



24 September 2020

**Compilation of information on the minimization of adverse
impacts in accordance with Article 3, paragraph 14, of the Kyoto
Protocol, 2019**

Note by the secretariat

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I. Mandate

1. The Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol (CMP), by Decision 15/CMP.1,¹ 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.1,² 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.1:³
 - (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.1.⁴

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

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

³ 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.

⁴ Decision 22/CMP.1, annex, paragraph 125.

II. Approach

6. As of September 2020, Thirty-nine Parties included 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 2020 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 2020 NIR differs from the information provided in the 2019 NIR, the complete text as included in the 2020 NIR is presented in the compilation;

(b) In the case that only a small part of the information provided in the 2020 NIR differs from the information provided in the 2019 NIR, only the difference is presented.

(c) In the case that additional information is provided in the 2020 NIR on top of the information provided in the 2019 NIR, only the additional part is presented;

(d) In the case that no difference was found between the 2020 and 2019 NIRs, it is stated “No additional information was included in the NIR for 2020”.

III. Observations

8. Of the 43 Parties that submitted NIRs,⁵ 39 provided information on the on the minimization of adverse impacts. One Party (Kazakhstan) did not submit its NIR. Out of the NIRs from the forty-three Parties, it is observed that seventeen Parties (Australia, Estonia, European Union, Greece, Hungary, Italy, Japan, Malta, Netherlands, New Zealand, Norway, Portugal, Russian Federation, Slovakia, Spain, Sweden and United Kingdom) provided major changes and/or additional information, ten Parties (Austria, Belgium, Iceland, Latvia, Lithuania, Monaco, Poland, Slovenia, Switzerland and Ukraine) provided minor changes or updates, and twelve Parties provided the same information as contained in last year’s NIRs. Four Parties (Belarus, Canada, Turkey and the United States) did not provide information.

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 2020.

How Australia addresses domestic impacts of response measures

[...] The Australian Government aims to meet its international climate change obligations while protecting the livelihoods and employment of Australian workers. It sees the development and use of technological solutions as key to achieving emissions reductions while maintaining social and economic gains. In support of this approach, Australia will release a Technology Investment Roadmap in 2020 to establish technology priorities in partnership with industry to address the challenges of energy transition.

How Australia addresses the international impacts of response measures

[...] In November 2019, Australia released its Climate Change Action Strategy which will guide climate action through the development cooperation program over 2020–25. The Strategy sets three key objectives to make the best use of our development assistance: supporting partner countries to adapt to climate change, and to plan, prepare for and respond to climate related impacts; promoting

⁵ By 21 September 2020.

the shift to lower-emissions development in the Indo-Pacific region; and supporting innovative solutions to climate change, including those that engage private sector investment. Australia also has a complementary private sector development strategy to support the growth and inclusiveness of the private sector in developing countries. The Strategy will underpin our climate investments and help us meet Australia's commitments, building on our \$1 billion climate development assistance from 2015–2020.

Currently the Australian aid program includes targets for promoting prosperity, engaging the private sector and reducing poverty. Mandatory safeguard requirements on all Australian aid investments, including our bilateral climate finance programme, ensure potential adverse social and environmental impacts are identified and adequately addressed. In December 2019, the Australian Government announced a consultation process to inform a new international development assistance policy to drive Australia's efforts in support of security, stability, prosperity and resilience in the Indo-Pacific. The new policy will guide Australia's development cooperation program and build on the objectives of the Foreign Policy White Paper (released in November 2017).

Going forward, Australia will look at ways of working through the development cooperation program to help developing country partners reduce emissions and build resilience to the effects of climate change, while demonstrating the co-benefits of these activities in responding to the COVID-19 health and economic crisis.

For example, Australia is supporting:

[...]• The Regional Pacific NDC Hub, which provides a technical support unit and coordination to assist Pacific countries develop and implement their adaptation and mitigation plans;

- ARENA's International Engagement Program (IEP) provides funding to 12 projects to take part in the International Energy Agency Technology Collaboration Programmes (IEA TCP) and the Mission Innovation Challenges (MICs). These projects primarily facilitate knowledge and information exchange on research activities for renewable energy technologies Multilateral Funds including the Global Environment Facility, World Bank, Montreal Protocol Multilateral Fund and Asian Development Bank;

- The Sustainable Development Investment Portfolio which takes an integrated approach to water, energy and food management in three major Himalayan river basins, with a focus on climate change risks;

- Bilateral initiatives to deploy low carbon technologies and expertise in developing countries, such as micro-grids in the Pacific.

2. AUSTRIA

The following information was updated in Austria's 2020 NIR compared to its 2019 NIR.

[...]• Fuel consumption levy

The car registration levy depends on the standard fuel consumption of the car. The provisions have been adapted to the new test cycle for the type approval of cars (WLTP). For cars with a fuel consumption corresponding to CO₂ emissions below or equal to 115 g/km the tax rate is zero, it linearly increases up to 32% for cars with emissions of 275 g/km; further 40 € are added for each g/km above 275 g/km. Electric vehicles are exempted from the levy. Since 2020 the registration levy for motor cycles is also based on the the standard fuel consumption

[...]• Company cars

Until the 31st December 2015, the non-cash benefit was valued uniformly monthly at 1.5% of the actual cost of the vehicle – with a maximum of € 720. Since 2016 the non-cash benefit was raised to 2% - with a maximum of € 960.

In 2019 (<https://www.ris.bka.gv.at/eli/bgb/II/2019/314>) an ecological component has been introduced in deviation of the provision of 2016: for vehicles registered for the first time after 31st March 2020 with a CO₂ emission value of not more than 141 grams per kilometer, the non-cash benefit of 1.5% of the actual purchase costs of the motor vehicle (including sales tax and standard

consumption tax) still applies, up to a maximum of € 720 per month. The amount of 141 grams per kilometer is reduced by 3 grams annually from the 2021 calendar year to the 2025 calendar year.

Agricultural subsidies

[...] (b) **Removing subsidies associated with the use of environmentally unsound and unsafe technologies**

The Climate and Energy Strategy of the Federal Government foresees the identification of subsidies that run counter to climate and energy targets. An interministerial working group on this issue has started its work in 2019, which is also reflected in the Austrian Energy and Climate plan. Due to elections in Austria and the subsequent new governmental programme, its results and components will be incorporated in a comprehensive plan of making the tax system more ecological.

3. BELARUS

No information was included in Belarus' NIR for 2020

4. BELGIUM

The following information was updated in Belgium's 2020 NIR compared to its 2019 NIR.

[...] Various international bodies have identified areas where progress could be made to decrease fossil fuel subsidies in Belgium. Belgium has abolished subsidies supporting the use of coal and other fossil fuels for energy production and expects these measures to have a positive health impact on the long term. A modification of taxes aims achieving an equality of excises for diesel and gasoline has been implemented ("Royal Decree of 26 October 2015" and law of 27 June 2016): the special excise duty for diesel for non-commercial use has been increased from 2015 to 2018. The primary objective of this PAM is to improve air quality. The NECP foresees a national inventory of all fossil fuel subsidies will be communicated to the EC by end of 2020, and an action plan will be put in place by the federal state by 2021 to phase out fossil fuel subsidies based on a step by step approach, taking into account the guarantee of the SoS. The plan will include concrete and social corrective steps in order to accompany the transition to a climate neutral society.

The respect and the promotion of human rights is and remains a priority for Belgium, both at the national level and in the relations with other countries.

Belgium is in various ways actively involved in the promotion and protection of human rights, e.g.:

- Establishment of a solid legal and policy framework for combating gender-based discrimination;
- Support of the Office of the High Commissioner for Human Rights as a partner organisation of multilateral cooperation.
- Focus on the rights of women in the programming cycles of cooperation activities.
- Recent decision to work out a national action plan on business and human rights which will ensure the implementation of social responsibility and the anchorage of human rights within the business sector;
- Commitment to develop a 2nd national plan to combat child poverty;
- etc.

For more info, we refer to the 1st Belgian National Voluntary Review on the Implementation of the 2030 Agenda ("Pathways to sustainable development").

Finally, the NECP also foresees:

- The organisation of a "National dialogue on the just transition to a climate-neutral society" with all policy actors, governments and stakeholders. This dialogue will be supported by an analysis of the positive and negative effects of the transition to a climate-neutral society and will focus, among other things, on the identification of policy options. The Belgian agricultural policies and the

promotion of bio-fuels are developed within the European common policies. Concerning biofuels, acknowledging that their development could create pressures on food prices and on land and forest management, especially in developing countries, the EU has established strict sustainability criteria which in particular include not supporting biofuels from land with high biodiversity value (primary forest and wooded land, protected areas or highly bio-diversed grasslands), or from land converted from wetlands, peat lands or continuously forested areas. It will also be very cautious about any broader environmental and social aspects such as air, water and soil quality and labor conditions. Belgium foresees a biofuel blending percentage of 10,45% in real terms and 13,9% including double counting. This includes a 7% first gen blending throughout the period and a blending of 1,75% and 1,7% of part A & part B advanced biofuel blending respectively in 2030. A biannual study is executed to evaluate the technical feasibility, the availability of resources and advanced biofuels (recycled carbon fuels & technological evolutions), the environmental-integrity and possible conflicts in their use, consumer costs as well as the availability of other renewable energy sources.

5. BULGARIA

No additional information was included in Bulgaria's 2020 NIR compared to its 2019 NIR

6. CANADA

No information was included in Canada's NIR for 2020

7. CROATIA

No additional information was included in Croatia's NIR for 2020

8. CYPRUS

No additional information was included in Cyprus' NIR for 2020.

9. CZECH REPUBLIC

No additional information was provided in the Czech Republic's NIR for 2020.

10. DENMARK

No additional information was included in Denmark's NIR for 2020

11. ESTONIA

The following additional information was provided in Estonia's NIR for 2020

[...] *Excise duties*

In recent years, Estonia's tax policy has proceeded from the principle that the tax burden is shifted towards taxation of consumption of natural resources and pollution of the environment. At the same time, it seeks to keep the tax systems simple and transparent, with as few exceptions as possible. The following fuels are subject to excise duty in Estonia: unleaded petrol, leaded petrol, aviation spirit, kerosene, diesel fuel, diesel fuel for specific purposes, light heating oil, heavy fuel oil, shale-derived

fuel oil, motor liquid petroleum gas and motor natural gas (hereinafter together motor fuel and fuel oil), coal, lignite, coke and oil shale, liquid petroleum gas, natural gas and specialty and unconventional fuel-like mineral oil, liquid combustible substances and biofuel. Excise duty is exempt from biogas, including biomethane.

[...] Pollution charges

[...] With the revenues from the environmental charges, the state has been financing environmental projects through the Environmental Investment Center for the last 20 years (including replacement of fossil fuel boilers with renewable fuel boilers, reconstruction of district heating systems, etc.).

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

[...] On the mitigation side there has been two projects approved.

Reverse Resources OÜ received a grant for the promotion of a software product for the recycling of clothing waste. Reverse Resources develops software for mapping and recycling textile waste at Asian clothing production factories. They have successfully completed two pilot projects with the world's largest global clothing brands and their factories. The support received will help to develop these solutions and bring them to the Bangladesh market.

NGO Mondo received a grant for the development of sustainable and affordable solar solutions for rural communities in Myanmar. As a result of the project, two affordable and sustainable solar-powered solutions developed in Estonia will be brought to the local market as a result of the project, in view of the development needs of rural Myanmar Shan state. One provides a permanent electrical connection to local organizations and public buildings, the other provides home users with a suitable solution in areas where electricity has so far been unavailable. The project will install real prototypes and raise the environmental awareness of local people.

12. EUROPEAN UNION

The following additional information was provided in the European Union's NIR for 2020.

Impact assessment of EU policies

[...] This process is governed by the so-called “Better Regulation Guidelines”⁶. [...]

[...] The EU’s Fourth Biennial Report⁷ 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 online⁸. In addition to the general approach described above to address adverse [...]

Directives on the promotion of the use of renewable energy Promotion of biomass and biofuels

[...] In April 2019, the European Commission published its regular Renewable Energy Progress Report⁹ under the framework of the 2009 Renewable Energy Directive. The report includes information on the assessment of sustainability of EU biofuels. In 2016, the net savings in greenhouse gas emissions resulting from the use of renewable energy in transport in the EU amounted to approx. 33 Mt CO₂-equivalent. Taking into account indirect Land Use Change (ILUC) emissions associated to biofuels consumed in the EU, net savings of 12 Mt CO₂ equivalent remain.

The 2030 climate and energy framework

[...] The 2030 climate and energy framework constitutes the main instrument for implementing the European Union’s Nationally Determined Contribution (NDC) under the Paris Agreement. In its conclusions¹⁰ of 12 December 2019, the European Council invited the European Commission to put

⁶ http://ec.europa.eu/smart-regulation/guidelines/toc_guide_en.htm

⁷ <https://unfccc.int/documents/204815>

⁸ <http://ec.europa.eu/transparency/regdoc/?language=en>

⁹ <https://eur-lex.europa.eu/legal-content/en/TXT/?uri=CELEX:52019DC0225>

¹⁰ <https://data.consilium.europa.eu/doc/document/ST-29-2019-INIT/en/pdf>

forward its proposal for an update of the EU's NDC for 2030, after a thorough impact assessment, in good time before COP26. The legislation under the 2030 climate and energy framework will be revised to reflect this updated NDC.

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

d) 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;

[...] China, Czech Republic, France, Germany, Greece, India, Italy, Japan, Republic of Korea [...]

[...] At the most recent meeting, the 2019 technical group annual meeting of the CSLF in Chatou, France, the focus was on carbon capture, utilization, and storage (CCUS). Workshops were held on hydrogen production with CCUS and on CCUS with energy intensive industries.

- Latin America Investment Facility (LAIF)

[...] Since 2010, 43 projects (28 bilateral and 15 multi-country) have been launched, representing a total investment cost of approximately EUR 9 billion with an EU LAIF contribution of over EUR 377 million.

Economic Partnership Agreements

[...] The majority of ACP countries are either implementing an EPA or have concluded EPA negotiations with the EU.

13. FINLAND

No additional information was included in Finland's NIR for 2020 .

14. FRANCE

No additional information was included in France's NIR for 2020.

15. GERMANY

No additional information was included in Germany's NIR for 2020.

16. GREECE

The following additional information was provided in Greece's NIR for 2020.

[...] 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 ETS⁸¹ 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 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 CO₂ 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 CO₂ 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.

13.2 Information on how Greece gives priority in implementing the commitments under Article 3. Paragraph 14 to specific actions

There is no change in this submission in the information on how Greece gives priority in implementing the commitments under Article 3. Paragraph 14 to specific actions.

The current section addresses the subparagraphs (a) to (f) of paragraph 24 of the reporting requirements in Annex I to decision 15/CMP.1. In cases where the relation of specific actions to the minimization of adverse social, environmental and economic impacts resulting from policies and measures to mitigate GHG emissions is not clearly defined the respective subparagraphs have been omitted. In any case, the main ways how Greece is striving to minimize adverse impacts have been already described in the previous section.

(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 current paragraph includes information on the means used by the country in order to enhance the progressive reduction or phasing out of market imperfections, fiscal incentives, tax and duty exemptions and subsidies that run counter to the objectives of the Convention and on the application of market instruments.

Greece, as a Member of the EU, supports and makes the necessary steps to implement the EU Common Agricultural Policy. In the specific policy environmental concerns have been gradually incorporated. Such examples are the including “decoupled” direct payments which have replaced price support; environmental cross compliance; a substantial increase in budget for rural development. As part of 2008 Common Agriculture Policy Health Check, additional part of direct aid has been shifted to climate change, renewable energy, water management, biodiversity, innovation; - transparency of agricultural subsidies has improved. It is important to note that in the other areas most subsidies are within the competence of the country.

The energy market liberalisation (National Law 2773/1999) has been an important step to create a original internal energy market and can be considered as a mean to address market imperfections and to reflect externalities. The existence of a competitive internal energy market is a strategic instrument both in terms of giving local consumers a choice between different companies supplying gas and electricity at reasonable prices, but also in terms of making the market accessible for all suppliers, especially the smallest and those investing in renewable forms of energy.

In the same time, Greece participates in the EU Emissions Trading Scheme, which constitutes an important market instrument to implement the objectives of the Convention and Article 3, paragraph 1 of the Kyoto Protocol which aims at creating the right incentives for forward looking low carbon investment decisions by reinforcing a clear, undistorted and long-term carbon price signal.

Finally, the taxation on energy products and electricity, as defined by the Directive 2003/96/EC, contribute to establishment of rules for the taxation of energy products used as motor or heating fuel, taxes on energy consumption, and common minimum levels of taxation. The Directive has been transposed into Greek legislation with Laws 3336/2005 and 3340/2005. In addition, the National Customs Code (Law 2960/2001), as applicable, makes use of the options provided for in such

Directive to exonerate, totally or partially, the electricity generated by renewable energy sources, as well as natural gas or biofuel. Further information on the implementation of the respective laws has already been reported in the 5th National Communication of Greece (January 2010).

(b) 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

[...] One of the main research priorities of EU is orientated to the development, diffusion and transfer of less-greenhouse-gas emitting fossil fuels technologies. Greece, as an EU Member State, supports financially the pilot projects on carbon capture and storage and the relative cooperation of EU and China.

Various bilateral and multilateral cooperations have been already mentioned in the 5th National Communication of Greece (January 2010). In the context of these cooperations a number of projects is implemented in order to facilitate and finance the transfer and access of developing countries to environmentally sound technologies.

It should be also noted that in the EU's 'Creation and Operation of an EU-GCC Clean Energy Network', created in December 2009, a special working group is oriented to CCS technologies. Greece is an official partner of the project (Institute of Communications and Computer Systems of the National Technical University of Athens).

(c) 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

[...] In the oil and gas industry the upstream sector is a term commonly used to refer to the exploration, drilling, recovery and production of crude oil and natural gas. The downstream sector includes the activities of refining, distillation, cracking, reforming, blending storage, mixing and shipping and distribution.

The EU contributes to strengthening of the capacities of fossil fuel exporting countries in the areas of energy efficiency via the work of the Energy Expert Group of the Gulf Cooperation Council (GCC), in particular in the working sub-group on energy efficiency. As part of the EU's research programme, a project called "EUROGULF" was launched with the objective of to analyse EUGCC relations with respect to oil and gas issues and propose new policy initiatives and approaches to enhance cooperation between the two regional groupings. In Greece, the Energy Policy Unit of the National Technical University of Athens (NTUA) has actively participated in the EUROGULF Project ('EUROGULF: An EU-GCC Dialogue for Energy Stability and Sustainability'), as well as in others similar projects.

The European e-network on clean energy technologies, currently under development as part of the EU's research and development, is also aiming at the objective: promote research and technical development of clean energy technologies in the GCC countries. The Commission has recently started a project with the specific objective to create and facilitate the operation of an EU-GCC Clean Energy Network during the next three years. The network is to be set up to act as a catalyst and element of coordination for development of cooperation on clean energy.

The project has started in December 2009 and is structured in 5 working groups. Greece officially participates in the Network (Institute of Communications and Computer Systems of the National Technical University of Athens). Further information can be found in the website: <http://eugcc.epu.ntua.gr/Home.aspx>.

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

[...] A number of activities aiming at the decrease of the dependence on the consumption of fossil fuels in developing countries have been supported and implemented by Greece. Most of the activities are oriented at the promotion of renewable energies and energy efficiency in those countries, contributing to the covering of rural electricity needs and the improvement of air quality. Such

indicative projects have already been mentioned in the 7th chapter of the 5th national communication (January 2010), and include:

- Project “SYN-ENERGY” (Recipient countries: Albania, Bosnia-Herzegovina, Croatia, FYROM, Moldavia, Montenegro, Serbia, Georgia, Ukraine)
- Applications of Renewable Energy and Energy Savings Methods (Recipient country: Libanon)
- Renewable Energy Sources – Development and Implementation of Solar Energy (Recipient country: Armenia)
- Action Plan for Cooperation in the field of Renewable Energy Sources (Recipient country: Turkey)
- Installation of solar systems for household use in poor households in the region of Monaragala (Recipient country: Sri Lanka).

Greece, as an EU Member State, also supports and facilitates the EU Cooperation with Developing Countries. The programmes included in this respect are:

- Renewable energy cooperation with the Mediterranean and Gulf countries
- Africa, Caribbean and the Pacific (ACP-E) Energy Facility
- Euro-Solar Programme in Latin America
- Latin America Investment Facility (LAIF)
- Global Energy Efficiency and Renewable Energy Fund (GEEREF).

17. HUNGARY

The following additional information was provided in Hungary's NIR for 2020.

[...] The duties of Hungarian decarbonisation and climate change adaptation are supplemented by the Climate Awareness Raising Programme (“Partnership for Climate” Awareness-Raising Plan). The NCCS II. defines long-, mid- and short-term goals and action lines in the field of mitigation, adaptation and awareness raising. In January 2020, a “climate package” was adopted by the Hungarian Government including the first Climate Change Action Plan (CCAP) in order to implement the NCCS-II, and the draft long term climate strategy called National Clean Development Strategy which sets the basic principles for the country's 2050 climate neutrality goal. The planning of the 1st CCAP was carried out in parallel with the preparation of the National Energy and Climate Plan (NECP), and the renewal of the National Energy Strategy. In February 2020 the government has adopted another action plan regarding climate change: the Climate and Nature Protection Action Plan, which consists eight points.

[...] For the time being Hungary alone does not carry out any relevant large scale development project, however as a Member State, it fully supports the EU's activities in this regard.

The Hungarian Ministry of Innovation and Technology and the Swedish Environmental Protection Agency are currently implementing a project financed by the EU Structural Reform Support Programme with the aim of strengthening the implementation of Hungary's National Climate Change Strategy.

The main goal of the project is to establish a coherent monitoring, evaluation and verification framework for all climate and energy policies, actions, strategies at national-level.

18. ICELAND

The following additional information was provided in Iceland's NIR for 2020.

Actions	Implementation
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	<ul style="list-style-type: none"> [...] Furthermore, the government of Iceland has financially contributed to various climate-specific projects within the Geothermal Exploration Project East Africa, the Energy Sector Management Assistance Program (ESMAP), Sustainable Energy for All (SEforALL), Ukraine geothermal project, Nicaragua geothermal project, as well as the International Renewable Energy Agency (IRENA). <p>More information can be found in Iceland's Seventh National Communication and Third Biennial Report submitted to the UNFCCC, in particular Tables 7-2 and 7-3.</p>

19. IRELAND

No additional information was included in Ireland's NIR for 2020.

20. ITALY

The following additional information was provided in Italy's NIR for 2020.

13.1 Overview

[...] In particular, the update of the distribution of global CDM projects by Host country and scope, as presented in Figure 14.1 and relevant tables (Tables 14.2 and 14.3).

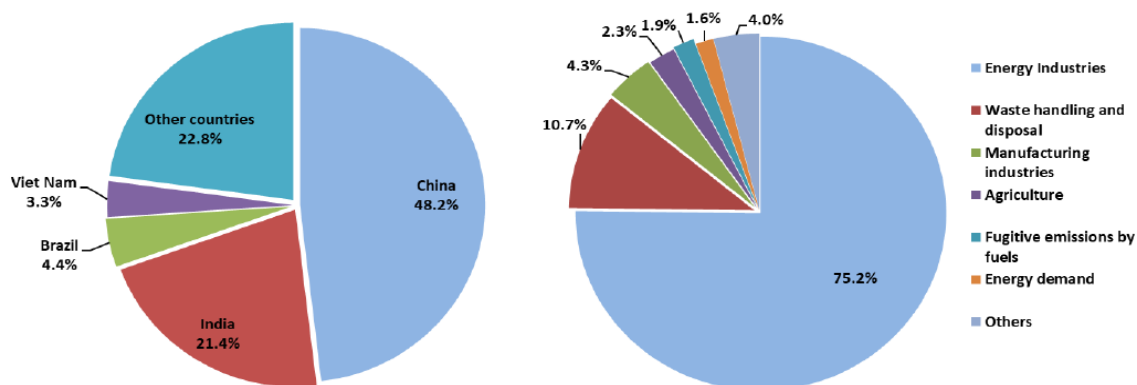
Table 14.1 Questions in relation to impacts on Third countries

Economic	Social	Environmental
<ul style="list-style-type: none"> How does the policy initiative affect trade or investment flows between the EU and third countries? How does it affect EU trade policy and its international obligations, including in the WTO? Does the option affect specific groups (foreign and domestic businesses and consumers) and if so in what way? Does the policy initiative concern an area in which international standards, common regulatory approaches or international regulatory dialogues exist? 	<ul style="list-style-type: none"> Does the option have a social impact on third countries that would be relevant for overarching EU policies, such as development policy? Does it affect international obligations and commitments of the EU arising from e.g. the ACP-EU Partnership Agreement or the Millennium Development Goals? Does it increase poverty in developing countries or have an impact on income of the poorest populations? 	<ul style="list-style-type: none"> Does the option affect the emission of greenhouse gases (e.g. carbon dioxide, methane etc) into the atmosphere? Does the option affect the emission of ozone-depleting substances (CFCs, HCFCs etc)? Does the option affect our ability to adapt to climate change? Does the option have an impact on the environment in third countries that would be relevant for overarching EU policies, such as development policy?

- Does it affect EU foreign policy and EU development policy? • What are the impacts on third countries with which the EU has preferential trade arrangements?
- Does it affect developing countries at different stages of development (least developed and other low-income and middle income countries) in a different manner?
- Does the option impose adjustment costs on developing countries?
- Does the option affect goods or services that are produced or consumed by developing countries?

Source: European Commission, 2009[a]

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



Source: UNFCCC, 2020[b]

Figure 14.1 CDM projects by Host country and scope (as for 31/01/2020)

Table 14.2 Italian CDM projects by Host country

Country	n°	%
China	52	40.6
India	12	9.4
Brazil	6	4.7
Nepal	5	3.9
Uganda	5	3.9
Kenya	5	3.9
Republic of Moldova	4	3.1
Argentina	4	3.1
Tunisia	3	2.3
Other	32	25.0
Total	128	100

Table 14.3 Italian CDM projects by scope (there are project with multiple scopes)

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 sulphurhexafluoride	8	5.3
Energy demand	7	4.6
Other	4	2.6
Total	152	100

Also the amount of financial resources to developing countries in Table 14.4 has been updated. The section of Annex 8 related to the information of the registered CDM projects where Italy is involved contains also updated information.[...]

Table 14.4 Financial resources to developing countries and multilateral organisations from Italy, USD million.

	2001-02	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
NET DISBURSEMENTS											
I. Official Development Assistance (ODA)											
(A + B)	1980	3297	2996	4326	2737	3430	4009	4003	5087	5858	5098
ODA as % of GNI	0.18	0.16	0.15	0.20	0.14	0.17	0.19	0.22	0.27	0.30	0.24
A. Bilateral Official Development Assistance											
	724	875	759	1703	624	867	1372	1829	2420	2977	2140
of which: General budget support	-1	9	5	1	6	7	8	6	1	0	1
Core support to national NGOs	64	-	15	-	1	99	93	118	137	37	38
Investment projects	-107	37	-34	310	-17	9	42	32	6	-9	48
Administrative costs	34	59	42	53	35	36	40	36	21	39	46
Other in-donor expenditures	10	5	5	526	272	406	843	985	1666	1808	1129
of which: Refugees in donor countries	8	-	3	525	247	404	840	983	1665	1804	1125
Imputed student costs							1	1	1	5	5
B. Contributions to Multilateral Institutions											
	1255	2423	2237	2623	2113	2563	2637	2174	2667	2881	2958
of which: UN	198	205	170	150	188	217	200	161	155	271	169
EU	691	1862	1557	1924	1516	1605	1662	1424	1773	1761	1920
IDA	183	214	386	179	166	329	377	198	214	216	323
Regional Development Banks	61	24	6	206	105	229	178	135	286	290	263
II. Other Official Flows (OOF) net (C + D)											
	-158	-72	-151	-214	196	161	96	43	51	110	37
C. Bilateral Other Official Flows (1 + 2)											
	-158	-72	-151	-214	196	161	96	43	51	110	37
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	-	-	-	-
D. Multilateral Institutions											
	-	-	-	-	-	-	-	-	-	-	-
III. Officially supported export credits ⁽²⁾											
	1271	463	882	1234	725	2031	584	1414	802	1368	2121
IV. Private Flows at Market Terms (long-term) (1 to 3)											
	-2504	1719	5731	6456	7436	11024	3896	10033	13286	7390	98
1. Direct investment	930	129	4366	7530	8016	8643	3369	9715	8046	2	10
2. Bilateral portfolio investment	-3434	1590	1365	-1074	-580	2381	527	317	5239	7388	88
3. Securities of multilateral agencies	-	-	-	-	-	-	-	-	-	-	-
V. Grants by Private Voluntary Agencies ⁽³⁾											
	16	162	150	111	91	58	121	128	83	64	23
VI. Total resource flows (long-term) (I to V)											
	605	5569	9608	11912	11186	16703	8706	15621	19309	14791	7378
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	0.76	0.35

Source: OECD (OECD, 2020) <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.

[...] Italy as investor Party, contributes with 1.8% of world-wide registered CDM project portfolio. Up to 17 February 2020 Italy is involved in 128 CDM registered projects. No new project has been

registered since 2013. 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 where Italy is involved. [...]

13.7 Review process of Article 3.14 of the Kyoto Protocol

In 2011 an in-country review process for the Fifth National Communication took place. During this process also the minimization of adverse impacts in accordance with Article 3, paragraph 14, of the Kyoto Protocol was reviewed. Additional information reported for submission 2010 and 2011 related with this theme was also provided. According to the UNFCCC review report, the Expert review team (ERT) considers the reported information to be transparent and complete. The ERT also commends Italy for its comprehensive, transparent and well-documented information on the minimization of adverse impacts and encourages it to continue exploring and reporting on the adverse impacts of the response measures (UNFCCC, 2011[b]).

21. JAPAN

The following additional information was provided in Japan's NIR for 2020.

15.1 Overview

[...] Furthermore, for the genuine resolution of climate change problems, it is essential to change the perception related to response measures, and in such a light sustainable growth may become a key. For instance, it should be underlined that the introduction of renewable energy has aspects not only to contribute to GHG emission reductions but also to improve energy access, disaster preparedness, benefit the job creation through the development of new industries. At the G20 Osaka Summit in 2019, Leaders agreed on the importance of utilizing innovation to address urgent global environmental issues such as climate change, energy, and measures against marine plastic litter, under the concept of “a virtuous cycle of environment and growth”. Therefore, efforts as mentioned above toward the establishment of a low-carbon society should be accelerated throughout the world. From that perspective, in 2015, in order to support an agreement at COP21, Japan announced “Actions for Cool Earth 2.0 (ACE 2.0)”, which consists of two pillars: (1) the implantation of support to developing countries worth of 1.3 trillion yen in 2020 and (2) innovation. Japan continues to proactively contribute to the international community in these fields.

In accordance with the above-mentioned international commitments, in June 2019, the government of Japan made a Cabinet decision on its long-term low greenhouse gas emission development strategy as requested in the Paris Agreement, which was submitted to the UNFCCC secretariat. The strategy includes (1) aiming at the realization of a decarbonized society as the ultimate goal to be accomplished ambitiously as early as possible in the second half of this century to boldly implement measures towards a reduction in GHGs emissions by 80% by 2050 and (2) realization of a virtuous cycle of environment and growth through business-led disruptive innovation.[...]

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

[...] At the same time, it should be added that since there is no internationally established methodology for evaluating efforts related to the minimization of above-mentioned adverse impacts, it is impossible to carry out such evaluations.

- Technical assistance in the energy and environmental sectors

[...] Japan has continued to contribute to the sustainable economic growth of developing countries, based on their needs, through the provision of technical assistance in the field of energy and the environment throughout the world. For example, Japan has provided assistance for the development and operation of institutions related to energy savings and renewable energy, through cooperation in human resource development, such as inviting trainees from and sending experts to developing countries, including in the Middle East region. Moreover, from the viewpoint of the utilization of renewable energy in small island nations particularly vulnerable to climate change, Japan, in collaboration with the International Renewable Energy Agency (IRENA), held an international workshops targeting island nations in the Asia-Pacific region and others including in Maldives, in January 2019, in Tokyo and Miyako-Jima, respectively in November 2019, with a view to supporting human resource development and project formulations.

- *Development of carbon capture and storage (CCS) technologies*

[...] Japan will work on CCS which is an important technology for addressing global warmings based on decisions that include the Summary of the Director-Level Meeting on the Bid for Thermal Power Supply by the Tokyo Electric Power Company, the Strategic Energy Plan and The Long-term Greenhouse Gas Emission Strategy as requested in the Paris Agreement. In particular, Japan has been implementing largescale demonstration projects in the pursuit of aiming for its practical use by around 2020 while implementing research and development for cost reductions and safety improvements, evaluations of environmental impacts due to the CO₂ capture process, and geological surveys to identify potential CO₂ offshore storage sites in Japan. Furthermore, Japan has actively carried out information exchanges with stakeholders of European countries and the United States regarding technologies pertaining to CCS.

22. KAZAKHSTAN

No NIR was submitted for 2020

23. LATVIA

The following information was updated in Latvia's 2020 NIR compared to its 2019 NIR.

- (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.**

Energy sector

- 1) [...] Latvia is a country of high diversity of renewable energy sources. Increasing the renewable energy share in total energy consumption has reduced energy dependence on imported fossil energy resources from 51.2% in 2015 to 47.2% in 2016. In 2017, the primary energy supply from hydro and wind power plants together grew by 70.5% compared to 2016, however it dropped by 43.6 % in 2018, compared to 2017, due to atypically dry and long summer period and low water flow in the river Daugava.
- 2) Latvia has set one of the highest individual targets for the share of renewable energy by 2020 and 2030. They are respectively 40% and 50% of gross final energy consumption. In 2018, the actual share of renewable energy in the gross final energy consumption exceeded Latvia's target totaling 40.29% of gross inland energy consumption. This bring Latvia closer to its 2030 target.[...]
- 3) [...] "Sustainable Development Strategy of Latvia until 2030" is the long-term development [...]

[...] reachability as well as the use of renewable energy such as electric motor technology, possibly also hydrogen engine development. Energy consumption in the transport sector has increased by 16.4% over five years (2014-2018), reaching 53.9 PJ in 2018. It accounts for about one third of Latvia's energy consumption and is almost entirely based on oil imports, as the share of electricity and biofuel in the transport sector is relatively insignificant. Diesel is the main source of energy used in transportation with a share of 64.3% of all fuels in 2018. The share of LNG in transport has increased in recent years. The consumption of LNG in 2010 was 1 PJ but in 2018 the number had increased 2.3 times. Compared to 2017, the consumption of LPG has decreased by 5.2%. Consumption of petrol in the transport sector fell by 10.6% in five years, reaching 7.7 PJ in 2018, which is 4.1% less than in 2017.¹¹

[...] In 2017, compared to 2016, production volumes of bioethanol and biodiesel have increased but the consumption of bioethanol and biodiesel in transport has slightly decreased.[...]

¹¹ CSB, <https://www.csb.gov.lv/lv/statistika/statistikas-temas/vide-energetika/energetika/meklet-tema/32-energoresursupaterins-latvija-2018-gada>

[...] This plan is going to be 2020 amended to complement the actions envisaged. [...]

- 4) [...] The National Energy and Climate Plan 2021-2030 (hereinafter - NECP) which was adopted on January 28, 2020 is a document for long-term energy and climate policy planning, which defines the basic principles, goals and directions of action of the Latvian state energy and climate policy for the next ten years. The Plan was developed to ensure transition to low carbon economy that is competitive in the region and worldwide by developing a balanced and effective energy policy based on market principles, which promotes further development of the Latvian economy and welfare of the society. The Plan covers objectives of all the dimensions of the Energy Union, as well as policies and measures required to reach them.

NECP includes targets for all dimensions of the Energy Union where many numerical targets are set by EU legislation, such as the GHG reduction target, the share of energy from renewable sources in transport, the share of advanced biofuels and biogas in transport, interconnection targets or obligation, with specific conditions applicable to the purposes.

Natural Resources Tax Law

[...] in years 2017-2019. Starting from 2020 CO₂ tax has been doubled to 9 EUR per 1 CO₂ ton. The Natural Resources Tax Law also marks a further increase – in 2021 the CO₂ tax will reach € 12 per ton of CO₂ and in 2022 - € 15. Installation operators who [...]

- (d) [...] **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 was no development, dissemination and transfer of low emissions technologies for fossil fuels and/or carbon capture and storage technologies to the developing country parties in 2017-2018.[...]

24. LIECHTENSTEIN

No additional information was included in Liechtenstein's NIR for 2020.

25. LITHUANIA

The following additional information was provided in Lithuania's NIR for 2020.

15 INFORMATION ON MINIMIZATION OF ADVERSE IMPACTS IN ACCORDANCE WITH ARTICLE 3, PARAGRAPH 14

The most recent information on how Lithuania is striving to implement commitments while minimizing adverse social, environmental and economic impacts on developing country parties is provided in Lithuania's 4th Biennial report under UNFCCC submitted in January 2020 to UNFCCC secretariat (see Chapter 5 "Provision of financial, technological and capacity-building support to developing country parties", p. 145-151) available on <https://unfccc.int/BRs>.

26. LUXEMBOURG

No additional information was included in Ireland's NIR for 2020..

27. MALTA

The following additional information was provided in Malta's NIR for 2020.

[...] These conditions are, among other, aimed at protecting these important ecosystems, including in developing countries.[...]

[...]The UNFCCC, in Article 4, requests that developed country Parties listed in Annex II to the Convention provide financial resources to meet the costs incurred by developing country Parties in complying with their commitments under the UNFCCC, to assist developing country Parties that are particularly vulnerable to the adverse effects of climate change in meeting costs of adaptation, and to promote, facilitate and finance the transfer of and access to environmentally sound technologies and expertise to other Parties, especially supporting the development of endogenous capacity and technologies of developing country Parties.

Malta is not inscribed in Annex II to the Convention. Notwithstanding, it still provides support to developing countries in the sphere of mitigation and adaptation actions and capacity building. Since 2013, Malta has provided financial support for climate action totalling €726,694, through both bilateral and multilateral funding channels (Table 15-1).

Table 15-1 Financial support provided by Malta for years 2013 to 2018.

	Bilateral/regional funding channels	Multilateral funding channels
	Euros	
2013	29,637	N/A
2014	30,725	50,000
2015	105,953	54,410
2016	96,704	100,000
2017	69,265	90,000
2018	N/A	100,000

(source: annual reporting by Malta pursuant to Article 16 of Regulation (EU) No 525/2013)

28. MONACO

The following additional information was provided in Monaco's NIR for 2020.

15.2.1.Octroi de ressources financières

[...] C'est ainsi que le Gouvernement Princier a participé à la Conférence de haut niveau de reconstitution des ressources dudit Fonds qui s'est tenue le 25 octobre 2019 à Paris, annonçant une contribution globale de 3,75 millions d'euros pour la nouvelle période de mobilisation de ressources (2019-2023).

29. NETHERLANDS

The following information was updated in Netherland's NIR for 2020.

[...] Examples are: environmental taxes on the use of natural gas up to 170,000 m³ increased from €0.1639 per m³ in 2011 to €0.1911 in 2015 and to €0.3331 in 2020; excise duty on gasoline increased in the same period from €0.71827 per litre, to €0.76607 and €0.80033 per litre in 2015 and 2020, respectively. [...]

[...] While public climate finance amounted in 2013 to €286 million, it increased to €416 million in 2015, €419 million in 2017 and €575 million in 2018. In addition, the Netherlands mobilised €73 million private finance in 2015, €335 million in 2017 and €411 million in 2018. [...]

[...] The Energy Sector Management Assistance Program (ESMAP) supports, among other things, reform of fossil fuel subsidies through South-South cooperation (support for targeted research, design and preparation, capacity development, political economy strategies and communication).

South–South exchange demonstrates that many countries struggle with the challenge of reducing the fiscal burden of fossil fuel subsidies and are keen to learn from the experiences of front-runner countries in their region, like Egypt in the MENA region.

- The Ghana Climate Innovation Centre (GCIC), supported by the World Bank Group’s infoDev, helps local small and medium-sized enterprises (SMEs) in clean technology as well as helping climate innovators to commercialise and develop the most innovative private-sector solutions to climate change. It provides entrepreneurs in clean technology with the knowledge, capital and market access required to launch and grow their businesses. The success of these enterprises leads to emissions reductions and improved climate resilience, while also enabling developing countries to realise greater value in the innovation value chain, build competitive sectors and create jobs. [...]

30. NEW ZEALAND

The following additional information was provided in New Zealand’s NIR for 2020.

15.1 Overview

[...] Further information on actions and policies is included in New Zealand’s Fourth Biennial Report, published in December 2019 (Ministry for the Environment, 2019). [...]

[...] A similar approach is taken with New Zealand’s Pacific regional and multi-country climate change activities.

[...] Practice standards for activities funded by the Ministry of Foreign Affairs and Trade under the New Zealand Aid Programme include assessments and responses to environmental and climate-related impacts and risks (along with gender and human rights as the other significant cross-cutting issues).

[...] As a critical element of long-term sustainable development efforts, Small Island Developing States continue to increase their uptake of renewable energy. The New Zealand Aid Programme supports a major push to increase this uptake in the Pacific and reduce the region’s reliance on imported diesel. Further afield, the New Zealand Aid Programme supports several programmes to increase access to affordable, reliable and clean energy in Africa, the Caribbean and South East Asia.

The Sustainable Development Goals also include Goal 13, which calls for strengthened resilience and adaptive capacity, integration of climate change measures into national policies, strategies and planning, and mobilising finance from all sources to address the needs of developing countries. The New Zealand Aid Programme supports climate change adaptation, disaster risk reduction and humanitarian response to natural disasters.

15.3 Removal of subsidies

[...] New Zealand will also lead a renewed Ministerial Statement at the next WTO Ministerial Conference in June 2020.

In addition to previous events, New Zealand hosted a side event on fossil fuel subsidy reform at the United Nations High-Level Political Forum in July 2018. This event focused on improving energy access and responding to the Sustainable Development Goals through the phase out of fossil fuel subsidies.

At the twenty-fourth session of the Conference of the Parties (COP24) of the United Nations Framework Convention on Climate Change in December 2018, New Zealand helped launch a ‘Friends Network’ to broaden understanding of the need for reform and practical ways to achieve it. The Network held a series of five virtual interactive roundtables, which took place in 2019 with the participation of representatives from around 20 countries from around the world.

15.6 Improvements in fossil fuel efficiencies

[...] all eight countries of interest, as well as in Niue, Tokelau and the North Pacific states of Nauru, Palau, Republic of Marshall Islands and the Federated States of Micronesia.

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

[...] Since 2016, New Zealand has provided technical support to the Government of Indonesia to identify suitable areas for geothermal development, improve clarity and communication of the regulatory framework, and increase certainty around geothermal resource size and classification. New Zealand is also providing scholarships in geothermal project management, a programme of training, coordinated technical assistance and capacity building to strengthen Indonesia's local skill base and ability to sustainably operate, manage and maintain geothermal resources.

31. NORWAY

The following additional information was provided in Norway's NIR for 2020.

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

[...] aims of holding the increase in the global average temperature to well below two degrees °C above pre-industrial levels and pursue efforts to limit the temperature increase to 1.5 °C above pre-industrial levels, [...]

[...] Norway is involved in several initiatives that contribute to technology development and transfer and enhanced capacity building to developing countries with the aim of contributing to maximize the positive and minimize the negative effects of response measures, including economic diversification and [...]

Cooperation on carbon capture and storage

[...] As an example, Norway is co-chair together with Saudi Arabia, United Kingdom and USA, in the Clean Energy Ministerial CCUS Initiative. Members of the initiative are Canada, China, Japan, Mexico, the Netherlands, Norway, the Kingdom of Saudi Arabia, South Africa, United Arab Emirates, United Kingdom and USA. In 2019 and 2020 the Initiative co-hosted two regional workshops in the United Arab Emirates on CCUS in hard to abate sectors like steel and cement to facilitate cooperation and dissemination of experiences and how to accelerate CCUS in the Gulf Cooperation Council area.

32. POLAND

The following additional information was provided in Poland's NIR for 2020

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

[...]The climate-related bilateral assistance is granted primarily to the Eastern Partnership and African countries. In 2018 the total amount of climate aid donated was EUR 45.8 million (including EUR 3.3 million in the form of grants and EUR 42.6 million in the form of preferential loans). The main beneficiaries of this assistance in 2018 included: Georgia, Iraq, Jordan, Kenya, Myanmar, Palestine, Senegal and Tanzania. Approximately 86% of the climate aid provided by the bilateral channel related to adaptation actions and 14% - to mitigation and cross-cutting related activities covering also capacity building projects. Multilateral assistance was granted mainly through contributions to the assistance budget of the European Union [BR4 POL 2020].

33. PORTUGAL

The following information was updated in Portugal's NIR for 2020.

[...] The transition to a carbon neutral economy by 2050 relies on the contribution of all sectors. Particularly, in the context of the 2050 Carbon Neutrality Roadmap and the NECP 2030, there is a strong push for the diversification of energy sources and to the increase of endogenous renewable

resources. In some cases, measures already implemented pertaining to the diversification of primary energy sources (namely the introduction of natural gas in the economy in the late 1990s), [...]

[...] To ensure that all relevant possible impacts are taken into account, Portugal has established SPeM to assess the economic and social consequences of climate policy measures throughout the different sectors.

For the development of new policy initiatives, the members of SPeM (from all the economy sectors) are called to present their policies and measures with the potential of GHG emissions reduction and respective foreseen costs.

Furthermore, Portugal is keen in assisting third countries on a sectoral level, such as for trade agreements, as well as on an overarching political level in regional cooperation with those countries.[...]

[...] This way, it is ensured that the effects of climate change policies on non-EU countries are taken into account. The cooperation of Portugal with third countries looks to the integration of the adaptation dimension of climatic change in the several sectoral policies and instruments of planning, vulnerabilities and risks associates to climate change.

Portugal's Official Development Assistance (ODA) also supports third countries to effectively implement the Paris Agreement in a manner that unlocks socio-economic opportunities and supports climate objectives, by providing capacity building and technology transfer for partner countries.

34. ROMANIA

No additional information was included in Romania's NIR for 2020.

35. RUSSIAN FEDERATION

The following additional information was provided the Russian Federation's NIR for 2020.

[...] энергоресурсов экспор-тируется, в том числе в развивающиеся страны.¹²

Российским оператором экспорта электроэнергии является Группа «Интер РАО»;¹³ в 2018 г. объем экспорта составил 16,7 млрд. кВт*ч. Экспорт электроэнергии в развивающиеся страны производится из Единой энергетической системы России (ЕЭС России) по линиям электропередач. В 2018 году параллельно с ЕЭС России работали энергосистемы Грузии, Азербайджана, Казахстана и Монголии, а также энергосистемы стран Центральной Азии – Узбекистана, Киргизии (через энергосистему Казахстана) и энергосистема Молдавии (через энергосистему Украины). По линиям электропередачи переменного тока осуществлялась передача электроэнергии в энергосистему Южной Осетии и энергосистему Абхазии. Энергосистема Китая (экспорт в 2018 г. – 3,1 млрд. кВт*ч) работала совместно с ЕЭС России через преобразовательные устройства постоянного тока; по линиям электропередачи переменного тока осуществлялась передача электроэнергии в «островном» режиме (АО «СО ЕЭС», 2019).

Значительную часть электроэнергии в ЕЭС России вырабатывается атомными и гидроэлектростанциями, практически не дающими выбросов парниковых газов, что обеспечивает достаточно низкий уровень углероемкости российской электроэнергетики. Так, в 2018 году доля [...]

10. Дополнительная информация согласно пункту 1 статьи 7 Киотского протокола

[...] тепловых электростанций составила около 64%. В результате экспортные поставки российской электроэнергии в развивающиеся страны обеспечивают замещение в их

¹² Основные данные по экспорту энергоресурсов приведены в приложении к настоящему докладу.

¹³ <https://www.interrao.ru/>

топливом балансе углеродоемких видов топлива, снижая, таким образом, выбросы в атмосферу парниковых газов, в первую очередь, CO₂.[...]

[...] Экспортные поставки российского природного газа способствуют внедрению в странах-импортерах современных технологий в энергетическом секторе и обеспечивают замещение в их топливном балансе более углеродоемких видов топлива (каменный уголь и нефть), снижая, таким образом, выбросы в атмосферу парниковых газов, в первую очередь, CO₂. В 2018 году экспорт газа из России достиг 247,5 млрд. м³ (включая СПГ), что является максимальным показателем за постсоветский период (Аналитический центр, 2019). Основным поставщиком природного газа через систему трубопроводного транспорта - Группа «Газпром». Среди его покупателей такие страны, как Словения, Хорватия, Босния и Герцеговина, Сербия и Македония, Азербайджан, Армения, Киргизия, Южная Осетия. В 2018 году был завершен основной объем работ по строительству линейной части газопровода «Сила Сибири» и с начала 2019 года начались поставки газа этим путем в Китай. Поставки в Китай будут вестись согласно заключенному в 2014 г. контракту о поставке 38 млрд. м³ газа в КНР с 2019 г. в течение 30 лет, с возможностью увеличения поставок до 60 млрд. м³. Проект газопровода «Сила Сибири» мощностью 61 млрд. м³ газа в год был инициирован в конце 2014 г. с целью расширения географии поставок природного газа в направлении Азиатско-Тихоокеанского региона (АТР).

В 2018 году экспорт СПГ из России составил 19,8 млн. т СПГ (Аналитический центр, 2019), в том числе в такие развивающиеся страны, как Тайвань, Республика Корея, Китай, Индия, Таиланд, Пакистан, Аргентина, Бразилия, Панама, Кувейт, Иордания, Египет (GIINGL, 2019). Страны Ближнего Востока и Южной Америки стали в 2018 году новыми рынками сбыта российского газа за счет начала поставок с проекта «Ямал СПГ». Тем не менее, около 70% экспорта СПГ из России было направлено на рынок АТР.[...]

[...] происходят на территории Российской Федерации и учтены в настоящем кадастре. Одновременно со строительством осуществляется обучение местного персонала методам и технологиям работы на построенных объектах и переданном оборудовании. Сейчас за границей реализуется 36 проектов атомных энергоблоков в 12 странах мира, в том числе в Египте, Иордании, Нигерии, Узбекистане. К 2018 г. Строительство атомных электростанций уже ведется в Бангладеш, Индии и Китае. На АЭС «Тяньвань» (Китай) начата коммерческая эксплуатация двух энергоблоков.

Также Госкорпорацией «Росатом» продолжена работа по заключению контрактов на расширение и сооружение новых АЭС за рубежом, в том числе в Китае и Индии. В 2018 году ведется совместная деятельность со странами, которые планируют реализацию проектов сооружения АЭС или других атомных объектов: Аргентиной, Бразилией, Замбией, Казахстаном, Саудовской Аравией. Ведется сооружение многоцелевых центров ядерных исследований и технологий в Боливии и Замбии, а также планируется строительство такого центра в Монголии (ГК «Росатом», 2019).

Для создания и развития национальной системы ядерного образования стран-партнеров «Росатом» реализует с 2017 по 2021 гг. проект «Международное сотрудничество в сфере ядерного образования» с использованием российских образовательных технологий. Так же, с целью повышения информированности широких слоев общественности, Росатом открывает на территории зарубежных стран-партнеров информационные центры.[...]

[...] По данным Министерства науки и высшего образования Российской Федерации, всего по специальностям, связанным с охраной окружающей среды и климата, а также энергосбережением, обучались в 2017–2018 учебном году – 206 человек, а в 2018 – 2019 гг. – 223 человека из 51 развивающейся страны.

[...] университета (РГГМУ).²⁷ Являясь региональным метеорологическим учебным центром Всемирной метеорологической организации (ВМО), РГГМУ готовит специалистов для национальных метеорологических и гидрологических служб зарубежных стран, выполняя соглашение между Правительством РФ и ВМО об обучении граждан государств-членов ВМО. РГГМУ осуществляет программы совместной научной и образовательной деятельности по природоохранной и климатической проблематике с университетами Узбекистана, Украины, Белоруссии, Мексики, Перу, Танзании, Колумбии и Китая.[...]

[...] Программа продолжалась и в 2018 г.: 106 наиболее успешных кандидатов были отобраны для обучения в вузах России.[...]

[...] В 2018 г.[...]

[...] Гуманитарные операции в развивающихся странах, включая страны, наиболее уязвимые к воздействию изменений климата, проводятся [...]

[...] (МЧС России). В 2018 году силы МЧС России были задействованы в спасательных операциях и ликвидации последствий стихийных бедствий в странах, подвергшихся природным стихийным бедствиям, таким как наводнения, циклоны и цунами (Лаос, Индонезия).

[...] Кроме того, за отчетный период МЧС России участвовало в оказании продовольственной помощи развивающимся странам за счет взносов РФ в ООН, а также в совместных операциях с Всемирной организацией здравоохранения (ВОЗ) по оказанию чрезвычайной медицинской помощи нуждающимся странам в рамках финансируемого РФ проекта «Укрепление потенциала ВОЗ в области чрезвычайной медицинской готовности и реагирования». На многосторонней основе, в счет взносов Российской Федерации в фонд Всемирной продовольственной программы ООН, продовольственная помощь оказана Таджикистану, Киргизии, КНДР, Палестине, Йемену, Гвинее, Афганистану, Никарагуа, Кении, Судану, Иордании, Конго. Совместно с ВОЗ была оказана помощь товарами медицинского назначения в рамках подготовки к сезону ураганов для стран Карибского бассейна (Куба, Венесуэла, Гватемала, Никарагуа, Эквадор, Боливия) и обеспечения готовности к бедствиям (в том числе к бедствиям климатического характера) для стран Тихоокеанского региона (Тонга, Антигуа и Барбуда, Палау, Маршалловы острова), а также оказана помощь Гватемале и Зимбабве.[...]

36. SLOVAKIA

The following additional information was provided in Slovakia's NIR for 2020.

Adopted Legislative Measures:

a) Fiscal Policy Instruments

[...] Since 2018 inventory submission, no legal changes related to the fiscal policy instruments were introduced [...]

b) Biofuels Policy

[...] In accordance with EU legislation, Slovakia accept the sustainable biofuels only, monitor the production of raw materials for so-called ILUC biofuels, have established a cap for biofuels from food and feed materials, and we support the production of biofuels from waste and residues as well as the production of advanced biofuels. The data show, that the import of biofuels and raw materials for their production from developing countries is very negligible, which is mainly a result of the logistics - transport routes to the Slovak Republic and strongly represented domestic production of raw materials for biofuels in our own territory and in neighbouring countries [...]

c) GHG Reduction Policies

[...] As far as GHG reduction policies is concern, no new or additional policies were introduced, Slovakia expects that following new EU reduction targets related to the year 2030 (and subsequently to year 2050), these policies will be updated and impact to the third countries will be assessed in this respect. For completing information in year 2019, Slovakia is channelling its Official Development Assistance (ODA) to third countries through projects, where climate change component as cross-sectoral issue is incorporated. Climate change is then reflected in the projects oriented to food safety and agriculture, infrastructure and sustainable use of resources (e.g. strengthening food security building resilience of local communities to affect climate change in agriculture). Other projects aim to improve the health of the population with special emphasis on children and mothers, by making them accessible quality health and preventive care, what refers also to the illness caused by climate change impacts. Referring to the projects to reduce youth unemployment, improving access to quality education and acquisition practical skills, climate component is taken in consideration, even though in limited scale.

37. SLOVENIA

The following information was updated in Slovenia's NIR for 2020.

[...]Additionally, in 2019 Slovenia for the first time contributed 1 million EUR to the Green Climate Fund (GCF).

[...]Slovenia will do its best to contributing additional climate finances in the next years also to the Green Climate Fund.

38. SPAIN

The following information was included in Spain's NIR for 2020.

15 INFORMACIÓN SOBRE LA MINIMIZACIÓN DE LOS EFECTOS ADVERSOS DE ACUERDO CON EL ARTÍCULO 3, PÁRRAFO 14 DEL PROTOCOLO DE KIOTO

[...] la Séptima Comunicación Nacional de España (capítulo 4.2) de 2017¹⁴ y el Cuarto Informe Bienal presentado por España ante el Secretariado de UNFCCC el 23 de diciembre de 2019¹⁵. [...]

Tabla 15.1.2. Potenciales efectos de medidas nacionales

MEDIDAS	POTENCIALES EFECTOS EN TERCEROS PAÍSES		
	Ambientales	Sociales	Económicos
Medidas que aumentan el uso de biocombustibles	[...] (+) Si los criterios de sostenibilidad (establecidos por la UE para sus EEMM) se cumplen, en particular, en relación con los cambios de uso indirectos.	[...] (+) Creación de empleo en los países exportadores de biocombustibles.	[...] (+) Importación de biocombustibles de terceros países. (+) Incentivo para la diversificación económica en países productores de combustibles fósiles.
[...] Medidas que aumentan el uso de energías renovables	[...]	[...]	[...] (-) Reducción de la demanda de combustibles fósiles en los países productores, con disminución de ingresos para los mismos y tensiones en los precios de estos productos.[...]
[...] Reducción de emisiones en LULUCF	[...]	[...] (+) Reducción de efectos negativos en pueblos dependientes de los bosques en países en desarrollo, al reducir, entre otras cosas, la tala ilegal.	[...] (+) Incentivo para la diversificación económica en países exportadores de estos productos. (-) Impactos en comercio exterior de materias primas y productos agroalimentarios.

¹⁴ http://unfccc.int/files/national_reports/annex_i_natcom/application/pdf/68037591_spain-nc7-1-7cn.pdf

¹⁵ https://unfccc.int/sites/default/files/resource/4BR_España_UNFCCC.pdf

[...] Reducción de emisiones de la gestión de los residuos	[...] (+) Implantación de tecnologías eficientes en la gestión de los residuos que pueden ser transferidas a otros países.	[...]	[...] (+) Implantación de tecnologías eficientes en la gestión de los residuos que pueden ser transferidas a otros países.
[...] Huella de carbono	[...]	[...] (+) Sensibilización de las empresas y la sociedad sobre las emisiones que producen y sobre la necesidad de reducirlas	(+) Transferencia de estas políticas por intercambio y armonización de procesos de etiquetaje. (-) Posible disminución de inversión en proyectos de absorción en terceros países.

15.2.5 Fortalecimiento de la capacidad de las Partes

[...] En las tablas 7, 8 y 9 CTF (Common Tabular Format) del anexo del Cuarto Informe Bienal de España se pueden encontrar los ejemplos más relevantes de las acciones llevadas a cabo de apoyo financiero, tecnológico y de capacitación en materia de cambio climático a países en desarrollo.

15.2.6 Prestación de asistencia a las Partes

[...] En las tablas 7 CTF del anexo del Cuarto Informe Bienal de España se incluye información sobre el apoyo financiero en materia de cambio climático de España a países en desarrollo. Destacan los proyectos [...]

39. SWEDEN

The following information was included in Sweden's NIR for 2020.

14.1 Changes in information provided under Article 3, paragraph 14

New information has been added to Paragraph 24(a) regarding carbon and energy tax levels and to Paragraph 24(d) regarding a long-term reform targeting process-related emissions from industry, including support for Carbon Capture and Storage. Information about the EU funded project called White Rose, in Great Britain, has been deleted as the project has not developed in recent years.

14.3 Paragraph 24 (a)

[...] For industry covered by the EU ETS it is mainly the price of allowances that reflects the external effect of carbon dioxide emissions and the market failure. This has been the case also for combined heat and powerplants (CHPs) and other heating plants within the EU ETS until recently. These plants are however, since August 2019, in addition to the pricing in the EU ETS also subject to 91 % of the carbon tax and 100 % of the energy tax.

Moreover, some of the earlier reductions of the carbon and energy taxes outside the EU ETS have been rescinded or reduced. In August 2019, the energy tax for fuels used to produce heat in CHPs outside the EU ETS was raised from 30 % to 100 %. These fuels are also subject to 100 % carbon tax.

For so-called mining diesel (diesel that is used in working machinery in manufacturing processes in mining industrial activity), the earlier reduction of energy and carbon tax was rescinded in August 2019, meaning that the full energy and carbon tax rates are now applied.

14.6 Paragraph 24 (d)

[...] In 2018 a long-term reform, called The Industrial Leap began and continues until 2040. It consists of a government scheme that supports the development of technology and processes to reduce the process-related greenhouse gas emissions in Swedish industry. Financial support may be

provided for research, feasibility studies, pilot and demonstration projects as well as full-scale investments and includes support to CCS techniques.

40. SWITZERLAND

The following information was updated in Switzerland's 2020 NIR compared to its 2019 NIR.

Context

[...] Regarding greenhouse gas emissions, market-based instruments – such as e.g. the Swiss emissions trading scheme, [...]

[...] The Swiss Federal Office for Spatial Development annually publishes a report analysing all external effects of transport (including costs and benefits). The most recent estimates for 2016 correspond to total external costs of transport of about 2.3 billion Swiss francs (external costs related to climate contributing about 200 million Swiss francs), of which slightly less than one billion Swiss francs are covered by the heavy vehicle charge (ARE 2019).[...]

[...] This programme offers technical assistance for states that want to reform their fossil fuel subsidies. [...]

[...] other developing countries in the development of fossil fuel-fired power plants with carbon capture and storage [...]

41. UKRAINE

The following information was updated in Ukraine's NIR for 2020.

15 MINIMIZATION OF ADVERSE IMPACTS IN ACCORDANCE WITH ARTICLE 3, PARAGRAPH 14

Name of Ukrainian Educational Institution		Number of Students as by 01.01.2019
Total		92
1	National University of Life and Environmental Sciences of Ukraine	9
2	The National University of Water and Environmental Engineering	2
3	Mariupol State University	11
4	Institute of Chemical Technologies of the Ukrainian National University named after Vo-lodymyr Dahl (Rubizhne City)	2
5	Kyiv Taras Shevchenko National Shevchenko University	1
6	State High Educational Institution " "Pridniprovsk State Academy of Architecture and Ar-chitecture""	1
7	Odessa National Academy of Food Technologies	2
8	V.N. Karazin Kharkiv National University	1
9	Zaporizhzhia National University	2
10	Vinnitskyi National Agriculture University	1
11	Bogdan Khmelnytsky Melitopol State Pedagogical University	1
12	Dnipro State Agrarian and Economic University	1
13	National University "Lvivska Politechnika"	1
11	National Technical University "Kharkiv Politechnic Institute"	1
15	National University of Shippbuilding named after Admiral Makarov	3
16	Oles Honchar Dnipro National University	1
17	Karkiv National Technical Agricultural University named after Ptro Vasylenko	1
18	National Metallurgical Academy of Ukraine	8
19	Tavria State Agrotechnological University Name After Dmitri Motor	1
20	Sumy National Agrarian University	1
21	Ivano-Frankivsk National Technical University of Oil and Gas	3
22	Odessa State Ecological University	22
23	National Aviation University	1

24	Odessa National Polytechnic University	1
25	Kharkiv National Highway University	1
26	Private Higher Educational Institution University "European University"	4
27	Zhytomyr National Agro-Ecological University	1
28	Belotserkov National Agrarian University	1
29	State Higher Educational Institution "Kharkiv college of Textile and Design"	2
30	Private Higher Educational Institution "Institute of economy, ecology and law"	5

42. TURKEY

No information was provided in Turkey's NIR for 2020.

43. UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND

The following additional information was provided in UK's NIR for 2020.

15.1 GENERAL OVERVIEW

[...] We continue to play a key role at the Conference of the Parties (COP) to the United Nations Framework Convention on Climate Change (UNFCCC), and in December 2019 were formally appointed as the President for COP26, to be held in Glasgow in November 2020.

Central to our commitment to effective climate action is a continuation of the UK's ambitious domestic record of reducing our emissions while growing our economy, as well as our worldleading support for developing countries as they look to pursue low greenhouse gas emissions and climate resilient development.

In June 2019, the UK government set a legally binding target to achieve net zero greenhouse gas emissions from across the UK economy by 2050. We are the first major economy in the world to legislate for a net zero target, which will end the UK's contribution to climate change.

Since setting a net zero target, the Government has committed around £2 billion to support clean growth in a range of sectors from transport to industry. In July, we published our landmark Green Finance Strategy, setting out our approach to catalysing the investment in green infrastructure, technologies and services that will be needed to deliver net zero.

As well as seeking to prevent further climate change, we continue to help those already most affected by it. At the UN Climate Action Summit, the Prime Minister announced that the UK will be doubling its International Climate Finance (ICF) to £11.6 billion between 2021-2025 to help countries cut emissions, improve resilience, and reduce deforestation. [...]

International Climate Finance

Recognising the growing importance and urgency of tackling climate change and its impact on growth and poverty reduction, the UK committed to provide at least £5.8 billion of International Climate Finance from 2015/16 to 2020/21 and in September 2019 announced a further doubling to £11.6 billion from 2021/22 to 2025/26. At the UN Climate Action Summit in September 2019, the Prime Minister announced that the UK will be doubling its International Climate Finance (ICF) to £11.6 billion between 2021-2025 to help countries cut emissions, improve resilience and reduce deforestation.[...]

[...] hardest. At the Summit we announced major new investments in both clean energy and a range of actions and investments to strengthen resilience and adaptation.[...]

[...] technologies, supports agriculture which is more resilient in the face of climate events such as drought and [...]

[...] Cumulative data that we collect show that, between 2011/12 and 2018/19, UK ICF programmes have¹⁶:

- Supported 57 million people to cope with the effects of climate change;
- Provided 26 million people with improved access to clean energy;
- Reduced or avoided 16 million tonnes of greenhouse gas (GHG) emissions (tCO₂e);
- Installed 1,600 MW of clean energy capacity; and
- Mobilised £3.8 billion public and £1.4 billion private finance for climate change purposes in developing countries.

The Green Climate Fund

[...] The GCF is now entering into its first replenishment period (2020-2023). In 2019, the UK has committed to double its contribution to the GCF to £1.44 billion making it the fund's lead donor and demonstrating our ongoing commitment to the GCF over the coming four years (2020-2023).

[...] the GCF has committed \$55.6 billion of funding to 124 projects, representing a balanced geographical and thematic split, and has a dedicated private sector facility.

Projects approved by the GCF, including \$833 million to Small Island Developing States, are expected to increase the resilience of 348 million beneficiaries.[...]

Least Developed Countries Fund (LDCF)

[...] programming. Since inception the UK, through DFID has contributed £122m to LDCF. The most recent contribution was £30 million from December 2016 to March 2019. The Project Completion Report in 2019 demonstrated LDCF had performed well. Cumulative results achieved under the LDCF portfolio, since inception i.e. including projects completed before FY18, comprise more than 15.5 million direct beneficiaries, over 1.75 million hectares of land under more climate-resilient management, and some 420,000 people trained in aspects of planning and implementing resilience strengthening activities.[...]

Global Environment Facility (GEF)

The GEF is the principal multilateral agency supporting developing countries in tackling major environmental problems and supporting implementation of the international agreements covering biodiversity (including wildlife loss), land degradation, deforestation, chemical pollution, marine and freshwater degradation – including marine plastic - and climate change. Since its inception in 1991 the GEF has supported management of more than 3,300 protected areas covering 860 million hectares (an area larger than Brazil), 790 climate change mitigation projects contributing to 2.7 billion tonnes of greenhouse gas emission reductions, sustainable management of 34 of the world's major river basins, and provided \$131m to the Global Wildlife Programme to tackle the illegal wildlife trade.

GEF supported activities will achieve outputs across a range of environmental sectors. The GEF is financed through 4-yearly replenishments. The current, seventh replenishment started in 2018 and will end in June 2022 and is funded by DFID and Defra. The GEF7 replenishment period has a total donor endorsement of \$4.1 billion (UK has 10.07% burden share of the total).

Of this total, the UK is contributing up to £250m (£100m/40% Defra and £150m/60% DFID); 20% of which will attract payment by results.

The expected direct results from GEF 7 include, 200 million hectares of terrestrial protected areas created or under improved management for conservation and sustainable use; 8 million hectares of marine protected areas created or under improved management; 6 million hectares of degraded land restored; 1,500 million metric tons of CO₂e of greenhouse gas emissions mitigated; and 100 thousand metric tons of toxic chemicals of global concern reduced. GEF funded projects seek to provide broader transformative effect through demonstrating approaches that can be replicated and scaled up elsewhere.

[...] **Partnerships for Forests** [...] sustainable forestry and land-use P4F provides seed grant finance to early stage businesses to help accelerate the commercial scale up of sustainable farming

¹⁶ <https://www.gov.uk/guidance/international-climate-finance#our-results>

and forestry enterprises. It supports businesses where the private sector, public sector and communities work together to protect forests while providing sustainable livelihoods. This works alongside BEIS' other climate finance support for governance and policy implementation through REDD+ and climate partnerships with key countries; to build the business conditions to grow sustainable rural economies in areas affected by deforestation.

[...] UK Climate Investments (UKCI) [...] Completed investments to date include:

- 50GW utility-scale solar project in Maharashtra, India
 - The financing of two wind projects and one small-hydro project in South Africa via the participation of a Black Economic Empowerment (BEE) party.

The Climate Public Private Partnership (CP3) [...]the programme has so far mobilised private climate finance of \$103 million (attributable to the UK). The funds have so far invested in 102 investments and renewable energy developers across developing countries in Asia, Africa and South and Central America. CP3 is expected to avoid 8 million tonnes of CO₂ equivalent over its lifetime (to 2026).

[...] The Climate Finance Accelerator (CFA) is a £10m technical assistance programme which supports developing countries to translate their Nationally Determined Contributions (NDCs) – commitments made under the Paris Agreement – into 'climate investment plans', which consist of a pipeline of bankable, low-carbon projects. It does this by bringing together policy makers, project developers and capital market players from developing countries with green finance experts from the City of London to learn from each other in workshops. Participants take lowcarbon project ideas, identify barriers to finance, find potential solutions, and turn them into investable proposals. By finding ways to improve the enabling environment for private finance, countries can then unlock flows of capital at the scale required to meet their NDC targets. The CFA was tested in series of successful pilot activities, involving Colombia, Mexico and Nigeria, which took place between 2017 and 2019. The full programme was announced in January 2020, with activities set to commence later in the year.

The NDC Partnership (NDCP) is a coalition of countries and institutions working to turn countries' NDCs into specific strategies and measures, as well as achieving greater harmonisation between development assistance and NDC implementation efforts. The Partnership adopts a flexible, country-driven approach that helps governments set out priorities and connect them to available resources across its membership. BEIS has provided £2m of funding in the past. BEIS recently extended our contribution by providing between £11m and £17m to the NDCP. £4m of this will be spent directly on the Climate Action Enhancement Package (CAEP). CAEP was launched at the UNCAS and is directly funding and mobilizing funding for projects that help countries update and implement their NDCs in 2020. Demand for NDCP's services is now outstripping supply – originally the Support Unit planned to work in 38 countries at a time. They are currently working in over 40 with plans to expand to 60 in the coming year.

[...] Ensuring climate and environmental factors are fully integrated into mainstream financial decision making across all sectors and asset classes is essential to achieving this.

In July 2019 the UK published its Green Finance Strategy. This sets out how we will be driving the growth of Green Finance, by aligning private sector financial flows with clean, environmentally sustainable and resilient growth. This includes for example:

- committing to align all UK ODA with the Paris Agreement
- setting out an expectation for all listed companies and large asset owners to disclose in line with the TCFD recommendations by 2022
- CDC and UK Export Finance will make climate-related financial disclosures in their accounts in line with the TCFD recommendations as soon as practicable, following the close of the 2020/21 financial year
- working with industry and the British Standards Institution to develop a set of Sustainable Finance Standards, and chairing a new International Organisation for Standardisation (ISO) Technical Committee on Sustainable Finance

The UK will use its global influence to explore and accelerate approaches to the alignment of financial flows, including through our role as founding members of the Coalition of Finance Ministers for Climate Action, and the milestones of COP26 and our subsequent G7 presidency.

Research collaboration

[...] At the UN Climate Action Summit in New York, the Prime Minister announced a £1bn Ayrton Fund for clean energy research development and demonstration (RD&D) from 2021-26. The Ayrton Fund will almost double the Official Development Assistance (ODA) investment across UK Government in clean energy innovation and will enhance the UK's global leadership in this area. Emerging technology areas to be supported include, for example energy storage, new sustainable cooling technologies, next generation solar, and technologies for industrial decarbonisation.

[...] UK funding is provided through the World Bank CCUS Trust Fund (£35 million) and the Asian Development Bank CCUS Fund (£35 million), and the UK is the largest ODA donor to CCUS globally.

[...] The UK co-hosted the International CCUS Summit and Conference with the IEA in November 2018, hosted a CCUS side event in the UK Pavilion at COP24 and COP25, and actively participates in COP events on CCUS.

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

Asian Development Bank (ADB)'s Clean Energy Fund [...] The UK's contribution of £19.5 million is specifically used to fund the technical assistance elements of the fund across the Asia-Pacific region.

Results Based Financing for Low Carbon Energy Access (RBF) aims to pilot and demonstrate payment by results to increase sustainable energy access for people in developing countries using market-based renewable energy and energy efficiency approaches. The £40m programme, funded by the UK and implemented by Energising Development, is about establishing markets through a range of different approaches, utilising decentralised low carbon technologies, such as solar mini-grids and electric cookstoves. The programme has improved energy access for over 4 million people to date through the sale of over 1 million low carbon technologies in 17 projects across 14 countries.

The Africa Clean Energy (ACE) programme aims to increase access to modern, clean, affordable energy for low-income households in Africa by providing up to £65m UK funding to promote a market-based approach for private sector delivery of off-grid energy services including standalone solar household systems and mini-grids. ACE focuses on seven of the countries with the lowest access to electricity rates in Sub-Saharan Africa.

Capacity building projects on adapting to climate change

[...] programme and the Asia Regional Resilience to a Changing Climate (ARRCC)[...]

[...] • The UK is a convening partner of the Risk-Informed Early Action Partnership (REAP), a new global partnership convening the humanitarian, development and climate communities, drawing on data, evidence and best practice to drive up and unify standards, and increase targets for forecast-based action and investment. By bringing together partners working on climate risk, early warning, and anticipatory and early action, and focusing on the communities most at risk from climate shocks, REAP will drive a systemic shift towards anticipatory action that will save lives and protect livelihoods now and in the future, making 1 billion people safer from disaster by 2025.¹⁷ On launch at the UN Climate Action Summit in September 2019, the UK made commitments of £175 million to the targets of REAP. The partnership now has 15 country members across donors, LDCs and

¹⁷ Specifically, REAP will work to these targets by 2025:

1. 50 countries have reviewed and integrated their crisis/disaster risk management and climate adaptation laws, policies and/or plans to ensure that they reduce climate change impacts and exposure on people and the environment. 2. 1 billion more people are covered by financing and delivery mechanisms connected to effective early action plans, ensuring they can act ahead of predicted disasters and crises. 3. \$500 million invested in early warning system infrastructure and institutions to target early action in 'last/first mile' communities, building on existing initiatives such as DFID's WISER, ARRCC & the CREWS programmes. 4. 1 billion more people are covered by new or improved early warning systems, including heatwave early warning, connected to longer-term risk management systems and supported by public awareness campaigns.

SIDS, and 22 organisational members. The partnership will grow significantly in 2020 and bring a comprehensive plan to meet 2025 targets to COP26 in Glasgow.

Energy Market Reforms – responding to energy market imperfections

[...] CfDs are long term (15-year) contracts between low carbon electricity generators and the Low Carbon Contracts Company (LCCC), a government-owned company. The scheme was designed to provide a degree of income stabilisation for new projects by reducing their exposure to volatile wholesale prices, making projects that have high up-front costs but long lifetimes and low running costs attractive to investors. It also protects consumers when electricity prices are high.

[...] Contracts are awarded in a series of competitive auctions, driving efficiency and cost reduction. Generators receive revenue from selling their electricity into the market as usual. However, when the ‘market reference price’ (a measure of the average market price for electricity) is below the ‘strike price’ (a price for electricity reflecting the cost of investing in a particular low carbon technology), generators receive a top-up payment for the additional amount. Conversely if the reference price is above the strike price, the generator must pay back the difference.

[...] Our sustained support for clean electricity has led to dramatic falls in the costs of some renewable technologies. For example, the costs of offshore wind are now around 30% lower than the second auction held in 2017 and 65% lower than the first auction held in 2015. In July 2018 the government announced its intention to hold a CfD auction approximately every two years, to provide industry with the certainty to invest in new renewable projects. The next auction is planned to open in 2021.

44. UNITED STATES

No information was provided in United States’ NIR for 2020.
