner une quinzaine de pays dans la traduction de leurs engagements volontaires de réduction des émissions de gaz à effet de serre et d'adaptation en plans d'investissement, avec une concentration sur l'Afrique et l'adaptation. Plusieurs autres facilités, faisant appel à des cofinancements de l'Union Européenne, visent également à accompagner la mise en oeuvre des engagements climatiques des pays en développement. On notera à titre d'exemple une facilité pour les énergies renouvelables en Afrique de 24 M€ ou encore le « fonds CICLIA », doté de 12 M€, visant à accompagner les villes d'Afrique dans la mise en oeuvre de leurs politiques de lutte contre le changement climatique, dont le déploiement est en cours jusqu'en 2020.

### ***Soutien financier fourni par le fonds français pour l'environnement mondial***

Le Fonds Français pour l'Environnement mondial (FFEM) est un fonds public bilatéral créé en 1994 et destiné à favoriser la protection de l'environnement dans les pays en développement, autour de six thématiques : changements climatiques, biodiversité, eaux internationales, dégradation des terres incluant la désertification et la déforestation, polluants organiques persistants et protection de la couche d'ozone. Il intervient dans le respect des engagements stratégiques de la France et des accords multilatéraux environnementaux qu'elle a signés, et se distingue d'autres initiatives publiques nationales en mettant l'innovation au coeur de son action.

Les priorités thématiques et géographiques du FFEM correspondent aux orientations définies par le gouvernement français dans le cadre du Comité interministériel de la coopération internationale et du développement (CICID).

Les axes thématiques fondamentaux du FFEM, correspondant à la production de biens publics mondiaux tels que définis dans les grandes conventions internationales ou forums internationaux y afférents, concernent :

- la lutte contre le changement climatique, avec, entre autres, une spécificité pour l'adaptation (au moins 35% des engagements totaux) ;
- la préservation et la gestion de la biodiversité et des ressources naturelles (au moins 35% des engagements) ;
- la protection des eaux internationales continentales et marines ;
- la lutte contre la désertification et la dégradation des terres, y compris la déforestation ;
- la lutte contre les polluants chimiques, en particulier le mercure ;
- l'élimination des substances qui appauvrissent la couche d'ozone stratosphérique.

Les priorités géographiques du FFEM incluent l'Afrique et la Méditerranée. Pour la période 2015-2018, l'objectif fixé est d'engager au moins deux tiers des ressources du Fonds sur ces régions.

Depuis 1994, il a financé 301 projets pour un montant total de plus de 354 millions d'euros, avec près de 3,5 milliards d'euros de cofinancements. Sur ce total, la part du changement climatique représente 103 projets pour un total d'engagement de 129 millions d'euro, répartis comme suit :

- Afrique et Méditerranée : 69%
- Amérique latine et Caraïbes : 16%
- Asie-Pacifique : 11%
- Europe de l'Est : 4%.

La reconstitution des engagements financiers du FFEM s'effectue par périodes quadriennales. Sur la période 2015-2018, le FFEM mobilise 90 M€ de financements, avec un objectif d'allouer au moins 35 % de ses fonds à la lutte contre les changements climatiques, dont la moitié sur la thématique spécifique de l'adaptation. En 2015-2016, le FFEM a ainsi alloué un volume

d'engagement total de 39 M€ pour 28 projets, dont 18,8 M€ consacrés à la lutte contre les changements climatiques (soit 48% de ses engagements financiers sur la période).

#### ***Soutien financier fourni sous forme de dons (FASEP) et de prêts par le Trésor français***

Le ministère de l'économie et des finances contribue, sous forme de dons, au financement d'études de faisabilité, d'assistance technique et de démonstrateurs de technologies innovantes dédiés à l'environnement et au développement durable, dans le cadre des fonds d'étude et d'aide au secteur privé (FASEP). Cet instrument finance des prestations réalisées par des bureaux d'études français et bénéficie à des entités publiques dans les pays éligibles à l'Aide publique au développement et pour des projets de développement économique durable répondant aux besoins de ces pays (meilleur accès à l'eau, aux énergies renouvelables, amélioration de l'offre de transports, etc.). Le ministère de l'économie et des finances soutient également, par l'intermédiaire de prêts du Trésor très concessionnels (élément-don d'au moins 35% par rapport à un taux de marché de référence), des projets d'infrastructures portés par des entités publiques dans des pays émergents éligibles à l'aide publique au développement. Des prêts non concessionnels peuvent également depuis 2015 être octroyés sur de nombreuses géographies. Les secteurs concernés visent essentiellement le développement durable et la thématique du changement climatique (transports de masse, eau et environnement, énergies renouvelables, etc.). Sur la période 2013-2016, 342 M€ ont été engagés sous forme de prêts du Trésor ayant un co-bénéfice climat et 21,5 M€ sous forme de dons dans le cadre de FASEP.

- **Coopération multilatérale**

Avec une contribution de 9,5 milliards de dollars en 2016, la France est le cinquième bailleur mondial en volume parmi les pays de l'OCDE en matière d'aide publique au développement multilatérale et se situe au troisième rang des pays du G7 en termes de contribution rapportée au revenu national brut. Elle considère que le système multilatéral se doit d'être exemplaire et moteur en matière de lutte contre les changements climatiques, avec notamment pour finalité d'appuyer la mise en oeuvre des contributions déterminées au niveau national par les pays en développement signataires de l'accord de Paris. A ce titre, la France est l'un des principaux contributeurs aux institutions financières et fonds multilatéraux dédiés au climat.

Une part importante de l'action de la France est dédiée à sa participation aux banques de développement et aux fonds multilatéraux de développement, tels l'Association internationale de développement (AID), guichet concessionnel de la Banque mondiale, le Fonds africain de développement (FAD), le guichet concessionnel de la Banque africaine de développement, le Fonds asiatique de développement (FAsD), le fonds spécial de la banque interaméricaine de développement et le fonds international de développement agricole (FIDA). Ces banques et fonds consacrent une partie de leurs ressources à la lutte contre les effets du changement climatique. La France comptabilise pour la première fois la part « climat » imputable à sa contribution dans ces fonds concessionnels. En 2016, la part « climat » des décaissements réalisés dans ces institutions est estimée représenter 103 M€.

#### ***Contribution au Fonds vert pour le climat***

Le Fonds vert pour le climat, décidé à la conférence climat de Copenhague en 2009, a vocation à devenir le principal fonds multilatéral consacré au financement de l'atténuation et l'adaptation des pays en développement vers des économies sobres en carbone et résilientes. Sa capitalisation initiale est de 10,3 Mds USD. Il vise une répartition équilibrée entre atténuation et adaptation et une allocation minimale de 50 % de ses ressources consacrées à l'adaptation pour les pays les moins avancés, les Etats africains et les petits Etats insulaires en développement. Au 31 décembre 2016, sur un volume d'engagements de 1,5 milliards de dollars, 47% des engagements du fonds visaient des projets d'atténuation, contre 28% pour l'adaptation. Les projets mixtes atténuation-adaptation représentent 25% du volume engagé. Par ailleurs, à fin 2017, 54 projets pour un montant total de plus de 2,6 milliard de dollars[JJC1] . En termes de répartition géographique, 35 % des projets approuvés à ce jour sont en Afrique. Les financements au bénéfice des pays les moins avancés représentent plus de 500 millions de dollars. L'Agence française de développement (AFD) et sa filiale Proparco, spécialisée dans le financement du secteur privé, ont été accréditées au Fonds vert. La France contribue à hauteur d'un milliard de dollars au Fonds vert pour le climat, soit la quatrième contribution en montant et la cinquième en équivalent-don. Cette contribution inclut 489 M€ en don pur et 285 M€ en prêt concessionnel garanti par l'Etat français. Après un premier versement de 104 M€ de don en 2015, un second versement de 62 M€ a été réalisé en 2016, en avance sur les

engagements pris. Conformément au calendrier prévu pour les versements, en 2017, la France poursuivra [JJC2] son engagement à hauteur de 162 M€ en don et décaissera en outre l'intégralité du prêt concessionnel. Le fonds vert pour le climat vise un équilibre entre les financements dédiés à l'atténuation aux changements climatiques et ceux dédiés à l'adaptation.

#### ***Contribution au Fonds pour l'environnement mondial***

Créé en 1991, le Fonds pour l'environnement mondial, dont la France a été l'un des promoteurs principaux aux côtés de l'Allemagne, est l'un des principaux instruments multilatéraux en matière de préservation de l'environnement mondial. Ce fonds intervient, outre la réduction des émissions de gaz à effet de serre, dans les domaines de la protection de la biodiversité, de la protection des eaux internationales, des luttes contre l'appauvrissement de la couche d'ozone, contre la dégradation des sols et contre les polluants organiques persistants.

Le FEM est le mécanisme financier pour cinq conventions :

- Convention sur la diversité biologique (CDB) ; - Convention-cadre des Nations Unies sur les changements climatiques (CCNUCC) ;
- Convention de Stockholm sur les polluants organiques persistants (POP) ;
- Convention des Nations Unies sur la lutte contre la désertification (CNULD) ;
- Convention de Minamata sur le Mercure

La France contribue à hauteur de 200,7 M€ (300 M\$) au Fonds pour l'environnement mondial pour la période 2015-2018 (dont 28,4%, soit 57 M€, sont dédiés spécifiquement au financement d'actions liées aux changements climatiques). La France apporte la cinquième contribution en valeur à ce fonds. L'intégralité des financements climat du FEM correspond à des projets d'atténuation aux changements climatiques.

#### ***Contribution au Fonds pour les pays les moins avancés***

Le fonds pour les pays les moins avancés (Least Developed Countries Fund – LDCF) est dédié à l'adaptation et aux transferts de technologies dans les pays en développement, hébergés et gérés par le FEM. La France y a apporté 15 M€ en dons en 2016 (un second versement complémentaire de 10 M€ aura lieu en 2017[ ).

#### ***Contribution au Fonds d'adaptation***

Le Fonds d'adaptation a été institué en 2007 et est placé sous le protocole de Kyoto. Il a mobilisé environ 650 MUSD depuis sa création. Il est dédié au financement exclusif de projets d'adaptation dans les pays en développement, ciblant en particulier les plus vulnérables. Depuis sa création, le fonds a financé 66 projets, dont 22 en Afrique, 20 en Amérique latine et Caraïbes, 18 en Asie, 5 dans le Pacifique et un projet en Europe de l'Est. 27% des bénéficiaires figurent parmi les pays les moins avancés et 18% sont des Petits Etats insulaires en développement (PEID). La France, septième contributeur à ce fonds, a contribué à hauteur de 5,6 millions de dollars US en 2015.

### **15.3 Transfert de technologie**

Depuis la sixième communication nationale, le contexte technologique a fortement évolué. On a vu se développer et se déployer à grande échelle des filières bas-carbone, particulièrement dans le secteur des énergies renouvelables et de l'efficacité énergétique. Les pays sont de plus en plus nombreux à vouloir mettre en oeuvre ces technologies, au Nord comme au Sud, puisqu'on estime à plus de 164 le nombre de pays s'étant dotés d'un objectif de production d'énergie renouvelable, dont la moitié parmi les pays en développement.

Sur le plan bilatéral, cette coopération passe par le biais de travaux avec l'Afrique notamment, mais également de pays comme le Brésil, l'Indonésie ou la Chine. Il s'agit notamment de coopérations stratégiques dans le domaine des énergies renouvelables et de l'efficacité énergétique.

Dans cette phase de mise en oeuvre des politiques publiques, le secteur privé et la coopération décentralisée jouent un rôle particulièrement important en tant qu'acteurs opérationnels développant sur le terrain les capacités nécessaires à implanter les projets bas-carbone et portant ces transferts de technologie. Les entreprises et collectivités françaises sont particulièrement actives en la matière et développent des projets aussi bien matures qu'innovants dans un nombre grandissant de pays. Le 21 mai 2015, M. Laurent Fabius, Ministre des Affaires étrangères et du développement international, et M. Matthias Fekl, secrétaire d'Etat chargé du commerce extérieur, de la promotion du tourisme et des Français de l'étranger, ont nommé M. Jean Ballandras, Secrétaire général d'AKUO ENERGY,

Fédérateur Export « Energies renouvelables ». Celui-ci aura pour mission de promouvoir la filière française des énergies renouvelables à l'international et d'accélérer le déploiement de solutions concrètes sur le terrain. Cette action permettra de renforcer la coopération technologique avec un certain nombre de pays dans le domaine des énergies renouvelables.

Sur le plan multilatéral, la coopération technologique de la France se fait au travers des grands partenariats énergétiques internationaux, comme l'Agence internationale de l'énergie (AIE), et notamment au sein de la plate-forme internationale de l'AIE sur les technologies sobres en carbone établie en octobre 2010, la CEM (Clean Energy Ministerial) ou encore l'IPEEC (International Partnership for Energy Efficiency Cooperation). Dans un contexte plus large d'opérationnalisation de la démarche SE4All (Sustainable Energy for All), la montée en puissance de l'IRENA (International Renewable Energy Agency), agence récente ayant une vocation forte d'appui aux pays et dans laquelle la France est le sixième contributeur, mérite d'être saluée. Il convient également d'évoquer les traités multilatéraux de grande ampleur, au premier rang desquels la Convention cadre des Nations Unies sur les changements climatiques (CCNUCC) permettant l'appui et l'accélération des transferts de technologie et le partage d'expériences, sous laquelle un Mécanisme en faveur du transfert de technologies en appui à l'atténuation et à l'adaptation au changement climatique vers les pays en développement a été créé et est maintenant pleinement opérationnel. Les travaux du PNUE (Programme des Nations Unies pour l'Environnement) ou de la FAO (Food and Agriculture Organisation) favorisent aussi le partage d'expérience et d'outils utiles à la transition bas-carbone.

La coopération technologique telle que représentée dans la table CTF ci-dessous doit être comprise au sens large, et intègre notamment des transferts de savoir-faire, de méthodes, ou d'outils, nécessaires à la mise en oeuvre des technologies de la transition bas-carbone. Le tableau CTF présenté n'a aucune vocation à être exhaustif, mais vise plutôt à montrer via quelques exemples comment les secteurs publics et privés français se sont saisis de la question à tous les niveaux. Ceci permet de générer une coopération technologique de grande ampleur allant au-delà des canaux bilatéraux et multilatéraux classiques de l'aide publique au développement.

## 12. GERMANY

The following additional information was provided in Germany's NIR for 2018 .

<p><b>1/CMP.8 paragraph 23</b> PPSR account</p>	<p>The opening of the PPSR account is linked to the entry into force of the Doha amendment (Article 73f introduced by the Delegated Regulation 2015/1844). Since only 108 countries have ratified out of the 144 needed in total, it currently prevents the carry-over of AAUs and thus the creation of PPSR accounts in the Union Registry.</p>
<p><b>Annual Review report</b> Previous Expert Review Team recommendations</p>	<p>The last available report (FCCC/ARR/2015/DEU published 12.04.2017) does not contain recommendations related to the national registry.</p>

## 13. GREECE

The following information was updated in Greece's 2018 NIR compared to its 2017 NIR.

### Impact assessment of EU policies

In the EU a wide-ranging impact assessment system accompanying all new policy initiatives has been established. This regulatory impact assessment is a key element in the development of the Commission's legislative proposals. The Commission is required to take the impact assessment reports into account when taking its decisions, while the impact assessments are also presented and discussed during the scrutiny of legislative proposals from the Council and the Parliament. This approach ensures that potential adverse social, environmental and economic impacts on various stakeholders (in the case on developing country Parties) are identified and minimized within the legislative process. In general, impact assessments are required for all legislative proposals, but also

other important Commission initiatives which are likely to have far-reaching impacts. Below the impact assessment process implemented in the EU policy making is explained in more detail in order to better demonstrate how the EU is striving for all strategies and policies to minimize their adverse impacts. Specific guidelines for the impact assessment have been adopted in 2009, called “Impact Assessment Guidelines”(European Commission 2009a). The Impact Assessment guidelines were revised in May 2015, since then called “Better Regulation Guidelines” (European Commission 2015a).

Assessing systematically the likely effects of different policy initiatives on developing countries is a requirement based on Article 208(1) TFEU, which stipulates that the EU “shall take account of the objectives of development co-operation in the policies that it implements which are likely to affect developing countries”. This constitutes the legal basis of a concept generally known as “Policy Coherence for Development” (PCD). Practically, the application of the PCD principle means recognizing that some EU policy measures can have a significant impact outside of the EU which may contribute to or undermine the Union's policy objectives concerning development. Through PCD, the EU seeks to take account of development objectives in all of its policies that are likely to affect developing countries, by minimizing contradictions and building synergies between different EU policies to benefit developing countries and by increasing the effectiveness of development cooperation. Measures regarding climate change mitigation and affecting adaptation needs in developing countries have been identified as “measures known to have impacts on developing countries”. The assessment of impacts on developing countries includes economic, social and environmental impacts.

Related to economic impacts the following guiding questions have to be assessed (European Commission 2015a, Better Regulation “Toolbox”, p. 221ff):

- Who are the developing countries’ producing (and exporting to the EU) the goods/services affected? Are these least developed countries?
- What is the impact on proportion (esp. in value) of the trade between these developing countries and the EU, in particular regarding the trade balance of developing countries?
- What is the likely impact on price volatility?
- What are the impacts on proportion between the purchase of raw materials and finished products from developing countries?
- What is the impact on the competitiveness of exporters in developing countries in terms of intended or unintended trade barriers?
- What are the impacts on the initiative on intellectual property rights, standards, and technology and business skills in developing countries and on their capacity to trade their goods (towards the EU or between themselves)?
- What is the impact on food security for local population (e.g. by impacting on price of commodities or food on world and regional/local markets or by limiting access to land, water or other assets)?
- What is the impact on different population groups (urban vs. rural, small vs. large scale farmers)?
- What are the impacts on international and domestic investment flows (outflows and inflows including FDI) in the developing countries?
- What are the impacts on the private sector in developing countries (including competitiveness, access to finance, access to market)?

Related to social impacts the following guiding questions have to be assessed:

- What are the impacts on labour market (e.g. creation of job or decrease in employment level, impacts on different groups of workforce – low-skilled vs. high skilled workforce, wages level, working conditions)?
- What are the impacts on main stakeholders and institutions affected by the proposal?
- What is the impact on poverty levels and inequality in developing countries?
- What are the impacts on gender equality and on the most vulnerable groups of society?
- What is the impact on human rights in the development countries?
- What is the impact on migration in developing countries (rural-urban or international)?
- What is the impact on food security for the local population (e.g. by impacting on price of commodities or food on world and regional/local markets or by limiting access to land, water or other assets)?

- What is the impact on different population groups (urban vs. rural, small vs. large scale farmers)?

Related to environmental impacts the following guiding questions have to be assessed:

- How does it impact ecosystem approach?
- What is the impact on emission targets in developing countries?
- What is the impact on chemicals authorisation as well as on use and waste management?
- What is the impact on green economy development, both globally and in partner countries?
- What is the impact on the low carbon technology transfer and its availability in developing countries?
- What is the impact on the biodiversity (mono-cropping, deforestation) and global or local food security?
- What is the impact on the management and use of natural resources, e.g. minerals, timber, water, land, etc.?
- Are these options consistent with our support (under development cooperation policy) to responsible approaches to natural resources management such as FLEGT<sup>9</sup>, EITI<sup>10</sup> or Kimberley agreement<sup>11</sup>?

Depending on the case, a comprehensive literature review is conducted, while in some cases a detailed, substantial and quantified analysis including detailed quantitative data to establish the causal link between the policy option and its impacts. A range of analytical approach can be used for this purpose, such as econometric analysis or computable general equilibrium (CGE) models. Consulting interested parties is an obligation for every impact assessment and all affected stakeholders should be engaged. Each consultation includes a 12-week internet-based public consultation and can be complemented by other approaches and tools. Existing international policy dialogues are also be used to keep third countries fully informed of forthcoming initiatives, and as a means of exchanging information, data and results of preparatory studies with partner countries and other external stakeholders.

The EU's Biennial Reports provides a detailed overview of the European policies and measures to mitigate GHG emissions in all sectors. All key strategies and climate policies have been subject to impact assessments as described above. All impact assessments and all opinions of the Impact Assessment Board are published online (see [http://ec.europa.eu/smartregulation/impact/ia\\_carried\\_out/cia\\_2015\\_en.htm](http://ec.europa.eu/smartregulation/impact/ia_carried_out/cia_2015_en.htm)). In addition to the general approach described above to address adverse social, environmental and economic impacts, more specific ways to minimize impacts depend on the respective policies and measures implemented. As the reporting obligation related to Article 3, paragraph 14 in the UNFCCC reporting guidelines for GHG inventories does not include an obligation to report on each specific mitigation policy, the EU chooses the approach to provide some specific examples for a more complete overview on the ways how the EU is striving to minimize adverse impacts. Major EU policies such as the Directive on the promotion of the use of renewable energy (Directive 2009/28/EC, in particular its relation to biomass and biofuels, are presented in more detail as examples in this chapter, because the related impact assessments identified potential impacts on third countries.

#### **Directive on the promotion of the use of renewable energy – Promotion of biomass and biofuels**

Developing country representatives as well as other stakeholder were extensively consulted during the development of the sustainability criteria and preparation of the directive and the extensive consultation process has been documented. On 30 November 2016, the Commission published a proposal for a revised Renewable Energy Directive to ensure that the target of at least 27% renewables in the final energy consumption in the EU by 2030 is met (European Commission

<sup>9</sup> The Action Plan on Forest Law Enforcement, Governance and Trade (FLEGT) is the European Union response to illegal logging that was adopted in 2003. [http://ec.europa.eu/environment/forests/illegal\\_logging.htm](http://ec.europa.eu/environment/forests/illegal_logging.htm)

<sup>10</sup> The Extractive Industries Transparency Initiative is a global coalition of governments, companies and civil society working together to improve openness and accountable management of revenues from natural resources. <https://eiti.org/eiti>.

<sup>11</sup> The Kimberley Process (KP) is a joint government, industry and civil society initiative to stem the flow of conflict diamonds – rough diamonds used by rebel movements to finance wars against legitimate governments. <http://www.kimberleyprocess.com/>

2017b). The revised Renewable Energy Directive strengthens the existing EU criteria for bioenergy sustainability and extends them to cover also biomass and biogas for heat and power. More specifically, the Directive includes the following new requirements (European Commission 2016):

- The sustainability criteria for biofuels are improved, including by requiring that (new) advanced biofuels emit at least 70% fewer GHG emissions than fossil fuels.
- A new sustainability criterion on forest biomass is introduced, in order to ensure that the production of woodfuel continues to be sustainable and that any LULUCF emissions are accounted for (in the country of biomass production).
- The EU sustainability criteria are extended to cover solid biomass and biogas used in large heat and power plants (above 20 MW fuel capacity). This means, for instance, that electricity and heat from biomass have to produce at least 80% fewer GHG emissions compared to fossil fuels by 2021 and 85% less by 2026.

A new Directive amending the current legislation on biofuels through the Renewable Energy and the Fuel Quality Directives was adopted in 2015 (Directive (EU) 2015/1513) with the objectives:

- To increase the minimum greenhouse gas saving threshold for new installations to 60% in order to improve the efficiency of biofuel production processes as well as discouraging further investments in installations with low greenhouse gas performance.
- To include indirect land use change (ILUC) factors in the reporting by fuel suppliers and Member States of greenhouse gas savings of biofuels and bioliquids;
- To limit the amount of food crop-based biofuels and bioliquids that can be counted towards the EU's 10% target for renewable energy in the transport sector by 2020, to the current consumption level, 5% up to 2020, while keeping the overall renewable energy and carbon intensity reduction targets;
- To provide additional market incentives to the existing ones for biofuels with no or low indirect land use change emissions, and in particular the 2nd and 3rd generation biofuels produced from feedstock that do not create an additional demand for land, including algae, straw, and various types of waste, as they will contribute more towards the 10% renewable energy in transport target of the Renewable Energy Directive.

With these new measures, the Commission wants to promote stronger biofuels that help achieving substantial emission cuts, do not directly compete with food and are more sustainable at the same time. While the directive does not affect the possibility for Member States to provide financial incentives for biofuels, the Commission considers that in the period after 2020 biofuels should only receive financial support if they lead to substantial greenhouse gas savings and are not produced from crops used for food and feed. The Impact Assessment of the Directive analysed social, economic and environmental impacts on third countries in detail<sup>12</sup>. The Directive also ensures that the Commission reports every two years, in respect to both third countries and Member States which constitute a significant source of biofuels or of raw material for biofuels consumed within the Union, on national measures taken to respect the sustainability criteria for soil, water and air protection.

On 1 February 2017, the European Commission published its regular Renewable Energy Progress Report (European Commission 2017a) under the framework of the 2009 Renewable Energy Directive. The report includes information on the assessment of sustainability of EU biofuels. The 2017 report and its accompanying staff working document (European Commission 2017b) report that the net savings in greenhouse gas emissions resulting from the use of renewable energy in transport of around 35 Mt CO<sub>2</sub>-equivalent in 2014. Indirect Land Use Change (ILUC) emissions associated to biofuels consumed in the EU are estimated to be 23 Mt CO<sub>2</sub>-equivalent, leaving a net saving of 12 Mt CO<sub>2</sub>-equivalent. Recent modelling work of the ILUC impacts of individual biofuel feedstock confirms that ILUC emissions can be much higher for biofuels produced from vegetable oils compared to biofuels produced from starch or sugar. Advanced biofuels from non-food crops have generally very low or no ILUC emissions. In 2014, around 10% of bioethanol and around 26% of biodiesel consumed in the EU was imported.

The main exporting countries for biodiesel were Malaysia (palm oil), Brazil and the US (Soybean) and for bioethanol Guatemala, Bolivia, Pakistan, Russia, Peru, Ukraine, Canada and Moldova.

Projections for 2020 foresee that the EU biofuel policy could lead to an expansion of 1.8 Mha of cropland in the EU and to 0.6 Mha in the rest of the world, with 0.1 Mha at the expense of forest.

---

<sup>12</sup> <http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52014SC0296&from=EN>



Expansion of cropland at global level would occur at the expense of grassland (-1.1 Mha), abandoned land (-0.9 Mha) and other natural vegetation (-0.4 Mha). No significant negative effects from the production of biofuels and bioliquids on biodiversity, water resources, water quality and soil quality were found in the EU. However, indirect land use change can cause biodiversity losses if additional land expansion takes place in sensitive areas, such as forests and highly biodiverse grassland. The EU ethanol consumption had negligible impact on cereal prices given that the EU share in the global ethanol market did not exceed 7%, and the global cereal market is driven mainly by demand for feed. In the future, the strongest biofuel consumption growth is expected in developing countries, while the increased demand for food and feed for a growing and more affluent population is projected to be mostly met through productivity gains, with yield improvements expected to account for about 80% of the increase in crop output. Regarding land use right, the most recent reports on large-scale land deals confirm the finding of the 2015 Commission progress report on renewable energy that only very small share of biofuel projects outside the EU have been developed with the EU market in mind.

The Communication from the Commission on voluntary schemes and default values in the EU biofuels and bioliquids sustainability scheme (2010/C 160/01)<sup>13</sup> sets up a system for certifying sustainable biofuels, including those imported into the EU. It lays down rules that such schemes must adhere to if they are to be recognized by the Commission. This will ensure that the EU's requirements that biofuels deliver substantial reductions in greenhouse gas emissions and that biofuels do not result from forests, wetlands and nature protection areas are implemented.

The European Commission has so far (April 2017) recognised 19 voluntary schemes: International Sustainability and Carbon Certification (ISCC), Bonsucro EU, Round Table on Responsible Soy (RTRS EU RED), Roundtable of Sustainable Biofuels (RSB EU RED), Biomass Biofuels voluntary scheme (2BSvs), Abengoa RED Bioenergy Sustainability Assurance (RBSA), Greenergy Brazilian Bioethanol verification programme, Ensus voluntary scheme under RED for Ensus bioethanol production, Red Tractor Farm Assurance Combinable Crops & Sugar Beet Scheme, SQC (Scottish Quality Farm Assured Combinable Crops (SQC) scheme), Red Cert, NTA 8080, RSPO RED (Roundtable on Sustainable Palm Oil RED), NTA 8080, Roundtable on Sustainable Palm Oil RED (RSPO RED), Biograce GHG calculation tool, HVO Renewable Diesel Scheme for Verification of Compliance with the RED sustainability criteria for biofuels, Gafta Trade Assurance Scheme, KZR INIG System, Trade Assurance Scheme for Combinable Crops and Universal Feed Assurance Scheme.<sup>14</sup>

### **Inclusion of aviation in the EU emission trading scheme**

In 2005 the Commission adopted a Communication entitled "Reducing the Climate Change Impact of Aviation", which evaluated the policy options available to this end and was accompanied by an impact assessment. The impact assessment concluded that, in view of the likely strong future growth in air traffic emissions, further measures are urgently needed. Therefore, the Commission decided to pursue a new market-based approach at EU level and included aviation activities in the EU's scheme for greenhouse gas emission allowance trading.

In April 2013 the EU temporarily suspended enforcement of the EU ETS requirements for flights operated from or to non-European countries, while continuing to apply the legislation to flights within and between countries in Europe. The EU took this initiative to allow time for the International Civil Aviation Organization (ICAO) Assembly in autumn 2013 to reach a global agreement to tackle aviation emissions – something Europe has been seeking for more than 15 years. In October 2013 the EU's hard work paid off when the ICAO Assembly agreed to develop by 2016 a global market-based mechanism (MBM) addressing international aviation emissions and apply it by 2020. Until then countries or groups of countries, such as the EU, can implement interim measures.

In response to the ICAO outcome and to give further momentum to the global discussions, the European Commission has proposed amending the EU ETS<sup>81</sup> so that only the part of a flight that takes place in European regional airspace is covered by the EU ETS. In April 2014 the "Regulation (EU) No 421/2014 of the European Parliament and the Council of 16 April 2014 amending the Directive 2003/87/EC establishing a scheme for greenhouse gas emission allowance trading within

<sup>13</sup> OJ C160, 19.6.2010, p.1

<sup>14</sup> <https://ec.europa.eu/energy/en/topics/renewable-energy/biofuels/voluntary-schemes>

the Community, in view of the implementation by 2020 of an international agreement applying a single global market-based measure to international aviation emissions” entered into force.

The regulation limits the aviation coverage of EU ETS to emissions from flights within the European Economic Area (EEA) for the period from 2013 to 2016. This applies to all (also third country) aircraft operators. All options are left open for the EU to react to the developments of the ICAO Assembly in 2016 and to re-adjust the scope of the EU ETS from 2017 onwards. The regulation also includes exemptions for small emitters.

In October 2016, the ICAO agreed on a Resolution for a global market-based measure to address CO<sub>2</sub> emissions from international aviation as of 2021. The agreed Resolution sets out the objective and key design elements of the global scheme, as well as a roadmap for the completion of the work on implementing modalities. The Carbon Offsetting and Reduction Scheme for International Aviation, or CORSIA, aims to stabilize CO<sub>2</sub> emissions at 2020 levels by requiring airlines to offset the growth of their emissions after 2020. In light of the progress on the global measure under ICAO, the European Commission has proposed to continue the current approach beyond 2016.

This proposal will now be considered by the European Parliament and the Council of the European Union.

## 14. HUNGARY

The following additional information was provided in Hungary's NIR for 2018.

---

Firstly, being an EU Member State, the Hungarian climate policy is largely determined by EU legislation. Therefore, the information provided by the European Union on the subject matter in its respective reports is relevant in case of Hungary.

## 15. ICELAND

No additional information was included in Iceland's NIR for 2018.

## 16. IRELAND

No additional information was included in Ireland's NIR for 2018.

## 17. ITALY

The following additional information was provided in Italy's NIR for 2018.

---

### 13.3 Italian commitment under Art 3.14 of the Kyoto Protocol

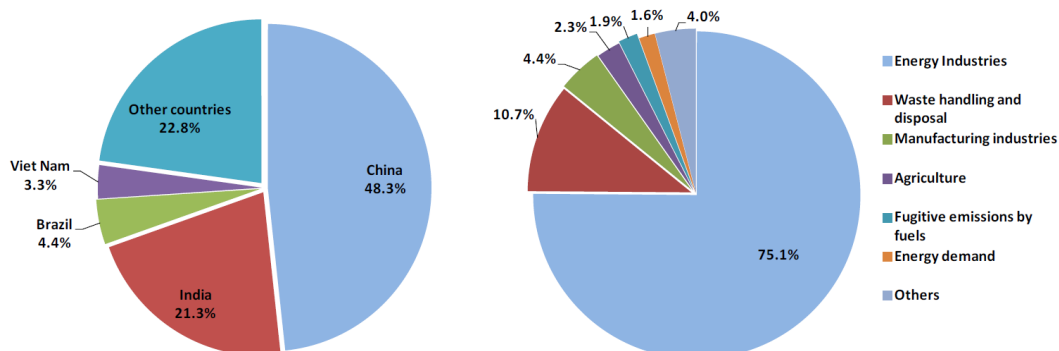
[...].

#### **Procedure for assessing sustainability at local and national level for CDM and JI**

The Clean Development Mechanism (CDM), defined in Article 12 of the KP, allows a country with an emission-limitation commitment (Annex B Party) to implement an emission-reduction project in developing countries.

For this section, information was collected from the UNFCCC CDM Project Search Database (UNFCCC, 2018[a]). On 05 February 2018, the UNFCCC CDM Database reported a total of 7,791 registered project activities out of 8,146 projects. With data as of 31 December 2017, 83.8% of CDM projects were registered in Asia and the Pacific Region, 12.8% in Latin America and Caribbean, 2.8% in Africa, and 0.6% in Countries with economies in transition. The distribution of registered projects by scope activity was mainly: energy industries (75.1%), waste handling and disposal (10.7%) and manufacturing industries (4.4%). Registered projects by Host Party were mainly in China (48.3%), India (21.3%), Brazil (4.4%) and Viet Nam (3.3%).

The distribution of global CDM projects by Host country and scope is presented in Figure 14.1.



Source: UNFCCC (UNFCCC, 2018[b])

**Figure 14.1 CDM projects by Host country and scope (as for 31/12/2017)**

Italy as investor Party, contributes with 1.6% of world-wide CDM project portfolio. Up to 05 February 2018 Italy is involved in 128 CDM registered projects. Italy is involved directly, as government, in 52 registered CDM (MATTM, 2011). Projects by dimension are 60.2% large scale and 39.8% small scale. Italy is the only proposer for 40.6% of the CDM projects.

**Table 14.2 Italian CDM projects by Host country**

Scope	n°	%
Energy industries (renewable/non renewable)	81	53.3
Waste handling and disposal	20	13.2
Afforestation and reforestation	16	10.5
Manufacturing industries	16	10.5
Fugitive emissions from production and consumption of halocarbons and sulphur hexafluoride	8	5.3
Energy demand	7	4.6
Other	4	2.6
<b>Total</b>	<b>152</b>	<b>100</b>

[...] Up to 1st January 2018, the UNEP database reports 761 JI projects (track1+track2) from which 604 projects are registered (91.9% track 1+8.1% track 2). Up to 1st February 2018 the UNEP database reports 8,362 CDM projects with 7,796 registered from which 6 projects are validated with CCB, 138 with GS, and 30 with SD tool (Sustainable Development tool).

**Assessment of social, environmental, and economic effects of CDM and JI projects**

For this section we have accessed project databases (UNFCCC, 2018[a]; Carbon Finance, 2018; UNEP, 2018) and peer-reviewed articles (see Annex A8.2.4 for detailed information on CDM research studies).

**13.4 Funding, strengthening capacity and transfer of technology**

[...] The flow of financial resources to developing countries and multilateral organisations from Italy is shown in Table 14.4 (OECD, 2018)

Table 14.4 Financial resources to developing countries and multilateral organisations from Italy (2015 and 2016 data are updated on 22 December 2017)

<i>Italy</i>									
2001-02	2009	2010	2011	2012	2013	2014	2015	2016	
NET DISBURSEMENTS					USD million				
I. Official Development Assistance (ODA) (A + B)	1980	3297	2996	4326	2737	3430	4009	4003	5087
ODA as % of GNI	0.18	0.16	0.15	0.20	0.14	0.17	0.19	0.22	0.27
A. Bilateral Official Development Assistance	724	875	759	1703	624	867	1372	1829	2420
of which: General budget support	-1	9	5	1	6	7	8	6	1
Core support to national NGOs	64	-	15	-	1	99	93	118	137
Investment projects	-107	37	-34	310	-17	9	42	32	6
Administrative costs	34	59	42	53	35	36	40	36	21
Other in-donor expenditures	10	5	5	526	272	406	843	985	1666
of which: Refugees in donor countries	8	-	3	525	247	404	840	983	1665
Imputed student costs		1			1		1		
B. Contributions to Multilateral Institutions	1255	2423	2237	2623	2113	2563	2637	2174	2667
of which: UN	198	205	170	150	188	217	200	161	155
EU	691	1862	1557	1924	1516	1605	1662	1424	1773
IDA	183	214	386	179	166	329	377	198	214
Regional Development Banks	61	24	6	206	105	229	178	135	286
II. Other Official Flows (OOF) net (C + D)	-158	-72	-151	-214	196	161	96	43	51
C. Bilateral Other Official Flows (1 + 2)	-158	-72	-151	-214	196	161	96	43	51
1. Official export credits(1)	16	-28	-28	117	97	90	48	-	-
2. Equities and other bilateral assets(1)	-173	-44	-123	-330	100	71	48	-	-

<i>Italy</i>									
D. Multilateral- Institutions	-	-	-	-	-	-	-	-	-
III. Officially supported export credits(2)	1271	463	882	1234	725	2031	584	1414	802
IV. Private Flows at Market Terms (long-term) (1 to 3)	-2504	1719	5731	6456	7436	11024	3896	10033	13286
1. Direct investment	930	129	4366	7530	8016	8643	3369	9715	8046
2. Bilateral portfolio investment	-3434	1590	1365	-1074	-580	2381	527	317	5239
3. Securities of multilateral agencies	-	-	-	-	-	-	-	-	-
V. Grants by Private Voluntary Agencies(3)	16	162	150	111	91	58	121	128	86
VI. Total Resource Flows (long- term) (I to V)	605	5569	9608	11912	11186	16703	8706	15621	19309
Total Resource Flows as a % of GNI	0.05	0.27	0.47	0.55	0.56	0.81	0.41	0.86	1.04

Source: OECD (OECD, 2016)

<http://www.oecd.org/dac/stats/statisticsonresourceflowstodevelopingcountries.htm>

(1) no more updated by OECD since 2018 submission.

(2) item reported as "2. Private export credits" under title IV up to 2017 submission.

(3) item reported as title "III. Grants by Private Voluntary Agencies" up to 2017 submission.

## 18. JAPAN

The following additional information was provided in Japan's NIR for 2018.

### 15.1 Overview

[.....] In October 2017, ahead of COP23, Japan announced Japan's Assistance Initiatives to Address Climate Change 2017 (Initiative 2017), which includes Japan's visions and activities. The key concept of this initiative is "co-innovation" that enhances the collaboration with developing countries by utilizing its advanced technology and know-how.

### 15.2 Actions to minimize adverse impacts in accordance with article 3. Paragraph 14

- **Technical assistance in the energy and environmental sectors**

Japan, in collaboration with International Renewable Energy Agency (IRENA), invited governmental officials from Asia-Pacific and other small island nations to training program in Hyogo (February and October, 2017) and international workshop in Fiji (December 2017) for capacity building and support for developing projects.

## 19. LATVIA

The following information was updated in Latvia's 2018 NIR compared to its 2017 NIR.

- The progressive reduction or phasing out of market imperfections, fiscal incentives, tax and duty exemptions and subsidies in all greenhouse-gas-emitting sectors, taking into account the need for energy price reforms to reflect market prices and externalities.

### *Energy sector*

1) Latvia is a country high diversity of renewable energy sources. Increasing renewable resources in total consumption reduce energy dependence from imported fossil energy resources from 51,2 % in 2015 to 47,2 % in 2016. [...] Latvia has got one of the highest individual targets for the share of renewable energy by 2020, namely 40% from total gross final energy consumption. In 2013, the rate was 37,1 %, in 2014, this rate was already 38,7%, however this rate has decreased in following years reaching 37,6% in 2015 and 37,2% in 2016.

2) The share of renewable energy in the transport sector must reach at least 10% by 2020 of gross final energy consumption for transport sector (4.0% in 2013, 4.1% in 2014, 3,9% in 2015 and 2,8% in 2016). In 2015, the share of biodiesel and bioethanol in the transport sector in Latvia was 1.95%, in 2016 it was 0.87%, although final energy consumption of biodiesel and bioethanol have decreased from 954 TJ in 2015 to 432 TJ in 2016. Alternative Fuel Development Plan 2017-2020 has been approved by the Cabinet of Ministers on 25 April 2017 (order Nr. 202) which aims to identify the necessary research and analysis directions, which will result in the development of a future policy on the introduction of alternative fuels in certain transport sectors to reduce greenhouse gas emissions. According to Cabinet Regulation No 637 of November 3, 2015 "Specific Objective 4.4.1. "To develop electric vehicles charging infrastructure in Latvia"" it is planned to complete the Latvian national charging network by installing 150 charging stations by December 31, 2023. There were around 23 electric vehicle charging stations in Latvia at the end of 2017. The number of registered electric cars (commercial vehicles and passenger cars) in Latvia in 2014 were 194 and at the end of 2017.

Latvia has several plans also about the alternative fuel implementation, mainly in public transport systems. So far with the help of EU Cohesion Fund (Cabinet Regulation No 637 of December 20, 2016, "Specific Objective 4.5.1.2. "To develop environmentally friendly public transport infrastructure (buses)"" municipalities are planning to obtain 50 new buses that use alternative fuels or comply with EURO 6 standards.

### *Environmental taxes*

In accordance with the amendments to the Law on Excise Tax adopted on July 27, 2017 new excise duty rates for fuel are enter into force from January 1, 2018 - The tax for unleaded petrol is €509 per 1000 liters, for leaded petrol €594, for diesel €414.

[...]Over time there has been made different amendments in CO2 rates - 2014 rate: €2.85 per ton; 2015 and 2016 rate: €3.50 per ton and starting from 2017 rate is €4.50. Starting from 2017 this tax is cancelled due to changes in Vehicle Operation Tax. Law On the Vehicle Operation Tax since 2017 is linked to CO2 emissions, but only for vehicles with first registration from 2009. The tax is paid according to the amount of the vehicle emissions CO2 gram per km. The tax rate for Vehicles under 50g CO2 per km is 0 euros. By contrast, for vehicles built before 2009, the CO2 rate is not applied, and car owners continue to pay for vehicle usage tax at the existing order based on three components - mass of the vehicle, engine capacity (cm<sup>3</sup>) and engine power.

- Cooperating in the development, diffusion, and transfer of less-greenhouse-gas-emitting advanced fossil-fuel technologies, and/or technologies, relating to fossil fuels, that capture and store greenhouse gases, and encouraging their wider use; and facilitating the participation of the least developed countries and other non-Annex I Parties in this effort.

There were no greenhouse gas emission reduction or capture and storage technology development or transfers regarding developing country parties In 2015 and 2016.

- Strengthening the capacity of developing country Parties identified in Article 4, paragraphs 8 and 9, of the Convention for improving efficiency in upstream and downstream activities

relating to fossil fuels, taking into consideration the need to improve the environmental efficiency of these activities.

There was no collaboration studies or programs in regarding capacity strengthening of developing country parties In 2015 and 2016.

- Assisting developing country Parties which are highly dependent on the export and consumption of fossil fuels in diversifying their economies.

There have not been assistance projects in 2015 and 2016 to diversify developing countries economies.

## 20. LIECHTENSTEIN

The following additional information was provided in Liechtenstein's NIR for 2018.

A mid-time report about the Energy Strategy 2020 has been published from the Government in 2017.

## 21. LITHUANIA

The following additional information was provided in Lithuania's NIR for 2018.

Under Article 3.14 of the Kyoto Protocol and UNFCCC Decision 31/CMP.1, Annex I Parties shall provide information on how they are striving to implement their commitment while minimizing adverse social, environmental and economic impacts on developing country parties.

Since 2004 Lithuania is a Member State of the EU and, as such, designs and implements most of its policies in the framework of EC directives, regulations, decisions, and recommendations. In this context, the minimization of adverse impacts on developing countries is also largely dictated by the European Union's policy on climate change and by its policies and programmes affecting developing countries. Regulation at the European level also controls or influences market conditions, fiscal incentives, tax and duty exemptions and subsidies in all economic sectors in EU Member States. Lithuania strives to design climate change policies and measures in a way as to ensure a balanced distribution of mitigation efforts by implementing climate change response measures in all sectors and for different gases.

The impact assessment of new policy initiatives has been established in the European Union, which allows their potential adverse social, environmental and economic impacts on various stakeholders, including developing country Parties, to be identified and limited at an early stage within the legislative process. Impact Assessment Guidelines specifically address impacts on third countries and also issues related to international relations. This provides a framework in which Member States like Lithuania can also ensure a high level of protection of the environment and contribute to the integration of environmental considerations into the preparation and adoption of specified plans and programmes with a view to promoting sustainable development.

As of 2017, 2 projects in Moldova are being implemented. Lithuanian solar company is installing 55 Kw power solar plant on the rooftop of the Ministry of Environment building in Kishinev.

In the beginning of 2017, the Ministry of Environment signed an agreement with the Lithuanian company Saulės grąža to implement project in Georgia. The main goal of the project is to install solar power plants and heating systems in 6 public schools and kindergartens in Georgia, total value of the projects is approx. 286.5 thous. EUR, subsidy amount is approx. 191 thous. EUR. The project will be finished in 2018.

In the summer of 2017, the Ministry of Environment launched a new call for submission. 3 applicants for implementing projects in Mali, Armenia and Georgia have been selected. The total amount of subsidy for all 3 projects is 608 thous. EUR. The total value of 3 projects is approx. 1 mln. Euros. In 2017 Lithuania has contributed 700 thous. EUR to the EIB's Eastern Partnership TA Trust Fund, which directs a large part of its funds towards the Climate Action (approx. 60% of the fund are directed for climate-related purposes).

The table below summarizes the data on international climate finance provided by Lithuania in 2017:

<i>Thous. EUR</i>	<i>Type of support</i>	<i>Recipient of support</i>	<i>Provider of support</i>
1005*	bilateral	Development cooperation projects	Ministry of environment
700	multilateral	EPTATE – Eastern Partnership Technical Assistance Trust Fund, administered by the European Investment Bank	Ministry of Finance

\* Planned total project value, including beneficiary's own contribution (disbursement in 2018-2019)

## 22. LUXEMBOURG

No additional information was included in Luxembourg's NIR for 2018.

## 23. MONACO

The following additional information was provided in Monaco's NIR for 2018

### 15.1. Description des effets potentiels des politiques et mesures nationales

Les politiques et mesures mises en place en Principauté de Monaco, visent à :

- Améliorer l'efficacité énergétique;
- Réduire les consommations de fioul domestique en développant les énergies renouvelables et en opérant parfois une substitution du fioul par du gaz naturel dont le facteur d'émission est moindre;
- Réduire les consommations de carburant dans les transports;
- Réduire la production de déchets incinérés et développer la valorisation matière ;
- Limiter les émissions relatives aux gaz fluorés.

Ces mesures peuvent avoir des effets positifs sur l'économie de certains pays en développement, en particulier le recyclage dont certaines filières existent sur la rive sud de la méditerranée (cartouches, électroniques...).

Une tendance à la baisse existe pour les énergies fossiles de type pétrolières qui se reportent partiellement sur le gaz naturel. Les quantités sont cependant insignifiantes à l'échelle des pays producteurs, mais peuvent soulever à terme la question générale de la diversification de certaines économies pétrolières. Les politiques et mesures de la Principauté de Monaco ont conduit aux :

- Variation de la consommation de produits pétroliers (carburants, fioul domestique et fioul lourd) :
- Variation de la consommation de gaz :

Au vu de la nature de nos politiques et mesures ainsi que des valeurs absolues des variations issues de ces politiques, il ne nous a pas été possible de déterminer s'il existait des effets adverses directs avérés sur les pays en développement.

Toutefois, les effets potentiels des politiques et mesures mises en oeuvre sur le territoire de la Principauté de Monaco doivent être considérés comme extrêmement faibles, voire inexistantes, eu égard à la taille du pays.

Nonobstant, la Principauté participe à des programmes de coopération avec les pays en développement qui, bien qu'il ne soient pas directement liés à la minimisation d'effet adverse de ses



politiques et mesures, peuvent avoir un effet positif local de réduction des besoins en énergie fossile et par conséquent de diminution de l'impact des variations du prix du pétrole sur les populations.

### **15.2. Ressources financières et transfert de technologie**

La Principauté de Monaco a fait de la lutte contre la pauvreté sa priorité d'intervention. Les principaux bénéficiaires sont les personnes les plus démunies, les populations vivant en zone rurale, les enfants et les adultes porteurs d'un handicap, les réfugiés, les femmes et les enfants vivant dans des conditions précaires, notamment en situation de rue.

Les 8 Objectifs du Millénaire pour le Développement (OMD) constituent le fil conducteur de la politique de coopération au développement du Gouvernement de la Principauté de Monaco et sont déclinés à travers 4 domaines d'intervention : Santé, Education, Microéconomie et Environnement.

En termes de répartition géographique, l'aide est essentiellement concentrée sur le continent africain, ciblant plus particulièrement les Pays les Moins Avancés (PMA) tels que le Burkina-Faso, le Burundi, Haïti, le Mali, la Mauritanie, Madagascar, le Mozambique, le Niger, le Sénégal, le Soudan, le Kenya, Haïti, Equateur, Philippines, Ethiopie, Vanuatu et le Timor-Leste. Des projets sont également soutenus dans le Bassin méditerranéen (pays historiques de coopération) et en Mongolie.

La Coopération monégasque se voulant une coopération de proximité, un effort particulier est apporté au

déploiement de la coopération bilatérale. Une part de l'Aide Publique au Développement (APD) monégasque est également versée au titre du canal multilatéral pour des programmes et projets qui sont conformes aux priorités politiques poursuivies par la Principauté de Monaco sur la scène internationale comme la protection de l'environnement, l'action humanitaire, la santé, l'aide au renforcement des capacités, la protection des enfants et les droits de l'homme. En plus de l'aide octroyée dans le cadre des coopérations bilatérale et multilatérale, des aides humanitaires d'urgence sont délivrées pour soutenir les populations touchées par des catastrophes naturelles ou des pénuries alimentaires.

### **15.3. Changements relatifs à la minimisation des effets adverses sur les pays en développement des politiques et mesures mises en oeuvre par la Principauté de Monaco (article 3 paragraphe 14 du Protocole de Kyoto)**

En complément des crédits alloués chaque année au titre de l'APD, des crédits spécifiques ont été inscrits au budget de l'Etat pour soutenir des actions de lutte contre les changements climatiques dans les pays en développement. Ces crédits sont donc nouveaux et additionnels à l'APD.

Dans ce cadre, un Protocole d'Accord a été signé en janvier 2011 avec la République Tunisienne pour le renforcement des capacités de l'autorité compétente en matière de promotion du Mécanisme de Développement Propre (MDP) dans le secteur de l'énergie et de l'industrie afin d'augmenter le nombre de projets dans ces secteurs. Afin de tenir compte des avancées de la négociation intergouvernementale sur le climat à Cancún et à Durban, une quatrième activité complémentaire a été initiée en 2012 avec pour objectif d'accompagner la formulation de Mesures d'Atténuation Appropriées au niveau National - NAMA (définition d'une stratégie nationale et d'un premier portefeuille de projets NAMA).

Toujours concernant des financements spécifiquement dédiés au climat, un système pilote d'irrigation à partir de l'énergie solaire photovoltaïque a été installé en 2011 dans une oasis au Maroc afin de démontrer l'avantage de cette technologie par rapport à l'utilisation des sources d'énergie conventionnelles pour l'irrigation des parcelles agricoles.

#### **15.3.1. Aide fournie aux pays en développement particulièrement vulnérables aux changements climatiques**

Entre 2014 et 2017, plus de la moitié de l'APD monégasque a été consacrée à des PMA, pays considérés comme particulièrement vulnérables au changement climatique. Dans ces pays, les actions soutenues s'inscrivent principalement dans les secteurs de la santé et de l'éducation, en adéquation avec les besoins prioritaires.

Au titre de la lutte contre les effets adverses du changement climatique, on peut citer les actions soutenues en Mongolie visant à mettre en place des concepts innovants de production agricole et d'élevage adaptés aux extrêmes climatiques. Les modes de production agricole et d'élevage mis en place permettront aux populations nomades de continuer à vivre de leurs moyens de subsistance

traditionnels. L'association Akamasoa du Père Pedro Opeka à Madagascar avec la société Solarplexus basée à l'Ile de la Réunion projettent d'installer une unité photovoltaïque à Antolojanahary à Madagascar. L'apport monégasque pour ce projet s'élève à 80 000 €. Sur le plan du multilatéral, la Principauté de Monaco a apporté en 2017 une contribution de 500 000 euros au Fonds Vert pour le Climat et sa contribution ne cesse d'augmenter.

### 15.3.2. Octroi de ressources financières

En 2017, le montant total de l'APD, exclusivement délivrée sous forme de subventions, s'est élevé à 586 462.17 Euros dont plus de 10% alloués à des projets dans le domaine de l'environnement. Ces projets se déclinent selon les deux axes d'intervention suivants :

- Lutte contre la désertification et le changement climatique
- Conservation de la biodiversité et promotion de l'écotourisme

L'aide apportée selon ces deux axes d'intervention se concentre sur des projets alliant des objectifs de préservation de l'environnement et de développement socio-économique des populations locales. En matière de conservation de la biodiversité, les projets cofinancés visent à renforcer l'efficacité de gestion d'aires protégées (terrestres et marines) pour en faire des atouts de développement économique et social des zones riveraines notamment à travers la création d'activités écotouristiques.

D'autres projets concernent la diffusion de modes de gestion durable d'écosystèmes forestiers et oasiens fortement menacés par les activités humaines et le phénomène de désertification.

Enfin, en Mongolie, les initiatives visent à lutter contre le surpâturage et la désertification et à prévenir les phénomènes climatiques extrêmes afin de permettre aux populations nomades de mieux résister à ces événements et de continuer à vivre de leurs moyens de subsistance traditionnels. L'ensemble de ces actions est comptabilisé au titre de l'APD.

### 15.3.3. Activités relatives au transfert de technologies

En 2017, l'association Akamasoa du Père Pedro Opeka à Madagascar avec la société Solarplexus basée à l'Ile de la Réunion vont installer une unité photovoltaïque à Antolojanahary à Madagascar afin de démontrer l'avantage de cette technologie par rapport à l'utilisation des sources d'énergie conventionnelles pour l'irrigation des parcelles agricoles. L'exécution de cette action a été réalisée par une société privée monégasque sur des financements publics spécifiques à la lutte contre le changement climatique autres que ceux de l'APD.

## 24. NETHERLANDS

The following additional information was provided in Netherland's NIR for 2018

Since the submission of the NIR 2017, there have been limited changes in the activities on minimizing adverse impacts. Policies are still in place and are being executed.

Among the actions – a to f – listed in the Annex to Decision 15/CMP.1, Part I. H, 'Minimization of adverse impacts in accordance with Article 3, paragraph 14', the Netherlands implemented national actions as well as actions to support and to assist developing countries.

With regard to the progressive reduction or phasing-out of market imperfections, fiscal incentives, tax and duty exemptions, and subsidies in all greenhouse-gas-emitting sectors, taking into account the need for energy price reforms to reflect market prices and externalities (action a), energy prices have reflected market prices for many years. With (increasing) environmental taxation the externalities of energy use related to GHG emissions are increasingly reflected in energy prices. Examples are: environmental taxes on the use of natural gas up to 170,000 m<sup>3</sup> increased from €0.1639 per m<sup>3</sup> in 2011 to €0.26001 in 2018; excise duty on gasoline increased in the same period from €0.71827 per litre to €0.778961 per litre. An overview of all environmental taxes is available at:

[https://www.belastingdienst.nl/wps/wcm/connect/bldcontentnl/belastingdienst/zakelijk/overige\\_belastingen/belastingen\\_op\\_milieugrondslag/tarieven\\_milieubelastingen/tabellen\\_tarieven\\_milieubelastingen?projectid=6750bae7-383b-4c97-bc7a-802790bd1110](https://www.belastingdienst.nl/wps/wcm/connect/bldcontentnl/belastingdienst/zakelijk/overige_belastingen/belastingen_op_milieugrondslag/tarieven_milieubelastingen/tabellen_tarieven_milieubelastingen?projectid=6750bae7-383b-4c97-bc7a-802790bd1110)

and on excise duties at:

[https://download.belastingdienst.nl/douane/docs/tarievenlijst\\_accijns\\_acc0552z75fol.pdf](https://download.belastingdienst.nl/douane/docs/tarievenlijst_accijns_acc0552z75fol.pdf).

[...] To promote Policy Coherence for Development, the Netherlands has adopted an Action Plan. One of its focus areas is climate change. In addition to integrating climate action into development cooperation, and increasing support for climate change adaptation and mitigation in developing countries, we have taken a number of other actions:

- We no longer provide public support, including export credits, to coal-fired power plants.
- In the international financial institutions we advocate more investment in renewable energy and support investment in fossil fuels only in exceptional circumstances, where no realistic alternatives are available.
- In climate funds such as the Green Climate Fund and the Climate Investment Funds we seek to ensure that funding benefits the poor.
- To halt deforestation in highly relevant supply chains such as timber, soy and palm oil, the Netherlands has initiated and promoted the Amsterdam Declarations. The two Declarations – one on stopping deforestation and one on sustainable palm oil – were launched on 7 December 2015 with the intention of achieving fully sustainable and deforestation-free agro-commodity supply chains in Europe by 2020. To date, in addition to the Netherlands, Denmark, Germany, Norway, the United Kingdom and France have signed. The Declarations are intended to stimulate private sector commitment and progress on agricultural commodities associated with deforestation (such as palm oil, soy and cocoa) for which Europe has a significant market share. By expanding market demand for sustainable commodities in the signatory European countries, the Declarations aim to incentivize sustainable production in producer countries.

The Netherlands also strives to accelerate the transition to renewable energy worldwide. The Netherlands is a founding member of the International Renewable Energy Agency (IRENA), an intergovernmental organization that supports countries in their transition to a sustainable energy future. Through the Energy Sector Management Assistance Program (ESMAP) of the World Bank and the Friends of Fossil Fuel subsidy reform, the Netherlands supports countries (mostly) in the MENA region to reform fossil fuel subsidies while maintaining social safety nets.

The Netherlands has decided to integrate development and climate action budgets, policies and activities for maximum impact and best results, especially for the poorest and most vulnerable. Committed to supporting developing countries in their climate action, we have been scaling up our climate finance. While public climate finance amounted in 2013 to €286 million, it reached €395 million in 2014, €416 million in 2015 and €472 million in 2016. In addition, in 2015 the Netherlands mobilized €73 million private finance in 2015 and €171 million in 2016. We have provided support to multilateral climate funds such as the Least Developed Countries Fund, the Green Climate Fund, the GEF and the Scaling up Renewable Energy Program of the Strategic Climate Fund, one of the Climate Investment Funds. Furthermore, we focus our support on access to renewable energy, halting deforestation, climate-smart agriculture, integrated water resource management and the provision of climate-resilient water and sanitation (WASH) services. Disaster risk reduction is an integral part of our integrated water resource management programmes and receives support through Partners for Resilience. Gender is an important cross-cutting issue, as climate action is most effective when it builds on the capacities of both genders and addresses both their needs and their vulnerabilities.

There is no Dutch policy related to cooperating in the technological development of non-energy uses of fossil fuels (action c).

#### *Market Mechanisms*

[...] In total, the Netherlands has contracted 33.2 million tonnes of carbon credits from CDM projects, 17.1 million tonnes from JI projects, 3 million tonnes from Latvia (Green Investment Scheme) and 2.2 million tonnes from Participation in Carbon Funds (PCF) in order to realize its obligations under the Kyoto Protocol.

## 25. NEW ZEALAND

The following additional information was provided in New Zealand's NIR for 2018.

---

### 15.6 Improvements in fossil fuel efficiencies

Following the New Zealand Government and the European Union Pacific Energy Conference in 2016, New Zealand has committed a further \$100 million over 2017–21 to renewable energy investments in Micronesia, in addition to the \$200 million investment in renewable energy across eight countries since 2013 (Cook Islands, Kiribati, Papua New Guinea, Samoa, Solomon Islands, Tonga, Tuvalu, Vanuatu). Projects to implement renewable energy resources, particularly solar energy for remote island communities, have been completed in Cook Islands, Samoa, Solomon Islands and Tuvalu. In Samoa, three solar photovoltaic systems have been installed, including the largest solar array in the southern Pacific, at the Faleata Racecourse in Apia. This will meet approximately 4.5 per cent of Samoa's total electricity needs, reducing demand for imported diesel by more than a million litres per year, with annual savings of about WST\$3.4 million (NZ\$1.7 million).

### 15.7 Assistance to non-Annex I Parties dependent on the export and consumption of fossil fuels for diversifying their economies

[...]

For example, New Zealand has a long-standing partnership with the government of Indonesia to accelerate the development of Indonesia's geothermal energy sector. In 2016, New Zealand supported Indonesia to develop a geothermal energy human resource development strategy. New Zealand is also providing technical assistance and capacity building support through training and scholarships in geothermal project management, production skills and geothermal well control, in partnership with the University of Auckland's Geothermal Institute, GNS Science, the Gadjah Mada University and Indonesian Ministry of Energy and Mineral Resources.

## 26. NORWAY

The following additional information was provided in Norway's NIR for 2018.

---

### 15 Information on minimization of adverse impacts in accordance with Art. 3.14

Norway has striven to follow a comprehensive approach to climate change mitigation from policy development started around 1990, addressing all sources as well as sinks, in order to minimise adverse effects of climate policies and measures of climate policies and measures on the economy. In developing environmental, as well as the economic and energy policy, Norway strives to formulate the policy on the polluter pays principle and to have a market-based approach where prices reflect costs including externalities.

As regards emissions of greenhouse gases, costs of externalities are reflected by levies and by participation in the European Emissions Trading Scheme (EU ETS). These instruments place a price on emissions of greenhouse gases. Norway believes that the best way to reduce emissions on a global scale, in line with the two degree target and striving for 1.5 degree limit, would ideally be to establish a global price on emissions. Pursuing a global price on emissions would be the most efficient way to ensure cost-effectiveness of mitigation actions between different countries and regions, and secure equal treatment of all emitters and all countries. This will help minimise adverse impacts of mitigation. For more information about levies on energy commodities and the design of the EU ETS, see Chapter 4. of the seventh National Communication.

### National strategy for green competitiveness

The government presented a national strategy for green competitiveness in October 2017. The aim of the strategy is to provide more predictable framework conditions for a green transition in Norway, while maintaining economic growth and creating new jobs. In October the government also appointed an expert commission to analyze Norway's exposure to climate risk.

### **Cooperation on carbon capture and storage**

Both the International Energy Agency (IEA) and the Intergovernmental Panel on Climate Change have pointed out that CO<sub>2</sub> capture and storage (CCS) will be an important mitigation tool. In order for CCS to become a viable mitigation tool, countries and companies need to invest in technology development and demonstration of CO<sub>2</sub> capture and storage projects.

Carbon capture and storage (CCS) is one of five priority areas for enhanced national climate action. Norway strives to disseminate information and lessons learned from projects in operation in the petroleum sector, new large scale projects under planning and from research, development and demonstration projects. The information and lessons learned are shared both through international fora, and through bilateral cooperation with developing and developed countries.

Norway has a long experience with CCS. Since 1996, CO<sub>2</sub> from natural gas production on the Norwegian shelf has been captured and reinjected into sub-seabed formations. The CCS projects from natural gas on the Sleipner, Gudrun and Snøhvit petroleum fields are the only CCS projects currently in operation in Europe and the only projects in the offshore industry.

The Technology Centre Mongstad (TCM) is the world's largest facility for testing and improving CO<sub>2</sub> capture technologies. TCM has been operating since 2012, providing an arena for targeted development, testing and qualification of CO<sub>2</sub> capture technologies on an industrial scale.

Norway also provides funding for CCS projects abroad in cooperation with other countries and through existing programmes and institutions.

In Norway, funding for CCS research is provided through the CLIMIT programme. The CLIMIT programme is a national programme for research, development and demonstration of technologies for capture, transport and storage of CO<sub>2</sub> from fossil-based power production and industry. The programme supports projects in all stages of the development chain, from long-term basic research to build expertise to demonstration projects for CCS technologies. Projects under the CLIMIT programme have yielded important results for the development of CCS in Norway and internationally.

In addition, a Centre for Environment-friendly Energy Research for CCS, NCCS, has been established. The centre is co-financed by the Research Council of Norway, industry and research partners.

The Norwegian Government has an ambition to realize at least one new full-chain CCS demonstration facility. The results from the feasibility studies<sup>14</sup>, presented in July 2016, show that it is technically feasible to realize a CCS chain in Norway, but that the costs are relatively high compared to the current quota price in the EU ETS. A flexible transport solution and ample storage capacity can contribute to realising capture from further sources. That way, the initial investment on CO<sub>2</sub> infrastructure can be utilised by several projects. The government has continued the planning of a large scale CCS project in Norway, and concept studies are being conducted in 2017 and early 2018. The Norwegian Parliament will decide whether to continue the project into a Front End Engineering and Design (FEED) phase during the first half of 2018.

In order for CCS to play an effective role in climate change mitigation, international cooperation on developing and commercialising new technology is essential. Norway collaborates with other countries through a number of regional and international forums. Examples of such forums are North Sea Basin Task Force, Clean Energy Ministerial, Mission Innovation and The Carbon Sequestration Leadership Forum. Norway furthermore provides funding for CCS projects abroad in cooperation with other countries and through existing programmes and institutions. For example, Norway is currently supporting a CCS project in South Africa.

### **Cooperation with developing countries related to renewable energy – “Clean energy for Development”**

Overall spending to clean energy for development was reduced and amounted to about NOK 500 million in 2017. The budget for 2018 is increasing again to 570 million NOK, and the Government is aiming at further increase for the next years.

[.....] The public power infrastructure, such as the distribution and transmission system is also important for private investments to take place and as such also an area for Norway's development

cooperation. Further, Norway provide support for feasibility studies, training, infrastructure in order to reduce risk as incentives for private investors in power production.

The Norwegian Investment Fund for Developing Countries (Norfund) is providing risk financing as equity and loans to clean energy projects together with private investors. The Governemnet has increased fund allocations to Norfund significantly over the past years.

### **1 Gigaton Coalition**

The third report of the 1 Gigaton Coalition shows that internationally supported renewable energy and energy efficiency projects implemented in developing countries between 2005 and 2016 are projected to reduce greenhouse gas emissions by 0.6 Gigatons of carbon dioxide (GtCO<sub>2</sub>) annually in 2020. When scaled up using international climate financing commitments, these efforts could deliver 1.4 GtCO<sub>2</sub> in annual reductions by 2020. Emission reductions from internationally supported RE and EE projects could be on the order of 1.4 GtCO<sub>2</sub>e per year by 2020 if committed public finance for climate mitigation is used to scale up these activities.

The report also shows that data availability and information sharing remain a perennial challenge, one that is preventing countries and supporting organizations from systematically evaluating their work's impact, although renewable energy and energy efficiency projects and policies are growing in developing countries. The 1 Gigaton Coalition has developed a database of about 600 internationally supported projects implemented in developing countries between 2005 and 2016. Furthermore, the report shows that non-state and subnational actors have taken on a leading role in scaling up climate action. The case studies in the report show that low-carbon forms of development – particularly city-based public private partnerships – generate multipleco-benefits. These include improved environmental and human health, economic stimulusand employment creation, enhanced gender equality, and other societal gains that supportthe 2030 Agenda for Sustainable Development.

### **Consequence assessments**

Norway has issued Instructions for Official Studies and Reports (Utredningsinstruksen), laid down by Royal Decree. These Instructions deal with consequence assessments, submissions and review procedures in connection with official studies, regulations, propositions and reports to the Storting. The Instructions are intended for use by ministries and their subordinate agencies. The Instructions form part of the Government's internal provisions and deviation may only be allowed pursuant to a special resolution. The provisions make it mandatory to study and clarify financial, administrative and other significant consequences in advance.

In addition, Norway has a legal framework that deals specifically with environmental impact assessments. The purpose is to promote sustainable development for the benefit of the individual, society and future generations. Transparency, predictability and participation for all interest groups and authorities involved are key aims, and it is intended that long-term solutions and awareness of effects on society and the environment will be promoted.

## **27. POLAND**

The following information was updated in Poland's 2018 NIR compared to its 2017 NIR

---

### **15. CHANGES IN INFORMATION ON MINIMIZATION OF ADVERSE IMPACTS IN ACCORDANCE WITH ARTICLE 3.14**

In 2016, the total amount of climate aid donated was more than PLN 23 million (€ 5.6 million) and included countries such as Ethiopia, Georgia, Indonesia, Iraq, Kenya, Moldova, Nigeria, Tanzania, the West Bank and the Gaza Strip. Approximately 20% of the climate aid provided by the bilateral channel concerned adaptation projects, 20% of activities related to emission reduction. The remaining part was devoted to the implementation of horizontal projects.

## **28. PORTUGAL**

No additional information was included in Portugal's NIR for 2018.

## 29. ROMANIA

No additional information was included in Romania's NIR for 2018.

## 30. RUSSIAN FEDERATION

The following additional information was provided the Russian Federation's NIR for 2018

При выполнении принятых национальных обязательств по ограничению антропогенных выбросов и повышению абсорбции парниковых газов Российская Федерация учитывает положения пункта 14 статьи 3 Киотского протокола о сведении к минимуму неблагоприятных социальных, экологических и экономических последствий для Сторон, являющихся развивающимися странами. Основными направлениями деятельности по сведению к минимуму неблагоприятных социальных, экологических и экономических последствий для развивающихся стран являются:

- смягчение антропогенного воздействия на климатическую систему благодаря разработке и осуществлению целенаправленных национальных политики и мер;
- экспорт в развивающиеся страны энергетических ресурсов меньшей углеродоемкости и компенсация выбросов парниковых газов, связанных с производством или добычей, подготовкой и транспортировкой экспортируемых энергоресурсов;
- содействие развитию альтернативной энергетики в развивающихся странах посредством передачи технологий, возведения и компоновки объектов энергетики с использованием российского оборудования и материалов, обучения персонала навыкам работы на возведенных объектах, а также компенсация выбросов парниковых газов, связанных с производством и транспортировкой в пределах Российской Федерации экспортируемых материалов и оборудования;
- укрепление потенциала в развивающихся странах благодаря подготовке и переподготовке специалистов в области охраны окружающей среды, метеорологии и климатологии, а также в области техники и технологий;
- оказание международной помощи в ликвидации последствий стихийных бедствий, в том числе природно-климатического характера.<sup>15</sup>

Российская Федерация практически полностью обеспечивает себя энергоресурсами за счет внутренней добычи. Значительная часть добытых энергоресурсов экспортируется.<sup>16</sup> При этом выбросы парниковых газов от операций по добыче, подготовке и транспортировке экспортируемых нефти и природного газа, а также утилизации нефтяного (попутного) газа учитываются в национальном кадастре и, соответственно, их сокращение является обязательством Российской Федерации. В частности, благодаря принятым мерам по оптимизации использования попутного нефтяного газа, уровень полезного его использования в 2016 г. достиг 88%, что на 8% превышает аналогичный показатель 1990 года. Экспортные поставки российского природного газа способствуют внедрению в странах-

импортерах современных технологий в энергетическом секторе и обеспечивают замещение более углеродоемких видов топлива (каменный уголь и нефть), снижая, таким образом, выбросы в атмосферу парниковых газов, в первую очередь, CO<sub>2</sub>. Экспорт природного газа в развивающиеся страны Юго-Восточной Азии и Тихоокеанского региона будет производиться по двум направлениям: западному – из Западной Сибири и восточному – с месторождений Восточной Сибири, Дальнего Востока и Сахалина. В 2011 г. введен в эксплуатацию магистральный газопровод Сахалин – Хабаровск – Владивосток, который предполагается использовать в том числе и для экспортных поставок газа в Китайскую народную республику (КНР) и Республику Корея. В 2014 г. заключен контракт о поставке 38 млрд. м<sup>3</sup> российского

<sup>15</sup> Ранее это направление деятельности в национальном кадастре не представлялось.

<sup>16</sup> Основные данные по экспорту энергоресурсов за 2015г. приведены в Приложении 4 т. 2 настоящего доклада.

природного газа в КНР по восточному маршруту с 2019 г. в течение 30 лет, с возможностью увеличения поставок до 60 млрд. м<sup>3</sup>. С целью расширения географии поставок природного газа в направлении Азиатско-Тихоокеанского региона в конце 2014 г. инициирован проект газопровода «Сила Сибири» мощностью 61 млрд. м<sup>3</sup> газа в год.<sup>17</sup>

Увеличивается экспорт сжиженного природного газа (СПГ). К 2013 г. проект «Сахалин- 2» вышел на полную мощность, обеспечивая поставки СПГ объемом 1 млн. Тонн в Республику Корея.<sup>18</sup> С 2014 г. вступил в силу долгосрочный контракт ПАО «Газпром» на поставку 2,5 млн. т СПГ в Индию.<sup>19</sup> СПГ также экспортируется в Аргентину, Египет, КНР, Кувейт, Мексику, ОАЭ, Тайвань и другие развивающиеся страны.

Одним из направлений сотрудничества Российской Федерации с развивающимися странами в области снижения углеродоемкости энергетики и предотвращения изменения климата является атомная энергетика. Государственная корпорация по атомной энергии «Росатом» (ГК «Росатом») реализует проекты в области атомной энергетики на основе новейших российских технологий. Возведение энергоблоков в рамках проектов производится с использованием российских материалов и оборудования, выбросы парниковых газов от производства и частичной транспортировки которых учтены в разделах 3 и 4 настоящего кадастра. Следует отметить, что одновременно со строительством осуществляется обучение местного персонала методам и технологиям работы на построенных объектах и переданном оборудовании. В 2015 – 2016 гг. ГК «Росатом» осуществляла строительство 34 энергоблоков для атомных электростанций (АЭС), находящихся за пределами Российской Федерации. По последним данным, обновленным по сравнению с информацией, включенной в предыдущий кадастр, проекты по строительству атомных электростанций реализуются в Армении, Бангладеш, Египте, Иордании, Иране, Индии, Китае и Нигерии. В 2014 г. заключены межправительственные соглашения об использовании атомной энергии в мирных целях с Алжиром, Аргентиной и ЮАР. В 2015 г. аналогичные соглашения заключены с Ганой и Саудовской Аравией, в 2016 г. – с Боливией, Замбией и Тунисом. На основе заключенных соглашений начато сооружение центров ядерных исследований и технологий в Боливии (2016), Нигерии (2016) и Замбии (2017).

Модернизация производства представляет собой практический инструмент снижения выбросов парниковых газов в различных секторах экономики. Ключевую роль в модернизации производства, а также принятии управленческих решений, направленных на смягчение негативного воздействия на климат, играют высококвалифицированные специалисты. Российская Федерация осуществляет подготовку иностранных студентов по многим специальностям, включая, в первую очередь, технические и технологические специальности различных направлений, а также экономические, юридические и прочие. Ежегодно Правительство Российской Федерации осуществляет оплату обучения иностранных граждан из развивающихся стран и стран СНГ на безвозмездной основе. Подготовка специалистов и повышение их квалификации (обучение в аспирантуре) осуществляется в профильных высших учебных заведениях за счет федерального бюджета (Постановление Правительства РФ от 8 октября 2013 г. № 891)<sup>20</sup>. В настоящее время в Российской Федерации в системе высшего и дополнительного профессионального образования по учебным программам экологического, природоохранного, климатического и гидрометеорологического профиля, а также энерго- и ресурсосбережения обучаются студенты из Азербайджана, Анголы, Армении, Бангладеш, Боливии, Ботсваны, Бурунди, Вьетнама, Гайаны, Гвинеи, Гвинеи-Бисау, Демократической Республики Конго, Джибути, Египта, Замбии, Йемена, Индонезии, Ирака, Ирана, Казахстана, Киргизии, Китая, КНДР, Колумбии, Конго, Коста-Рики, Кот-Д'Ивуара, Кубы, Лаоса, Либерии, Мавритании, Мозамбика, Молдовы, Монголии, Непала, Нигерии, Никарагуа, Руанды, Сан-Томе и Принсипи, Сальвадора, Сирии, Таджикистана, Танзании, Туркменистана, Узбекистана, Шри-Ланки, ЦАР, Чада, Эквадора, Эритреи и других развивающихся стран. В системе высшего профессионального образования разработаны учебные программы, по которым осуществляется преподавание основ метеорологии, климатологии, систем сбора и обра-

<sup>17</sup> [www.gazpromexport.ru/](http://www.gazpromexport.ru/)

<sup>18</sup> <http://www.km.ru/economics/2012/10/09/ekonomika-i-finansy/694369-gazprom-zaklyuchil-dogovor-opostavkakh-szhizhennogo>

<sup>19</sup> [www.gazpromquestions.ru/foreign-markets/](http://www.gazpromquestions.ru/foreign-markets/)

<sup>20</sup> <http://m.government.ru/docs/7126/>



ботки климатической информации, методов оценки состояния и прогнозирования изменений окружающей среды и климата. Координацию образовательной деятельности осуществляет

Учебно-методическое объединение в области гидрометеорологического образования, созданное Минобрнауки России на базе Российского государственного гидрометеорологического университета.<sup>21</sup>

ОК РУСАЛ, одна из ведущих компаний мировой алюминиевой отрасли, реализует международную образовательную программу по подготовке национальных кадров Гвинеи, Гайаны и Ямайки. В рамках программы молодые люди в возрасте от 18 до 35 лет проходят обучение в ведущих российских вузах: Российском университете дружбы народов, Московском государственном университете путей сообщения, Сибирском федеральном университете, Уральском федеральном университете и Уральском государственном горном университете. Компания берет на себя все расходы, связанные с обучением и пребыванием студентов, организует практику на своих предприятиях в России и трудоустройство на предприятиях ОК РУСАЛ в их родных странах после окончания обучения. В 2011 году РУСАЛ запустил программу «100 студентов». Основная цель программы – обучение гвинейской молодежи в российских высших учебных заведениях и подготовка молодых специалистов для работы на предприятиях РУСАЛа в Гвинее. Финансирование обучения и проживания студентов производится полностью за счет средств РУСАЛа (стоимость программы свыше 6 млн. долл. США). Обучение проводится по различным специальностям, в число которых входит экология. За 2015-2017 гг. обучение прошли 111 студентов. Общее количество студентов, обучающихся по Международной образовательной программе РУСАЛа в 2016 году, составило 118 человек, в том числе 85 человек из Гвинеи, 25 человек из Ямайки, 5 человек из Гайаны.

В 2014 – 2017 гг. Российская Федерация активно участвовала в оказании международной помощи по ликвидации последствий стихийных бедствий, в том числе природно-климатического характера. Министерством Российской Федерации по делам гражданской обороны, чрезвычайным ситуациям и ликвидации последствий стихийных бедствий (МЧС России) было проведено в общей сложности 25 гуманитарных операций, в том числе 17 операций в развивающихся странах, включая наиболее уязвимые к воздействию изменений климата. Силы МЧС России были задействованы в спасательных операциях и ликвидации последствий циклона в Республике Вануату (2015), неблагоприятных погодных явлений в Таджикистане (2015) и Киргизии (2017), наводнений в Мьянме (2015), КНР (2016) и Шри-Ланка (2017), а также катастрофических землетрясений и оползней в Афганистане (2014), КНР (2014), Непале (2015), Киргизии (2015), Таджикистане (2016) и Эквадоре (2016). В пострадавшие страны самолетами были доставлены гуманитарные грузы, включавшие продовольствие, палатки, электростанции, медикаменты и предметы первой необходимости. Силы МЧС России также участвовали в тушении крупных природных пожаров в Индонезии (2015), Израиле (2016), Чили (2017) и Армении (2017).

## 31. SLOVAKIA

The following additional information was provided in Slovakia's NIR for 2018.

Implementation of increasingly stringent environmental regulations and economic policies, which penalize further use of environmentally harmful substances, technologies and might be associated with a range of side effects. It is not excluded that some of possible adverse economic effects will affect some developing and least developed countries having less means for adequate remedial response measures. The magnitudes of these potential impacts are typically given by the stringency of adopted measures, selection of the particular policy instrument, size and strength of the implementing economy relative to the world markets and the actual macroeconomic set up of the affected developing countries.

In this chapter are identified potential channels of how domestically implemented environmental policies in the Slovak Republic might have exercised any impact on third countries. Furthermore, any existing evidence about the potential magnitudes of these effects is highlighted. Similarly, the

<sup>21</sup> <http://umo.rshu.ru/content/group>

activities in particular those related to the development aid of the Slovak Republic implemented in order to minimize the negative consequences caused by these policies are described in this chapter. The aim is to meet our commitments under the Kyoto Protocol in respect with transparent reporting on potential adverse social, environmental and economic impacts particularly on developing countries.

### **Adopted Legislative Measures:**

#### **a) Fiscal Policy Instruments**

Fiscal policy instruments are increasingly being referred to as an efficient instrument to correct existing environmentally related price distortions. The Slovak Republic maintains excise taxes on fossil fuels, electricity and mineral oils. The actual fiscal policy drivers, however, remain much more linked to the current governmental budgetary situation rather than to provide fiscal incentives for environmentally sound behaviour. Since 2009, only minor changes occurred such as a decrease of the excise tax on diesel, removal of existing exemptions of coal taxpayers and increase of excise tax on LPG, CNG and electricity. No impact on any third countries is expected from already implemented fiscal policies and therefore no specific policies to offset any negative effects have been considered.

#### **b) Biofuels Policy**

Biofuels policy has been in place to meet the targets required by EU legislation. Increased demand and subsequently also the production of biofuels has not only been reflected by rising commodity prices but also induced land use changes resulting from the reduction of the supply of commodities in direct competition with those used for biofuels world-wide. Therefore, international trade represents the key channel through which the potential negative economic, social and environmental impacts<sup>22</sup> might be transmitted towards developing countries. Taking into account the low quantities of biofuels in use in the Slovak Republic and domestic production of raw materials for their production, we do not expect any negative effects on neither forests destruction nor contribution to the rising world prices of agricultural commodities<sup>23</sup>. Despite its rather low contribution to these developments, the Slovak Republic actively contributes to shaping the international sustainability standards either within its own (and EU internal) legislation process or within the framework of international institutions, such as WTO, FAO, etc. Furthermore, the Slovak Republic has been actively engaged in strengthening the know-how on improving food security and agriculture, land and water management in Kenya. Moreover, scholarships for students from developing countries were offered with preference to those applying to pursue their studies in environmental sciences.

#### **c) GHG Reduction Policies**

The key policy option was a development of emerging carbon market with resulting carbon price. Among the complementary policies, targets have been adopted to increase the share of renewable energy resources, increase energy efficiency as well as the new legislation, which sets more stringent quality standards for fuels and personal cars.

Adopted policies could have had some implications for third countries through either the underlying carbon market price mechanisms or requirements to comply with new and tighter environmental regulations. CO<sub>2</sub> emission trading (either EU ETS or Kyoto Protocol emission trading) and increasingly stringent fuel quality standards might have some impact. The major example of its direct impact on the third countries is the integration of aviation sector into the trading scheme. Among indirect effects, the major example is the concern about a possible carbon leakage. Most of the impacts of carbon leakage (shifts of industrial activity to the countries without any GHG emission reduction commitments, potential downward pressure on oil prices, etc.) on the third countries would in fact be rather positive for them.<sup>24</sup> Measures in place to minimize a potential carbon leakage include the provision to enlist economic sectors facing immediate threat of carbon leakage, which under given conditions continue will receiving their CO<sub>2</sub> allowances free.

---

<sup>22</sup> Implied excessive land use changes, food shortages or compromised food security.

<sup>23</sup> Please note that the different conclusion might be drawn when considering the implications of the overall EU biofuel policies. Similarly, this would also apply in considering the existing agricultural policies within the EU Common Agricultural policy.

<sup>24</sup> In some specific cases, where the polluting entity seeking a location in developing country causing an increase of local pollution, increased environmental damage might outweigh economic benefits.

Furthermore, increasingly stringent fuel quality standards in Europe might in fact turn out to be positive impact because it might trigger increase of investments in the fuel processing industries in third countries. Rising fuel prices in Europe due to the carbon price (or tax) and quality increase might counter play the rising oil prices particularly due to increasing scarcity of this commodity. Such effects might on the one hand negatively affect revenues of the oil exporting countries, which can be on the other hand still balanced by rising demand from the rest of the world. The final net impact will depend on the benefits derived from expansion of industrial production and costs needed to clean up higher levels of pollution including addressing its consequences.

Apart to emission trading, no other Kyoto Protocol flexible instruments have been used to meet the GHG emission reduction targets by the Slovak Republic, therefore no impact on third countries in this respect is reported.

Activities considered within the preparation of the adaptation strategy to climate change have a local character without any implications to third countries.

### 32. SLOVENIA

The following additional information was provided in Slovenia's NIR for 2018.

---

In recent years, Slovenia has been increasing its climate finances. In 2016, Slovenia contributed EUR 3 million for climate finance or assistance in developing countries, which represents an increase of 26% as compared to 2015. In 2016, Slovenia has for the first time also added resources from the "Slovenian climate change fund"(around EUR 1 million per year), where resources are gathered from the sale of allowances from the EU-ETS greenhouse gas emissions trading scheme. Slovenia estimates its climate assistance to be an amount of EUR 3.5 million in 2017. Slovenia will strive to obtain the amount of EUR 3.5 million for climate assistance by 2020.

In the draft Development Assistance Programme for developing countries, which also includes climate finance, Slovenia plans to increase the annual contribution from the Climate fund by 2030 in order for the total climate finance to reach between EUR 6 and EUR 7 million in 2030. The current share of climate finance in 2016 amounts to around 15% of the total ODA, and by 2030, it would be expected to increase at least to 30%, which is twice the increase in the share of climate finance, both in absolute amount and in the share of all ODA resources. In the field of climate finance, Slovenia will also follow joint decisions and guidelines, both at EU and UNFCCC level agreements.

### 33. SPAIN

No additional information was included in Spain's NIR for 2018

### 34. SWEDEN

No additional information was included in Sweden's NIR for 2018

### 35. SWITZERLAND

The following information was updated in Switzerland's 2018 NIR compared to its 2017 NIR.

---

#### **Fiscal incentives, tax and duty exemptions and subsidies**

[.....] As of 1 January 2018, the funds for the national buildings refurbishment programme are limited to a maximum of 450 million Swiss francs per year (previously 300 million Swiss francs per year).

[.....] These mineral oil tax exemptions in the specific sectors are listed in appendix 3 of the Swiss Federal Council's subsidy report. Moreover, the mineral oil tax refunds in the agriculture sector are currently subject to an examination by the Swiss Federal Audit Office.

[.....] Worldwide subsidies for fossil fuels are estimated at 300 billion to 500 billion USD per annum, depending on the level of energy prices. This huge market distortion does not only produce severe fiscal problems for the countries concerned, it also poses a major obstacle for enhanced investments in energy efficiency measures and renewable energies.

Switzerland contributes to World Bank development project ESMAP (Energy Sector Management Assistance Program). The 2016 Annual Report of ESMAP is also supported by Switzerland and provides the analytical basis for the implementation of such reforms.

**Cooperating in the technological development of non-energy uses of fossil fuels, and supporting developing country Parties to this end**

Switzerland does not support any activities linked to the technological development of non-energy uses of fossil fuels in developing countries.

**Cooperating in the development, diffusion, and transfer of less-greenhouse-gas-emitting advanced fossil fuel technologies, and/or technologies, relating to fossil fuels, that capture and store greenhouse gases, and encouraging their wider use; and facilitating the participation of the least developed countries and other non-Annex I Parties in this effort**

Switzerland is an active participant in the negotiations for a plurilateral Environmental Goods Agreement (EGA) at the World Trade Organisation with the aim to liberalise environmental goods, including the diffusion and transfer of less-greenhouse-gas-emitting advanced fossil fuel technologies.

Furthermore, Switzerland is supporting the improvement and refit of inefficient gas-fired power plants in developing countries and advocates the use of the most efficient technologies available. Several Swiss universities conduct research in the field of carbon capture and storage and cooperate with other research institutions, companies and universities primarily in Europe and northern America to further develop the technology. Currently, Switzerland is not supporting any least developed countries and other developing countries in the development of fossil fuel-fired power plants with carbon capture and storage technology, because Switzerland is of the view that the technology is not sufficiently mature and cost effective yet.

## 36. UKRAINE

The following additional information was provided in Ukraine's NIR for 2018.

[...] Ukraine makes its contribution to strengthening the capacities of developing countries in the field of climate change prevention by training the qualified specialists. Information about number of foreign citizens from developing countries, who studied in the specialty “Ecology” in the higher education institutions of Ukraine in 2016, is presented in the table below and based upon the statistics received from the Ministry of Education and Science of Ukraine (letter № 7.3-15-367-18 dated April 11, 2018).

#	Name of Ukrainian Educational Institution	Country	Amount of Students
1	National University of Life and Environmental Sciences of Ukraine	Azerbaijan	1
2	National University of Life and Environmental Sciences of Ukraine	Algeria	1
3	National University of Life and Environmental Sciences of Ukraine	Cameroon	1
4	National University of Life and Environmental Sciences of Ukraine	Uzbekistan	1
5	Mariupol State University	Azerbaijan	4

<i>#</i>	<i>Name of Ukrainian Educational Institution</i>	<i>Country</i>	<i>Amount of Students</i>
6	V.N. Karazin Kharkiv National University	Jordan	1
7	Zaporizhzhya National University	Ecuador	1
8	National Technical University "Kharkiv Polytechnic Institute"	Azerbaijan	1
9	National Technical University "Kharkiv Polytechnic Institute"	Congo	1
10	National University of Shipbuilding named after Ad-miral Makarov	Turkmenistan	1
11	Kharkiv National University of Construction and Architecture	Turkmenistan	1
12	Kyiv National University of Construction and Architecture	Algeria	1
13	Kyiv National University of Construction and Architecture	Angola	1
14	National Metallurgical Academy of Ukraine	Angola	5
15	National Metallurgical Academy of Ukraine	Congo	1
16	National Metallurgical Academy of Ukraine	Libya	1
17	Tavriya State Agrotechnological University	Guinea	1
18	Sumy National Agrarian University	Turkmenistan	1
19	National Technical University of Ukraine "Igor Sikorsky Kyiv Polytechnic Institute"	Azerbaijan	1
20	Odessa State Ecological University	Azerbaijan	4
21	Odessa State Ecological University	Moldova	2
22	Odessa State Ecological University	Turkmenistan	1
23	Odessa National Polytechnic University	Libya	1
24	Odessa National Polytechnic University	Nigeria	1
25	Odessa National Polytechnic University	Turkmenistan	1
26	Private Higher Educational Institution University "European University"	Georgia	3
27	Uman National University of Horticulture	Turkmenistan	1
28	Dnipropetrovsk National University of Railway Transport named after Academician V. Lazaryan	Nigeria	1
30	Kharkiv National University of Municipal Economy named after O.M. Beketov	Iraq	1
In Total		43	

## 37. UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND

The following additional information was provided in UK's NIR for 2018.

This chapter has been updated for the 2018 NIR submission. Changes include:

- An update on new research programmes in 15.2.1;
- An update on Actions to minimize adverse impacts in accordance with Article 3, paragraph 14 in 15.2.2;
- An update on International Climate Finance in 15.2.3
- An update on Knowledge Transfer in 15.2.4;
- An update on Research Collaboration in 15.2.5;
- An update on Capacity Building and Technology Transfer projects on Renewable Energy and Energy Efficiency in 15.2.6;
- An update on capacity building projects on adapting to climate change in 15.2.7;
- An update on Energy Market Reforms in 15.2.8; and
- The section “within the EU (15.2.2 in the previous NIR) has been removed to prevent duplication of information in the EU NIR.

### 15.2.1 UK research, reports and analysis

[.....] The UK continues to take an active part in the EU's Strategic Energy Technology Plan, the technology element of Energy Union and the EU's Horizon 2020 research and development funding programme.<sup>25</sup>

### 15.2.3 International Climate Finance

Recognising the growing importance and urgency of tackling climate change and its impact on growth and poverty reduction, the UK invested £3.87 billion in International Climate Finance (ICF) from 2011-2016 (financial years 2011/12 to 2014/15). The UK has committed to provide at least a further £5.8 billion from 2016-2020 (financial years 2015/16 to 2020/21), with a commitment to achieve a 50:50 balance between mitigation and adaptation over this period. This will lead to a doubling in UK climate finance in 2020, relative to 2014. This commitment reflects our view that climate change is the biggest threat to the long-term eradication of global poverty, and that the impacts of climate change will hit the poorest hardest.

The UK's ICF is supporting a portfolio of investments managed by the Department for International Development (DFID), BEIS, and Defra. It aims to support international poverty eradication now and in the future by helping developing countries to manage risk and build resilience to the impacts of climate change, take up low-carbon development at scale, and manage natural resources sustainably. The UK aims to spend half of its ICF on mitigation, and half on adaptation. To achieve this, the UK ICF delivers transformational change through well-targeted finance.

For example, it helps to pay the incremental cost of making infrastructure investments climate smart and avoid lock-in of high carbon technologies. It also incentivises countries to reduce deforestation and promote sustainable land use. This demonstrates that low-carbon, climate resilient development paths are viable and compatible with economic growth and poverty alleviation. Cumulative data that we collect show that, between 2011/12 and 2016/17, UK ICF programmes have:

- Supported 34 million people to cope with the effects of climate change;
- Provided 12 million people with improved access to clean energy;
- Reduced or avoided 9.2 million tonnes of greenhouse gas (GHG) emissions (tCO<sub>2</sub>e);
- Installed more than 400 MW of clean energy capacity; and
- Mobilised £2.2 billion public and £500 million private finance for climate change purposes in developing countries.

Through its ICF, the UK is supporting a number of bilateral and multilateral programmes, including (but not limited to) the following examples:

**The Green Climate Fund** – Since becoming operational in 2015, the Green Climate Fund (GCF) has become the key multilateral climate fund, with a mandate to make ‘an ambitious contribution to

<sup>25</sup> <http://www.defra.gov.uk/statistics/environment/green-economy/scptb01-ems/>

the global efforts towards attaining the goals set by the international community to combat climate change'. The UK is a strong supporter of the GCF, having committed £720 million for the initial resource mobilisation period, and is committed to ensuring that the GCF delivers maximum impacts in the developing countries it supports.

The GCF funds transformational projects with a strong focus on leveraging private finance, with a commitment to provide 50% of its resources for mitigation and 50% for adaptation. At least 50% of its adaptation support will be provided to particularly vulnerable countries including Least Developed Countries (LDCs), Small Island Developing States (SIDS) and African States. In the past year, the GCF has made significant progress in terms of programming, tightening its policy framework, and building the Secretariat's capacity. So far, the GCF has committed \$2.65 billion of funding to 54 projects, representing a balanced geographical and thematic split, with over 50% of funds going to private sector projects, and over \$400 million to Small Island Developing States.

**The Nationally Appropriate Mitigation Action (NAMA) Facility** is a bilateral programme supported by the UK, working in partnership with the German Federal Ministry for the Environment (BMUB), Denmark and the European Commission. NAMAs are country owned projects, policies, or programmes that shift a technology or sector in a country onto a lowcarbon development trajectory. The Facility seeks to support and fund the implementation of the most transformational parts of the NAMAs, for which countries are unable to attract private sector funding. It has an open application process, welcoming projects across a diverse range of sectors and geographies. Since 2012, 20 climate mitigation projects across 16 countries have been supported, with each project chosen for its ability to catalyse change in the sector. To support this demand the UK has committed £140 million into the Facility, of which £40 million has been allocated to the 5<sup>th</sup> Call of the Facility, launched on 13 November 2017

**Climate Investment Funds** - The UK is the largest investor in the \$8.3 billion Climate Investment Funds (CIFs), having invested £1,252.9 million between 2011/12 and 2016/17, to pilot low-emission and climate resilient development through projects implemented by the multilateral development banks. The CIFs now operate across 72 countries and have a total portfolio of 310 projects. CIFs finance is enabling the construction of the equivalent of over a quarter of the current globally installed geothermal and concentrated solar power. The projects are unlocking finance flows in the green markets of developing countries and are expected to generate \$58 billion of co-financing.

**The Clean Technology Fund (CTF)** - Of the four funds that sit under the Climate Investment Fund, the UK has contributed £701 million, between 2011/12 and 2016/17, to the Clean Technology Fund (CTF). The CTF provides concessional finance and technical assistance in 21 countries, delivering significant development benefits, such as increased energy security, reduced local air pollution, and job opportunities. It has supported national governments to identify and implement ambitious low carbon investment plans, and helped demonstrate technologies and create markets. South Africa's KaXu Solar One Concentrated Solar Power project, with funding from the Clean Technology Fund, has recently been awarded a *Momentum for Change Award* by the UNFCCC for its innovative and game-changing approach to climate change and wider economic, social and environmental challenges.

**The Scaling up Renewable Energy Programme (SREP)** is another of the four Climate Investment Funds. The UK has provided £268m to SREP, which aims to stimulate energy access and economic activity by working with governments to build renewable energy markets and support productive uses of energy at the household level. As of June 2017, SREP had endorsed investment plans for 19 pilot countries. Expected results under these plans, and the Fund's Private Sector Set Aside, include an estimated 6,686 gigawatt hours (GWh) of electricity to be generated annually from renewable energy sources (equivalent to the annual electricity production of Armenia) and new or improved access to clean, modern energy services for 17.3 million people (approximately the population of Malawi). The total estimated greenhouse gas (GHG) emissions to be avoided are approximately 5.4 million tons CO<sub>2</sub>e/yr.

**Pilot Programme for Climate Resilience (PPCR):** the UK is the largest contributor to the \$1.2 billion Pilot Programme for Climate Resilience (PPCR), one of the four Funds that sit under the CIFs. The PPCR assists governments with the integration of climate resilience into development planning, and pilots innovative public and private solutions to climate-related risks, primarily in Least Developed Countries or Small Island Developing States. For example, a \$15.75 million project

in Mozambique will develop climate resilient infrastructure to improve the ability of 8,200 farming families to withstand extreme weather events.

**Least Developed Countries Fund (LDCF):** the UK is also a long-standing contributor to the Least Developed Countries Fund (LDCF), which supports LDCs in developing their National Adaptation Programmes of Action (NAPAs) and funding the resultant programming. Through our most recent contribution of £30 million, the UK is aiming to help nearly a million people become more resilient to climate change, and to bring approximately 200,000 hectares of land under more sustainable management. This was the fourth contribution that the UK has made to the LDCF – total contributions amount to £122 million since 2006. The LDCF has provided \$8 million towards a project strengthening the climate resilience of vulnerable communities in Somalia. Outcomes so far include the construction of a sand dam which has stored enough water for 40,000 people and their livestock to survive through the prolonged drought period in the Bari region.

**Reduce Emissions from Deforestation and forest Degradation (REDD+)** is a framework agreed under the UNFCCC to *Reduce Emissions from Deforestation and forest Degradation* and enhance forest carbon stocks (+) in developing countries. It is aiming to demonstrate the potential of a new land-use paradigm that delivers large-scale forest protection alongside

sustainable agricultural intensification. The UK will continue to support “jurisdictional” REDD+ results-based finance that unlocks key barriers in the enabling environment and mobilises private finance, including the examples below:

- The UK has committed £145 million to the Forest Carbon Partnership Facility to support more than 40 countries to develop and then deliver ambitious plans to reduce deforestation. It provides payments based on progress to reduce deforestation as an incentive for countries to take action.
- The UK is also supporting the BioCarbon Fund with £115 million. This is funding to fund policy reform and land-use projects across large areas, to roll out new landscape-wide approaches that produce verified emission reductions from agriculture, forests and other land use.

**REDD for Early Movers (REM)** - The UK has committed £73 million to the **REDD for Early Movers (REM)** programme which is an accelerator for the most ambitious and committed countries to reduce emissions from deforestation. REM rewards programmes that are already successful in driving down deforestation trends, with finance re-invested in agreed activities to deliver further results. UK support focusses on Colombia’s programme to achieve zero net deforestation in its Amazon region, as well as programmes to decouple increases in production from forest loss in two Brazilian States – Acre and Mato Grosso.

**The Sustainable Infrastructure Programme** - In 2017 the UK established the Sustainable Infrastructure Program (SIP) in Latin America in partnership with the Inter-American Development Bank. The purpose of the programme is to enable and accelerate the implementation of the Nationally Determined Contributions in Latin America, initially Brazil, Colombia, Mexico and Peru, focusing on supporting and catalysing private sector investments in low carbon infrastructure. The UK will provide up to £177.5 million from its ICF budget over 5 years to provide technical and financial support. This can include technical assistance to governments to help them shape their regulatory frameworks in a way that is attractive to private investors, support the development of local capital markets, while also investing in a few demonstration projects to show commercial viability.

**UK Climate Investments** - UK Climate Investments LLP has been mandated to invest in up to £200 million of UK ICF in low carbon projects in emerging markets its pilot phase (2015- 2018). The Investment Mandate requires UKCI to make equity investments into renewable energy and energy efficiency projects in India and Sub-Saharan Africa. Through investing in the projects. The central objectives of the pilot are:

- Use a private sector actor to have a demonstration effect, build a successful track record and prove commerciality of low carbon investments to the broader market by making a strong return on investment; and
- Achieve better value for money by more effectively and nimbly interacting with the private sector.



UKCI's first investment in India was alongside a UK solar developer in a partnership platform to fund the development, acquisition and ownership of large scale solar power generation assets in India.

The Renewable Energy Performance Platform (REPP) - The REPP seeks to mobilise private sector development activity and investment in small and medium scale renewable energy projects (up to 25MW) in sub-Saharan Africa. REPP aims to increase the number of sound 'bankable' smaller renewable energy projects by assisting project proponents throughout the project development stage, by financing Technical Assistance, drawing on existing risk mitigation instruments such as political risk insurance and providing results-based finance where necessary. The UK has committed £48 million for 2015 to 2020.

**The Climate Public Private Partnership (CP3)** a £130 million programme that aims to support clean energy and demonstrate the commercial viability of investments in climate-related businesses in emerging markets. By anchoring two private equity funds – i.e. providing committed investment into these funds to help attract additional investors – the programme mobilised private climate finance of \$279 million and kick-started the largest private equity climate fund in Asia. The funds have so far invested in 68 businesses and renewable energy developers across developing countries in Asia, Africa and South and Central America. CP3 is expected to avoid 57.4m tonnes of CO<sub>2</sub> equivalent over its lifetime (to 2026).

#### 15.2.4 Knowledge transfer

[.....]

- The UK-funded Global Network of Climate Innovation Centres programme provides funding to the World Bank's Climate Technology Programme (CTP) to support the design, implementation, and international coordination of Climate Innovation Centres (CICs) in developing countries. The programme assists local entrepreneurs to develop innovative technology and business solutions to domestic energy, resource and environmental challenges. [.....] There are additional non-DFID supported CICs in South Africa, the Caribbean, Ghana and Morocco. The programme helps gather evidence on climate technology innovation in developing countries, enabling national CICs to respond to technology trends. [.....] DFID has committed approximately £103m to the Climate and Development Knowledge Network (CDKN)

#### 15.2.5 Research collaboration

[.....] The UK continues to be an active participant in EU-based research and development initiatives through the EU's Strategic Energy Technology Plan, the EU's Horizon 2020 research and development funding programme and through the International Energy Agency's Technology Collaboration Programmes. The UK [.....] co-leads the affordable heating and cooling of Buildings Innovation Challenge alongside the European Commission and United Arab Emirates. [.....] The UK is playing a key role in promoting knowledge sharing and capacity building in developing countries on Carbon Capture & Storage (CCUS). The UK is extending this support by £10 million in 2017-18. [.....]

#### 15.2.6 Capacity Building and Technology Transfer projects on Renewable Energy and Energy Efficiency

The world needs increasing energy supplies to sustain economic growth and development. However, energy resources are under pressure and CO<sub>2</sub> emissions from today's energy use are already changing the climate. It is necessary to accelerate the deployment of low carbon energy technologies and increase energy efficiency to address the global challenges of energy security, climate change and economic development. The following are some examples of the technology transfer activities that the UK undertakes:

- **Carbon Capture, Usage and Storage (CCUS):** Since 2012, the UK has provided £60 million to support developing countries to build up the technical and institutional knowledge necessary to enable the deployment of CCUS technologies. The UK is extending this support by £10 million in 2017-2018. CCUS development and deployment is crucial for meeting the 2°C target set out under the Paris Agreement. The UK recently completed an evidence review of the global evidence base on CCUS, which highlights that globally, 12-14% of cost-effective decarbonisation needs to come from CCUS in order to meet the 2°C target. The programme aims to raise the level of

technical understanding of CCUS in key developing countries, leading to the establishment of the necessary policy frameworks and incentive structures to support CCUS demonstration and ultimately accelerate the deployment of CCUS.

- **The Clean Technology Fund (CTF)**, to which the UK is the largest contributor (providing £701 million), has demonstrated and deployed low carbon technologies at scale across 21 countries. Examples include supporting the first generation of utility scale Concentrated Solar Power (CSP) plants to be built in developing countries, with the plant in South Africa now providing power to 80,000 people and winning a Momentum for Change award from the UNFCCC. CTF finance for the Noor CSP complex in Morocco has helped to bring down technology costs and overall CTF has supported around a fifth of global CSP deployment to date. The fund has dramatically scaled up geothermal development across multiple countries, as well as a wide range of other renewable and clean transport technologies.
- **Capacity Building and Transparency:** As agreed by COP21, the Capacity Building Initiative for Transparency (CBIT) was established by the Global Environment Facility (GEF) in 2015 to support developing countries to meet new reporting requirements under the enhanced transparency framework of the Paris Agreement. The UK is the largest donor to CBIT to date, committing £10 million from the ICF and £1 million from the Scottish Government.
- **The Asian Development Bank (ADB)'s Clean Energy Fund** was set up to improve energy access, energy security and the transition to low-carbon technologies through cost-effective investments. The UK's contribution of £10 million is specifically used to fund the technical assistance elements of the fund.
- **Climate Innovation Centres Programme:** The UK-funded Global Network of Climate Innovation Centres programme provides funding to the Technology Programme (CTP). This supports to support the design, implementation, and international coordination of Climate Innovation Centres (CICs) in developing countries. The programme assists local entrepreneurs develop innovative technology and business solutions to domestic energy, resource and environmental challenges.

The UK has continued to leverage the collective commitment of the international community in other key fora and institutions to deliver policy interventions and high level actions that encourage the promotion of low carbon technologies, including:

**International Renewable Energy Agency (IRENA)** - The UK supports IRENA's mission to promote widespread and sustainable use of renewable energy through its role as a centre of excellence for energy transformation, a global voice for renewables, a network hub for international collaboration, and a source of support and advice. The UK has been an IRENA

Council member for 2016-2017 and has helped to drive forward IRENA's medium-term strategy which is consistent with UK government objectives regarding energy security and decarbonisation.

**International Partnership for Energy Efficiency Co-operation (IPEEC)** - The UK is working in the International Partnership for Energy Efficiency Co-operation (IPEEC), with key developed and developing countries, to share experience and learn from each other's policy successes and failures. This identifies, and identify opportunities for collaborative work to address issues of mutual interest or concern, where such international action can add value to domestic efforts/expertise. A work programme has been developed encompassing a range of activities including appliance standards and labels, sustainable buildings, financing, data collection and indicators, energy management, transport, and capacity building activities. Much of this work is also being taken forward within the G20's Energy Efficiency Leading programme which IPEEC is co-ordinating. The UK is also working with members of the G20, IPEEC and the International Energy Agency (IEA) to establish an "Energy Efficiency Hub", to help coordinate international efforts to drive forward energy efficiency improvements.

### **15.2.7 Capacity building projects on adapting to climate change**

UK ICF investments aim to support international poverty reduction now and in the future by helping developing countries manage risk and build resilience to the impacts of climate change, take up low-carbon development at scale, and manage natural resources sustainably. The poorest and most vulnerable people in the world will be hit first and hardest by the impacts of climate change. This is

why the UK aims to spend half of its climate finance on adaptation. We support capacity-building to assist developing countries to better:

**Adapt** to long-term impacts well in advance, for example by changing or diversifying livelihoods and ensuring infrastructure is fit for purpose.

**Anticipate** and reduce the impact of climate variability and extremes, for example through effective forecasting and preparedness measures.

**Absorb** the effects of climate extremes and disasters - for example through effective and rapid response that enables people to cope with disaster and recover quickly.

#### **Adapt**

- The Building Resilience and Adaptation to Climate Extremes and Disasters (BRACED) programme is helping people become more resilient to climate extremes in South and Southeast Asia, as well as in the African Sahel and neighbouring countries. It does this through improved integration of disaster risk reduction and climate adaptation methods into development approaches, influencing local, national and international policies and practices. The Blue Forest programme is introducing models for the sustainable management of mangroves in Madagascar and scaling these models in Indonesia and South East Asia to help increase coastal adaptation and resilience. The £10.1 million project, involving fisheries management and mangrove livelihood diversification, is expected to protect 20,000 hectares of mangrove forests and benefit over 100,000 people. Key progress made on livelihood adaptation includes the creation and implementation of 11 sustainable community-owned mangrove forestry management plans, and the development and integration of multiple alternative livelihoods, including bee keeping and sea cucumber farming.

#### **Anticipate**

- UK Aid funds the Weather and Climate Information and Services for Africa (WISER) programme. Its mission is to deliver transformational change in the quality, accessibility and use of weather and climate information services at all levels of decision making for sustainable development in Africa. It is strengthening the capacity of the national and
  - regional mandated organisations and channels in order to deliver weather and climate services which support poverty reduction, directed by user needs.
  - UK Aid also funds the Future Climate for Africa (FCFA) research programme, which aims to enhance the scientific understanding and prediction of climate variability and change in Africa and, at the same time, is working with stakeholders to bring this information into use in adaptation planning. FCFA includes 11 pilot studies, building capacity across sub-
    - Saharan Africa in using climate information to inform decisions, including infrastructure development, climate-smart agriculture, and urban and national planning.
    - The UK is a major contributor to African Risk Capacity (ARC) which strengthens African governments' understanding of drought risk and enables them to buy insurance that will pay out after harvest failures due to droughts. Senegal, Mauritania and Niger received payments totalling \$26.5 million after poor rains in 2014, providing food aid, animal fodder and other assistance to 1.3 million people. Malawi received a payment of \$8.1 million in 2016, which they have used for emergency cash transfers to affected people and to replenish the national strategic grain reserve. Five countries are currently insured.

#### **15.2.8 Energy Market Reforms – responding to energy market imperfections**

Launched under the last Government, Electricity Market Reform (EMR) introduced two key mechanisms – Contracts for Difference (CfD) and the Capacity Market.

CfDs are long term (15 year) contracts designed to give greater certainty and stability of revenues to electricity generators by reducing their exposure to volatile wholesale prices, whilst protecting consumers from paying for higher support costs when electricity prices are high.

Following the award of investment contracts to eight projects in 2014 and a first competitive allocation round in 2015 currently supporting 24 projects, a second CfD Allocation Round took place in September 2017. This led to 16 contracts being signed for ten projects, representing over 3GW of new renewable generation capacity to commission from 2021/22 onwards.

In total, the CfD scheme is now supporting 42 renewable electricity projects across 56 contracts, and is expected to deliver around 10GW of new installed capacity by 2023. Six projects have so far

been commissioned, providing a combined capacity of over 1.6 GW of renewable electricity. The Government announced in its Clean Growth Strategy in October 2017 that it plans to hold a further allocation round in spring 2019.

Three main Capacity Market auctions have been completed so far, with the fourth due in February 2018. Along with a special, early auction, which brought forward the start of the Capacity Market by a year to 2017/18, the auctions held so far have secured supplies up to 2020/21.

The most recent main auction was held in December 2016, for delivery in 2020/21. This, saw around 3.4 GW of new projects clear, with 1.5GW of new gas including a new CCGT plant (Centrica: Kings Lynn), a new OCGT plant (Spalding), and a variety of smaller scale, flexible gas resources. The UK is continuing to reduce its reliance on coal and is bringing innovative and low-carbon technologies into its energy mix, as part of a cleaner, more flexible energy system. The last two main auctions together have seen around 7.5GW of new capacity coming through, with significant innovation (demand-side response, battery storage) alongside more traditional gas projects and new interconnectors. The Government has confirmed plans to close all unabated coal power stations by 2025.

---