

26 January 2023

Compilation of information on the minimization of adverse impacts in accordance with Article 3, paragraph 14, of the Kyoto Protocol, 2022

Note by the secretariat

Contents

				P
I.	Man	ndate		
II.	II. Approach			
III	. Obs	ervation		
IV	. Con para	npilation of inform graph 14, of the l	nation on the minimization of adverse impacts in accordance with Article 3, Syoto Protocol	
	1.	AUSTRALIA		
	2.	AUSTRIA		
	3.	BELARUS		
	4.	BELGIUM		
	5.	BULGARIA		
	6.	CROTIA		
	7.	CYPRUS		
	8.	CZECH REPU	BLIC	
	9.	DENMARK		
	10.	ESTONIA		
	11.	EUROPEAN U	NION	
	12.	FINLAND		
	13.	FRANCE		
	14.	GERMANY		
	15.	GREECE		
	16.	HUNGARY		
	17.	ICELAND		
	18.	IRELAND		
	19.	ITALY		
	20.	JAPAN		
	21.	KAZAKHSTAN	۷	
	22.	LATVIA		
	23.	LIECHTENST	EIN	
	24.	LITHUANIA		
	25.	LUXEMBOUR	G	
	26.	MALTA		
	27.	MONACO		
	28.	NETHERLANI	DS	
	29.	NEW ZEALAN	D	
	30.	NORWAY		
	31.	POLAND		
	32.	PORTUGAL		
	33.	ROMANIA		

34.	RUSSIAN FEI	DERATION	20
35.	SLOVAKIA		20
36.	SLOVENIA		21
37.	SPAIN		23
38.	SWEDEN		26
39.	SWITZERLAN	ID	26
40.	TÜRKIYE		27
41.	UKRAINE		27
42.	UNITED KING	GDOM OF GREAT BRITAIN AND NORTHERN IRELAND	27

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-greenhousegas-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, para 26.

² Decision 15/CMP.1, annex, para 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. Forty-four Annex I Parties submitted their national inventory reports (NIRs) in 2022. This report compiles the information from the NIR of Annex I Parties that ratified the Kyoto Protocol, i.e. forty-two Parties. The information contained in section IV of this document is reproduced as received from Parties in their NIR 2022. The secretariat has, however, made minimal changes to the format of the information to ensure consistency in presentation.

7. There are five different types of presentation:

(a) In the case that majority of the information provided in the 2022 NIR differs from the information provided in the 2021 NIR, the complete text as included in the 2022 NIR is presented in the compilation;

(b) In the case that only a small part of the information provided in the 2022 NIR differs from the information provided in the 2021 NIR, only the difference is presented;

(c) In the case that additional information is provided in the 2022 NIR on top of the information provided in the 2021 NIR, only the additional part is presented;

(d) In the case that no difference was found between the 2022 and 2021 NIRs, it is stated "No new information was included in NIR 2022";

(e) In the case that the NIR does not include any information referred to in paragraphs 2 and 3 above, it is stated "No information was included in NIR 2022".

III. Observation

8. Of the forty-two NIRs that were compiled in this report:

- (a) Twenty-five NIRs included new information with different level of details;
- (b) Fifteen NIRs did not include any new information;

(c) Two NIRs did not include any information on the minimization of adverse impacts in accordance with Article 3, paragraph 14, of the Kyoto Protocol.

9. Of the twenty-five NIRs which included new information, it is observed:

(a) Eighteen NIRs added more initiatives in which the Party is involved or supports. These initiatives include, among others: domestic energy efficiency measures; domestic and regional carbon-related taxation; investment in and deployment of renewable and clean energy; bilateral and multilateral assistance or support, including financial-related support;

(b) One NIR emphasized just transition in the implementation of national climate plan which includes efforts towards economic diversification, and one NIR reported an initiative related to just energy transition. One NIR particularly highlighted economic diversification as one of the important targets in Parties bilateral and multilateral initiatives or programmes;

(c) Nine NIRs updated the figures related to Parties' existing financial assistance or support.

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 new information was included in NIR 2022:

[...] Australia's updated and enhanced Nationally Determined Contribution (NDC) was communicated in October 2021. The Australian Government whole-of-economy Long-Term

Emissions Reduction Plan sets out how Australia will achieve the NDC's target of net zero emissions by 2050. The core of the Plan is the Australian Government's Technology Investment Roadmap, which focuses on accelerating the deployment of low emissions technologies.

To support the Technology Investment Roadmap, a Technology Investment Advisory Council was established. It is chaired by Australia's former Chief Scientist Dr Alan Finkel AC, and made up of leaders from science, business, technology and government to advise the Government on the Low Emissions Technology Statements. In 2022, focus groups were held with over 100 leading industry and research stakeholders. The discussion covered the future direction for policy on low emissions technology development and deployment in Australia. The Government will continue working with industries and communities to support the development and deployment of low emissions technologies while capturing the economic opportunities that arise from these new and emerging technologies.

To ensure a smooth transition for the economy, workers and energy markets, the Australian Government has been investing in R & D, commercialisation and deployment of clean energy and grid management technologies, including through the Australian Renewable Energy Agency (ARENA), the Clean Energy Finance Corporation (CEFC), and the CSIRO. The Technology Investment Roadmap has helped guide some of these investments in recent years. (new information since last submission)

• Since it began investing in 2013 and as at 31 December 2021, the CEFC's commitments total more than \$10.3 billion to over 250 projects. Investments contribute to a diverse range of projects with a total value worth over \$36 billion.

• Since its inception in 2012 and as at 31 December 2021, ARENA has provided over \$1.83 billion in grant funding to more than 615 projects with a total value of \$7.9 billion.

[...]

The Climate Change Action Strategy underpins our climate investments and helps us meet Australia's commitments, building on our \$1 billion climate development assistance from 2015–2020 and our new \$2 billion commitment over 2020–25.

2. AUSTRIA

The following new information was included in NIR 2022:

[...]

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). From January 1, 2022, the basis for calculating the car registration levy (NoVA) is the CO2 emission value in g/km (according to the WLTP) minus 107g. To determine the tax rate used to calculate the NoVA, this value is to be divided by five. The maximum tax rate is 60 percent. Further $60 \in$ are added for each g/km above 185 g/km. To calculate the NoVA, the tax amount is to be reduced by a deduction of $350 \in$.

Between 2022 and 2024, the values will be adjusted annually: The CO2 deduction amount is lowered by 5 grams per year (2023: 102 g), the malus limit by 15 grams per kilometer (2023: 170 g/km), the malus amount is increased annually by the value 10 (2023: 70€) and the maximum tax rate is being raised by 10 percentage points per year (2023: 70%).

Starting January 1, 2025, only the CO2 deduction amount will be reduced annually by the value 3.

• Company cars

[...] In 2019 (https://www.ris.bka.gv.at/eli/bgbl/II/2019/314) an ecological component has been introduced in deviation of the provision of 2016: for vehicles registered for the first time in 2022 with a CO2 emission value of not more than 135 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 \notin 720 per month. If these vehicles exceed the CO2 emission value of 135 grams per kilometer, the non-cash benefit amounts to 2% of the purchase costs, up to a maximum of \notin 960 per month. The non-cash

benefit does not apply to purely electric vehicles. The amount of 135 grams per kilometer is reduced by 3 grams annually from the 2022 calendar year to the 2025 calendar year.

[...]

• On multilateral level Austria supports UNIDOs approaches on "Global Network for Sustainable Energy Centres GN-SEC"; SE4All (Sustainable Energy for All) is being supported with grants for the operations in Vienna and programs for women's empowerment and sustainable cooling; the EU Africa Energy Initiative is being supported with pool funding of the opera tions of GET.pro (support for the creation of regional Energy centres, studies etc.); The Nordic Development Fund receives funding for the Trust Fund of the Energy and Environment Partnership in Southern and Eastern Africa(EEP).

[...]

• Austria supports the establishment and operation of renewable energy and energy efficiency centres for West- and East Africa as well as for the Caribbean, Pacific, Central America and Himalaya-Hindukush Regions.

3. BELARUS

No information was included in NIR 2022.

4. BELGIUM

The following new information was included in NIR 2022:

[...]

However, there are still in Belgium various subsidies for fossil fuel consumption. The National energy and climate plan (NECP) foresaw the elaboration by the end of 2021 of an inventory of all fossil fuel subsidies. The federal Inventory of fossil fuel subsidies has been finalized in May 2021. A list of all energy subsidies (including those for fossil fuels) at federal and regional levels, has been communicated to the European Commission at the beginning of 2021.

5. BULGARIA

No new information was included in NIR 2022.

6. CROTIA

No new information was included in NIR 2022.

7. CYPRUS

No new information was included in NIR 2022.

8. CZECH REPUBLIC

The following new information was included in NIR 2022:

[...]

Tab 16-1 Actions implementation	by party	as identified	in paragraph	24 of the	Annex
to Decision 15/CMP.1					

Action	Implementation by the Party	
(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	[] Under the EU Taxonomy Regulation, a delegated act on sustainable activities for climate change adaptation and mitigation objectives was adopted in 2021, defining technical screening criteria for projects in line with these objectives.	

energy price reforms to reflect market prices and externalities.	
[]	
(f) Assisting developing country Parties which are highly dependent on the export and consumption of fossil fuels in diversifying their economies.	The Czech Republic is cooperating in several bilateral development assistance projects focusing on reduction of fossil fuels dependence and development of renewable energy sources, inter alia: [] - Implementation of Mini Hydro Power Plant in North Sulawesi, Indonesia []

9. DENMARK

No new information was included in NIR 2022.

10. ESTONIA

The following new information was included in NIR 2022:

[...]

Dieselland-Equipment OÜ wants to reduce the consumption of fossil fuels, air emissions and soot particles in the Republic of Kenya. A modular workroom built in Estonia for the repair of diesel engines will be moved to the destination country.

11. EUROPEAN UNION

No new information was included in NIR 2022.

12. FINLAND

The following new information was included in NIR 2022:

[...] Economic diversification and private sector development are particularly important targets in various Finnish bilateral programmes and Finnish-supported multilateral programmes in developing countries.

[...] Furthermore, Finland has joined Asian Development Bank's Ventures Investment Fund in 2020 by investing 20 MEUR in the fund. The fund provides financing to early-stage and growth companies applying technology-enabled climate mitigation solutions in Asia. The Finnish government-owned financial institution, Finnfund, also makes investments in renewable energy, sustainable forestry and other sectors in developing countries that help reduce greenhouse gas emissions.

[...] The revenue from carbon pricing can be used to minimize potential adverse impacts from response measures Through Finnfund and the Finland-IFC Blended Finance for Climate Program private sector financing for climate change solutions is incentivised for in low income countries.

[...]

o Through Finnfund and the Finland-IFC Blended Finance for Climate Program private sector financing for climate change solutions is incentivised for in low-income countries. In addition, through Asian Development Bank's Ventures Investment Fund, Finland provides funding for early-stage and growth companies trying to seek new climate mitigation solutions in Asia.

o Through the Global Environment Fund (GEF) and the Green Climate Fund (GCF) (the Operating Entities of the UNFCCC Financial Mechanism), Finland supports developing countries' efforts to improve energy efficiency, transition to cleaner sources of energy, introduce more sustainable transportation, and preserve and restore carbon sinks. [...]

[...] The latest achievement where the FFFSR has played a key role is a ministerial statement on fossil fuel subsidies reform launched among 37 WTO members in December 2021. The European Union, and Finland as its member state, cosponsors the ministerial statement. This statement will help to anchor and guide FFFSR related work in the WTO.

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

Action	Implementation in Finnish policy
(a) The progressive reduction or phasing out of market imperfections, fiscal incentives, tax and duty exemptions and subsidies in all greenhouse-gas-emitting sectors, taking into account the need for energy price reforms to reflect market prices and externalities	[] Finland is committed to end financing to new unabated thermal coal power projects overseas
<u>[]</u>	
(f) Assisting developing country Parties that are highly dependent on the export and consumption of fossil fuels in diversifying their economies.	Action has been undertaken both through support by international organisations such as UNCTAD (United Nations Conference on Trade and Development) and through bilateral and multilateral partnerships. For example, the Green Climate Fund, to which Finland contributes, reduces risks for investors in developing countries in order to attract global financial flows and to shift private investment to renewable energy- based power systems. The GEF on the other hand contributes to mainstreaming mitigation concerns into sustainable development strategies and promoting innovation and technology transfer for sustainable energy breakthroughs.
	Finland is supporting early-stage companies to provide access to renewable energy through the Energy and Environment Partnership (EEP) Trust Fund in Southern and Eastern Africa. []
	Finland is also supporting early-stage and growth companies helping to reduce greenhouse gas emissions through Asian Development Bank's Ventures Investment Fund. It provides funding for applying technology-enabled climate mitigation solutions in Asia.
	The Finnish government-owned financial institution, Finnfund, makes investments, among others, in renewable energy, sustainable forestry and other sectors in developing countries that help reduce greenhouse gas emissions. The government supports Finnfund financially by providing the financial institution with loans, capital injections, and a special guarantee

instrument targeted at high-risk projects. [...]

13. FRANCE

The following new information was included in NIR 2022:

[...]

La France a participé (et participe encore) à plusieurs projets visant à renforcer les capacités d'adaptation au changement climatique de ses membres. Des examples figurant dans le tableau ci-dessous.

Bénéficiaire Pays/ Region	Champ	Programme ou titre du projet	Description du programme ou du projet
[]			
Africa, SIDS	Mitigation, Adaptation	Facilité française de préparation aux INDC	Préparation des INDC d'une trentaine de pays
[]			

[...]

En 2018, la France a fourni plus de 5 milliards d'euros de financements publics pour l'atténuation et l'adaptation aux changements climatiques dans les pays en développement, à travers des sources bilatérales et multilatérales. Ce niveau d'engagements a connu une nette progression supplémentaire par rapport à 2017 (+15 %) et porte à plus de 33 milliards d'euros le total des financements en faveur du climat engagés depuis 2005, principalement à travers l'activité du groupe Agence française de développement.

14. GERMANY

No new information was included in NIR 2022.

15. GREECE

No new information was included in NIR 2022.

16. HUNGARY

The following new information was included in NIR 2022:

[...] The final version of the long-term National Clean Development Strategy was adopted and submitted to the UNFCCC in September 2021, and the second Climate Change Action Plan is currently under governmental approval.

A 22-party Hungarian consortium led by the Hungarian Ministry for Innovation and Technology successfully applied for funding under the 2019 Call for strategic integrated projects within the framework of the EU LIFE programme. The 9-year long "LIFE-IP North-HU-Trans" project, with a total budget of EUR 14.8 million, aims to ensure the successful implementation of the National Energy and Climate Plan, with special emphasis on the sustainable and just transition of Hungary's single largest coal region located in North Hungary. The central element of the project is the climate-friendly transformation of the Mátra Power Plant (hereinafter: MPP) with parallel efforts towards job preservation and economic diversification in the region. MPP is the second largest power plant in the Hungarian electricity production system. It accounts for nearly 50% of the total energy sector GHG emissions, and about 10% of the total national GHG emissions in Hungary. Therefore, the above strategic priorities of the NECP cannot be achieved without the gradual phase-out of the lignite-fired units of the MPP. On the other hand, MPP is also a major employer in the region providing a livelihood for 2,100 employees and almost 1,000 local companies. A complex, multidisciplinary-multistakeholder solution is being realized in order to ensure the sustainable and just transition.

Through its retraining and corporate mobilization programmes, the project will help address the situation of the miners, workers and enterprises concerned. It also contributes to the design, testing and evaluation of innovative prototypes in power plant decarbonisation, recultivation of post-mining landscapes, energy efficiency and energy community measures for the affected households and the promotion of regional green transport solutions. Furthermore, the project provides technical support for the mobilisation of other national and EU funds for ensuring the sustainable and just transition in the region.

The Hungarian Ministry for Innovation and Technology and the Swedish Environmental Protection Agency implemented a project between November 2019 and July 2021 financed by the EU Technical Support Instrument with the aim of strengthening the implementation of Hungary's National Climate Change Strategy. One of the main goals of the project was to support Hungary in establishing a coherent monitoring framework for climate and energy policies, actions, strategies at national-level. This framework is intended to enable feedback on the progress towards the climate-neutrality. The setting up of a coherent climate and energy policy monitoring framework will be one of the tasks of 2022-2023 after the Government approves the second Climate Change Action Plan.

17. ICELAND

No new information was included in NIR 2022.

18. IRELAND

No new information was included in NIR 2022.

19. ITALY

The following new information was included in NIR 2022:

[...]

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

[...]

Preliminary data for 2020 are available in the report of the Italian Development co-operation profiles at the URL:

https://www.oecd-ilibrary.org/sites/37f92091en/index.html?itemId=/content/component/5e331623en&_csp_=b14d4f60505d057b456dd1730d8fcea3&itemIGO=oecd&itemContentType=cha pter

Total Official Development Assistance (ODA) on a grant-equivalent basis stood at USD 4.2 billion in 2020 (preliminary data), 7.9% less than 2019 and representing 0.22% of Italy's gross national income (GNI). Italy ranked 20th among Development Assistance Committee member countries in relation to its ODA/GNI ratio in 2019. Italy is committed, at the European level, to collectively achieve a 0.7% ODA/GNI ratio by 2030. Under the cash-flow methodology used in the past, net ODA was USD 4.3 billion in 2020. Within Italy's gross ODA portfolio in 2019, 97.4% was provided in the form of grants and 2.6% in the form of non-grants (Table 14.5).

Table 14.5 Financial resources to developing countries and multilateral organisations from Italy, USD million in 2020 (preliminary data).

Official Development Assistance, grant equivalent measure	4,186
I. Bilateral ODA	1,115
Grants	952
Grant equivalents of bilateral loans	163
Debt relief	-
Other, net flows	-
Private sector instruments - institutional approach	-
Private sector instruments - instrument approach	-

II. Multirateral ODA	3,071
Grants and capital subscriptions	3,071
Grant equivalents of loans	-
GROSS NATIONAL INCOME AT MARKET PRICES	1,905,282
ODA grant equivalent as per cent of GNI	0
Population (million)	59
Official Development Assistance, net	4,348
I. Bilateral ODA	1,277
a. Budget support	9
b. Bilateral core support & pooled programmes & funds	350
c. Project -type interventions	620
d. Experts and other technical assistance	11
e. Debt relief	2
f. Administrative costs not included elsewhere	24
g. Other	262
In-donor refugee costs	229
a. Grants	1,006
of which: Recoveries on grants	-
b. Non grants, gross	368
c. Non grants, net	270
of which: Offset ting entry for debt forgiveness	52
I. Multilateral ODA, net	3,071
a. United Nations	206
b. EU	2,010
c. World Bank (AMCs, IDA, IBRD, IFC, MIGA)	432
d. Regional development banks and funds	152
e. Other	270

20. JAPAN

The following new information was included in NIR 2022:

[...]

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 and Asian countries.

21. KAZAKHSTAN

No new information was included in NIR 2022.

22. LATVIA

The following new information was included in NIR 2022:

[...]

1) Latvia is a country of high diversity of renewable energy sources. In 2020, the total consumption of renewable energy resources in Latvia was 74.2 petajoules (PJ), according to data of the Central Statistical Bureau (CSB). The decrease in renewable energy resources consumption in 2020 was influenced by the decrease in overall energy consumption. The share of renewable energy sources in total structure of energy consumption has been increasing in recent years. Over ten years 2011–2020, renewable energy resources consumption in total energy consumption increased by 14.8%, and in 2020 was 42.4%. By increasing the consumption of local energy resources, the energy dependence on imported energy resources decreased from 63.9% in 2005 to 44.0% in 2019.

2) Latvia has set one of the highest individual targets for the share of renewable energy by 2020 and 2030, respectively 40% and 50% of gross final energy consumption. In 2020, the actual share of renewable energy in gross final energy consumption exceeded Latvia's target totalling 42.13% 321 of gross inland energy consumption. This bring Latvia closer to its 2030 target.

3) [...] Energy consumption in the transport sector has increased by 5.4% over five years (2016-2020), reaching 47.1 PJ in 2020. 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 69.3% of all fuels in 2020. Compared to 2019, the consumption of diesel decreased by 6.9%. The share of LPG in transport has increased in recent years. The consumption of LPG in 2010 was 1,2 PJ but in 2020 – 1.8 PJ. Compared to 2019, the consumption of LPG has decreased by 9.6%. Consumption of petrol in the transport sector fell by 16.0% in five years, reaching 7.0 PJ in 2020, which is 3.8% less than in 2019. Electricity consumption in transport in 2020 was 339 TJ, which is 6.6% less than in 2019 (363 TJ). Compared to 2019, the consumption of electricity decreased in rail transport (by 7.4%) and pipeline transport (by 34.8%) but increased in road transport (by 2.1%). The share of renewable energy in the transport sector reached 4.73% in 2018 and 4.55% in 2019323. Although by 2020 this parameter must reach at least 10%, the share of renewable energy in the transport sector.

[...] In 2021, the number of electric charging stations in the national network of electric vehicle charging stations (E-mobi) maintained by the Road Traffic Safety Directorate (CSDD) reached 141 units. The number of registered electric cars (commercial vehicles and passenger cars) in Latvia at the end of 2021 were 2 215.

[...] • biodiesel (derived entirely from biomass) and paraffin-enriched diesel (derived from biomass) is taxed at a rate of EUR 330 per 1000 liters, if they are sold or used as fuel. Taxation rate of EUR 0 per 1000 liters is applied if relevant oil products are used as a combustion or in gas furnaces and in other equipment, not as fuel.

[...]

	2016-2	017	20	18-2019	2020	From 01.07.2021
Unleaded gasoline	411.21 436		476	509		
Unleaded gasoline with 5% (volume) of ethanol produced from agriculture origin raw materials	411.21 436		476	509		
Unleaded gasoline with 70- 85% (volume) of ethanol produced from agriculture origin raw materials in Latvia or imported from EU member state	123.36		131	30% from the base rate	360	
Lead gasoline	455.32	455.3	32	594	4	594
Diesel (gas oil);	332.95	34	1	372	414	
Diesel (gas oil) with any mix of biodiesel	332.95	34	1	372	4	14
Pure biodiesel, produced in Latvia or imported from EU member state	0	0		0	0	-

Table 15.1 The 2016-2017, 2018-2019, 2020, and from 1 July 2021 duties for gasoline and diesel used in transport sector Duties (EUR per 1000 litres)

				(excluded from 01.2.2021)
Oil gasses and other hydrocarbons (per 1000 kg)	161	206	244	285

[...]

In accordance with the directions of the State Tax Policy Guidelines for 2021-2025 approved by the Cabinet of Ministers, it was planned to introduce a CO2 component for oil products and natural gas in excise duty by linking with the emission allowance price (for example, initially EUR 25 per CO2 t for oil products). Adjustments for excise duty on petroleum products should only be made if the CO2 price increases by more than EUR 5 per CO2 t, taking into account the CO2 component calculated before. Unfortunately, no progress is being made in this direction, yet. Work on the State Tax Policy Guidelines for 2021-2025 in 2021 has been suspended due to other priorities.

23. LIECHTENSTEIN

No new information was included in NIR 2022.

24. LITHUANIA

The following new information was included in NIR 2022:

[...]

In 2021, the Minister of Environment has allocated a total amount of 1,94 mil. Euros to 6 new climate related projects in developing countries. In 2021 private and public investments for developing countries was 3,1 mil. Euros.

Selected projects will be implemented in 3 countries – Sakartvelo (Georgia), Armenia and Moldova.

2 projects will be implemented in Sakartvelo. Long-term Lithuania's partner country will be continuing to install solar power plants in public spaces/buildings – schools, local training centres etc. Lithuania's public and private investments for Georgia will account about 1,12 mil. Euros.

Two projects will be financed in Moldova with approx. of 1,3 mil. of Euros investments in solar power plants. Also 2 projects will be implemented in Armenia – total projects value is approx. 670 thous. Euros.

In 2021 Lithuania continued to support projects that have been started to be implemented in 2019 and 2020. The solar power plant projects were implemented in Africa Mali (finished in 2021), Nigeria. Also, other projects are continued in Eastern Partnership countries, especially Sakartvelo, Armenia and Moldova.

[...]

The table below summarizes the data on international climate finance provided by Lithuania in 2021:

Thous. EUR	Type of support	Recipient of support	Provider of support		
1940*	bilateral	Development cooperation projects	Ministry of Environment		
100	multilateral	EPTATF - Eastern Partnership Technical Assistance Trust Fund, administered by the European Investment Bank	Ministry of Finance		

* total subsidy amount

25. LUXEMBOURG

No new information was included in NIR 2022.

26. MALTA

The following new information was included in NIR 2022:

[...]

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 €926,694, through both bilateral and multilateral funding channels (Table 15 1). Multilateral funding contributions primarily relate to the Green Climate Fund (GCF), a fund set up by the UNFCCC in 2010 and dedicated towards helping developing countries reduce their greenhouse gas emissions and enhance their ability to respond to climate change.

Table 15.1 Financial support provided by Malta for years 2013 to 2020.

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

	Bilateral/regional channels	funding	Multilateral funding channels	
		Euros		
[]				
2020		N/A	100,000	

27. MONACO

The following new information was included in NIR 2022:

[...]

La Principauté de Monaco reconnaît le rôle des pays développés dans le soutien à apporter aux pays en développement et aux populations vulnérables afin qu'ils puissent réorienter leurs économies vers des trajectoires de développement bas-carbone et renforcer leur résilience aux effets adverses du changement climatique. C'est pourquoi le Gouvernement Princier est déterminé à endosser sa part de responsabilité pour atteindre l'objectif de 100 milliards de dollars par an en faveur de l'action climatique dans les pays en développement.

[...]

Au total, en 2021, près de 1 400 000 euros ont été versés, intégralement comptabilisés au titre du financement climatique international, dont plus de 80% ont été acheminés par des canaux multilatéraux.

En particulier, on doit souligner la contribution monégasque au Fonds Vert pour le climat dans le cadre de la première reconstitution du Fonds, à hauteur de 750 000 euros annuels pour la période 2020-2023, ce qui fait de la Principauté le premier bailleur du Fonds per capita.

On notera également la volonté du Gouvernement Princier de concrétiser, par l'appui de financements ciblés, son plaidoyer politique visant à renforcer les synergies entre les thématiques du climat, de l'océan et de la biodiversité. Cet engagement s'illustre notamment par l'octroi de plusieurs contributions à des projets incarnant le concept des « solutions fondées sur la nature » (carbone bleu, restauration et conservation d'écosystèmes marins dont les mangroves par exemple).

Enfin, le Gouvernement Princier est particulièrement sensible à la demande des pays en développement d'accorder davantage de financements aux initiatives d'adaptation aux changements climatiques. C'est pourquoi diverses contributions visent à favoriser la résilience et l'adaptation des populations vulnérables, dans le domaine de la santé notamment.

En complément de ces ressources dédiées, on estime à plus de 4,9 millions d'euros le montant des subventions allouées en 2021 dans le cadre de la politique de coopération internationale

monégasque ayant conjugué des bénéfices en termes de développement et au titre de l'action climatique (projets dits à « co-bénéfice climat »).

28. NETHERLANDS

The following new information was included in NIR 2022:

[...] With (increasing) environmental taxation, the externalities of energy use related to GHG emissions are increasingly reflected in energy prices. Examples are: environmental taxes on the use of natural gas up to 170,000 m3 increased from $\notin 0.1639$ per m3 in 2011 to $\notin 0.1911$ per m3 in 2015, to $\notin 0.3331$ per m3 in 2020, and to $\notin 0.3632$ per m3 in 2022; excise duty on gasoline increased in the same period from $\notin 0.71827$ per litre, to $\notin 0.76607$, $\notin 0.80033$, and $\notin 0.82371$ per litre in 2015, 2020 and 2022, respectively. Environmental taxes on the use of coal increased from $\notin 14.03$ per 1000 kg in 2013 to $\notin 14.40$ per 1000 kg in 2015, to $\notin 15.05$ in 2020, and to $\notin 15.49$ per 1000 kg in 2022.

[...]

The Netherlands has integrated development and climate action budgets, policies, and activities for maximum impact and best results, especially for the poorest and most vulnerable. Committed to supporting developing countries in their climate action, we have been scaling up climate finance. While public climate finance amounted to \notin 286 million in 2013, it increased to \notin 416 million in 2015, \notin 419 million in 2017, \notin 575 million in 2018, and \notin 608 million in 2020. In addition, in 2015 the Netherlands mobilized \notin 73 million private finance in 2015, \notin 335 million in 2017, \notin 411 million in 2018, and \notin 592 million in 2020.

[...]

The Dutch Emission Authority (NEa) has not taken any requests for Letters of Approval (LoA) for CDM or JI projects into consideration since 16 June 2020.

29. NEW ZEALAND

The following new information was included in NIR 2022:

[...]

New Zealand is undertaking several mitigation actions and policies to reduce emissions to meet its Paris Agreement (2015) commitments, as well as prioritising adaptation and resilience in the Pacific. These measures include:

• implementing New Zealand's updated Nationally Determined Contribution

• developing an economy-wide, sector-specific and cross-cutting emissions reduction plan mandated to meet New Zealand's legislated emission budgets

• improving New Zealand's emissions trading scheme, including by being one of the first countries in the world to put a price on agricultural emissions

· legislating a mandatory climate-related financial disclosures regime

· improving energy efficiency initiatives

• investing in public transport, electric and low-emission light vehicles

•[...]

• achieving 100 per cent of electricity produced from renewable energy sources by 2035

• establishing the Carbon Neutral Government Programme

• strengthening international cooperation by joining several initiatives that commit countries to effective and ambitious climate action, including playing a leading role in the Friends of Fossil Fuel Subsidy Reform (FFSR), the Global Research Alliance on Agricultural Greenhouse Gases, the Carbon Neutrality Coalition and the Agreement on Climate Change, Trade and Sustainability

•[...]

• increasing climate-related support four-fold, to be delivered by New Zealand's International Development Cooperation (IDC) Programme (see www.mfat.govt.nz/en/environment/climate-change/supporting-our-region/).

[...]

New Zealand recognises the potential for its climate policy to have consequences for its Pacific neighbours, particularly in relation to supply chains.

[...]

New Zealand is meeting its climate finance commitments under the Paris Agreement by progressively scaling up finance for developing countries to transition to low emission economies. New Zealand delivers its climate finance commitment through the provision of the IDC. The Ministry of Foreign Affairs and Trade manages the IDC Programme. New Zealand works closely with the partner country to agree priorities for the particular country's international development cooperation programme.

[...]

New Zealand is also supporting countries to undertake analysis to transition to low emission, climate-resilient economies, particularly in sectors such as energy and transport.

[...]

Compared with information reported in the previous National Inventory Report, additional initiatives include opportunities for new energy efficiency and transport energy projects. Scoping and design for these activities was initiated in 2019, with implementation set to begin in Nauru (energy efficiency) in 2021 and the Marshall Islands (transport) in 2022.

[...]

Trade is a critical part of New Zealand's economy. Through the Inclusive Trade Action Group, New Zealand and likeminded countries are driving a more inclusive and sustainable trade agenda.

[...]

New Zealand is an active advocate of fossil fuel subsidy reform internationally. Transparency is an important element of subsidy reform. New Zealand has undergone two voluntary peer reviews of its fossil fuel support measures using the Asia-Pacific Economic Cooperation (APEC) (2015) and Organisation for Economic Co-operation and Development (OECD) (2018) mechanisms. These found that New Zealand does not have any fossil fuel subsidies that encourage wasteful consumption. However, the OECD review found that New Zealand had nine remaining indirect support measures that could support the use of fossil fuels. Three of these measures have now been terminated. New Zealand committed to evaluate the remaining indirect support measures in 2019, and not to introduce any new fossil fuel subsidies. The evaluation found that New Zealand does not have any support measures that could directly or indirectly support the wasteful consumption of fossil fuels.

[...]

New Zealand used its APEC 2021 host year to drive regional trade and environment outcomes to support its multilateral ambitions. New Zealand led APEC to achieve consensus on work towards operationalising a voluntary standstill on inefficient fossil fuel subsidies from the end of 2022.

In December 2021, New Zealand launched the Joint Ministerial Statement on Fossil Fuel Subsidy Reform at the WTO, co-sponsored by 44 other WTO Members, representing over a quarter of the membership.

New Zealand is also leading negotiations on the Agreement on Climate Change, Trade and Sustainability trade initiative, which was launched in 2019, in a group of six like-minded countries including Costa Rica, Fiji, Iceland, Norway and Switzerland. It seeks to develop legally binding rules to eliminate harmful fossil fuel subsidies. It is expected the Agreement will expand into a multilateral initiative, open to WTO Members that meet the established standard.

New Zealand has the third highest share of renewable electricity generation in the OECD and is working towards 100 per cent renewable electricity generation by 2030. Prices for energy products and services are set freely by the market. New Zealand is a member of the Powering Past Coal Alliance and became an associate member of the Beyond Oil and Gas Alliance in 2021.

[...]

Significant geothermal support is also being provided in Africa (NZD\$10.2 million) and the Caribbean (NZD\$5.1 million), which is tailored to the specific needs of each country but covers broadly the same areas as in Indonesia of capability building, technical assistance and exploratory drilling support.

[...]

New Zealand has supported the Office of the Quartet since 2018 to improve the selfsufficiency, reliability and sustainability of Gaza's energy supply, including through offsetting greenhouse gas emissions. The Office of the Quartet is mandated by the United Nations to help mediate Middle East peace negotiations and support Palestinian economic development and institution building. New Zealand's funding provides technical advisors for feasibility studies, strategic documents and garnering support for renewable energy from the relevant authorities. This includes engagement with the Palestinian Energy and Natural Resources Authority and supporting the advocacy work in both Gaza and West Bank. An interim Power Purchasing Agreement was signed in September 2020 between Israel and Palestine that enabled the energisation of two high-voltage substations.

[...]

15.8 New Zealand's IDC climate commitment

At the United Nations General Assembly in 2018, Prime Minister Ardern announced that New Zealand would spend at least NZD\$300 million on climate change development assistance from 2019 to 2022. This commitment was managed within New Zealand's IDC Programme. In July 2021, New Zealand met this commitment. Of this commitment, NZD\$270 million was spent on adaptation projects as a whole, with NZD\$176 million of this spent in the Pacific.

In October 2021, New Zealand announced a new climate finance commitment to developing countries of NZD\$1.3 billion, from 2022 to 2025. At least 50 per cent of this funding will go to the Pacific as it adapts to the impacts of climate change.

30. NORWAY

The following new information was included in NIR 2022:

[...]

In 2020, the Norwegian Parliament approved funding for a new CCS project - the Longship demonstration project. Longship is the first large-scale CCS project to integrate a complete chain of individual CO2 sources, a flexible transport solution, and an open-access storage facility. The Longship consists of two capture projects, at cement plant and a waste incineration plant in Oslo provided that the latter secures sufficient financing; a transport (by ships) and storage project with excess storage capacity and can receive and store CO2 from other sources. Longship is currently under construction. According to plan, from the second half of 2024, Longship will start capturing and permanently storing CO2.

[...] 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. It is working with the MBDs, The Oil and Gas Climate Initiative and the Global Cement and Concrete Association. The Initiative has also funded India's participation in the ACT-programme – Accelerating CCS Technologies. ACT

is an ERA NET Cofund, which is a tool established by the European Commission under the Horizon 2020 programme for research and innovation. The idea behind ERA NET Cofunds iswas that European countries should join forces when it comes to funding RD&D and innovation on subjects of high European interest. Now, that Horizon 2020 has been replaced by Horizon Europe as the new European framework programme for research and innovation, ACT will be incorporated into a much wider partnership called CETP (Clean Energy Transition Partnership), as will all other energy related ERA NETs.

[...]

The Norwegian Oil for Development (OfD) programme, which was launched in 2005, aims at assisting developing countries, at their request, in their efforts to manage petroleum resources in a way that generates economic growth and promotes the welfare of the whole population in an environmentally sound way. A description of the OfD program can be found at:

<u>https://www.norad.no/en/front/thematic-areas/oil-for-development/</u>. The programme is currently engaged in 148 countries, mainly in Africa.

[...]

In 2021 the prior government decided to gradually phase out the OfD and discontinue the programme by 2024. This change was conducted to steer the development assistance in a greener direction with focus on climate change and renewable energy. In accordance with the Norwegian development policy with focus on renewable energy, the OfD programme shall be transformed into an Energy for Development (EfD) programme, which is in the process of being developed.

15.4 Cooperation with developing countries related to renewable energy

The policy of the Norwegian government is to integrate development and climate, as these major challenges are highly interlinked. Increased access and transition to renewable energy is the main priority.

Renewable energy has been part of Norway's development assistance policy for several years. In addition to extensive support through multilateral and multi-donor funding, several countries, mainly in Sub-Saharan Africa, have received bilateral Norwegian renewable energy funding.

[...]

The Norwegian Agency for Development Cooperation (Norad) works in close collaboration with the Norwegian Environment Agency on behalf of the Ministry of Foreign Affairs and the Ministry of Climate and the Environment to review and assess methodologies and routines used to estimate achieved emission reductions through Norwegian-funded development measures. This work will take place in close dialogue with partners and international organisations.

To further the goals of the Paris Agreement, the Norwegian government has committed to double climate finance by 2026. A new Norwegian Climate Investment Fund for Developing Countries is established, and the plan is to allocate NOK 10 billion over five years to invest in renewable energy with the aim of contributing to reduced greenhouse gas emissions. The Fund is based on public and private capital that will be able to provide returns, reduce greenhouse gas emissions and increase climate financing.

The Norwegian Investment Fund for Developing Countries (Norfund) has the responsibility of managing the Fund. Norfund is providing risk financing as equity and loans to clean energy projects together with private investors also in addition to the Climate and Investment Fund. Norfund's mandate is to establish sustainable and financially sound business in developing countries. Over time, Norfund is investing half of its capital in clean energy.

[...]

Further, Norway provide support for feasibility studies, training, infrastructure to reduce risk as incentives for private investors in power production. Norway has also established an economic instrument directed towards the private sector, i.e., guarantees for risk mitigation in developing countries. The Norwegian Renewable Guarantee Initiative was launched in 2022 in partnership with the two international guarantee institutions African Trade Insurance Agency (ATI) and Multilateral Investment Guarantee Agency (MIGA). NOK 1,5 billion over five years will be provided for the initiative.

31. POLAND

The following new information was included in NIR 2022:

[...]

The climate-related bilateral and regional assistance is granted worldwide including the Eastern Partnership, Africa and Asia. In 2020 the total amount of climate aid donated was EUR 3.9 million in the form of grants. Approximately 75% of the climate aid provided is related to adaptation actions while 25% - to mitigation measures. 77% of support was related to technology transfer and the rest related to capacity building projects. The beneficiaries of this assistance in 2020 covered such countries like: Albania, Georgia, Moldova, Mongolia, Lebanon, Myanmar, South Africa, Senegal, Sudan, Uganda, Kenya and Tanzania¹¹.

¹¹ Support to developing countries in 2020 GovReg: <u>https://reportnet.europa.eu/public/dataflow/180</u>

32. PORTUGAL

No new information was included in NIR 2022.

33. ROMANIA

No new information was included in NIR 2022.

34. RUSSIAN FEDERATION

The following new information was included in NIR 2022:

[...]

– содействие развитию альтернативной и низкоуглеродной энергетики в развивающихся странах посредством передачи технологий, возведения и компоновки объектов энергетики с использованием российского оборудования и материалов, обучения персонала навыкам работы на возведенных объектах, а также сокращение выбросов парниковых газов, связанных с производством и транспортировкой в пределах Российской Федерации экспортируемых материалов и оборудования;

[...]

Российская Федерация практически полностью обеспечивает себя энергоресурсами за счет внутренней добычи. Значительная часть добытых энергоресурсов и произведенной электро-энергии экспортируется, в том числе в развивающиеся страны. Значительная часть электро-энергии в России вырабатывается атомными и гидроэлектростанциями, практически не даю-щими выбросов парниковых газов, что обеспечивает достаточно низкий уровень углероемко-сти российской электроэнергетики. Так, в 2020 году доля гидроэлектростанций, атомных станций и возобновляемых источников энергии в производстве электроэнергии увеличилась на 3,3% по сравнению с 2019 г., достигнув 39,8%. (Росстат, 2021).

Экспортные поставки российской электроэнергии в развивающиеся страны обеспечивают замещение в их топливном балансе углеродоемких видов топлива, снижая, таким образом, выбросы в атмосферу парниковых газов, в первую очередь, CO2.

35. SLOVAKIA

The following new information was included in NIR 2022:

[...]

Fiscal policy instruments are deemed to be an efficient instrument to correct existing environmentally related price distortions. The Slovak Republic maintains excise taxes on fossil fuels, electricity and mineral oils. The budgetary situation in the aftermath of the COVID-19 pandemic has been complicated and the government had to adopt numerous measures to deal with its economic and social consequences. Even though there will be an increased pressure to improve the general government budget balance in the upcoming years, elements of a green tax reform are being considered. As a part of the 2017 Spending Review, there was a proposal to scrap socially motivated tax exemptions on energy excise taxes. However, the decision was eventually not made. On the other hand, an increase in landfilling fees is believed to bring about a significant GHG and pollutants emissions decrease. This is especially significant as landfilling is responsible for the vast majority of GHG emissions associated with waste management. No impact on any third countries with respect to measures is expected from already implemented fiscal policies and therefore no specific policies to offset any negative effects have been considered.

[...]

The data show, that the import of biofuels and raw materials for their production from developing countries is very negligible. In 2020, 3.5% of all the biofuels placed on the Slovak market was from developing countries. This value is connected to the biofuels made from raw materials, not from used cooking oil.

[...] Additionally, a carbon border adjustment mechanism, presented in July 2021, represents a mechanism for addressing greenhouse gas emissions embedded in goods produced in third countries and imported into the customs territory of the European Union, which ultimate goal is to reduce the carbon footprint in particular goods and ultimately reduce the emission intensity of the production at global level. As the proposal was presented in 2021, the negotiations were kicked-off swiftly and the envisaged deal on a mechanism is expected in the following year with a launch of the transitional period from 1 January 2023.

As far as GHG reduction policies is concern, no new or additional policies were introduced, Slovakia expects that following new EU reduction targets presented in the climate-energy package Fit for 55 related to the year 2030 (and subsequently to year 2050), these policies will impact on the third countries and will be assessed in this respect.

[...]

Furthermore, increasingly stringent fuel quality standards, proposed increased CO2 emission standards for cars and vans, and deployment of infrastructure for net-zero emission transport means in Europe might in fact turn out to be positive impact because it might trigger increase of investments in the fuel processing industries in third countries.

[...]

Apart to emission trading, no other Kyoto Protocol flexible instruments have been used to meet the GHG emission reduction targets by the Slovak Republic, therefore no impact on third countries in this respect is reported. However, outcomes of COP26 held in November 2021, particularly completing the Katowice "Rulebook" represent a deal with an international significance for emission trading. Especially, an agreement on Article 6 of the Paris Agreement, including accounting rules for bilateral transfers between parties, a mechanism to replace the CDM, or provisions to no carryover of units from 2030 onwards, entails the opportunity to launch a robust and transparent framework for global emission trading.

Activities considered within the preparation of the adaptation strategy to climate change or the National recovery and resilience plan with a substantive climate importance have a local character without any implications to third countries.

36. SLOVENIA

The following new information was included in NIR 2022:

[...]

Slovenia has strived to increase its climate finances in recent years. In 2016, Slovenia has for the first time also added resources from the Slovenian Climate change fund, where resources

are gathered from the sale of allowances from the EU greenhouse gas emissions trading scheme (EU-ETS) and from this source contributed to the Green Climate Fund in 2019 at its first replenishment an amount of 1 million EUR. In the previous report Slovenia announced it will strive to obtain the amount of EUR 3.5 million for climate assistance by 2020. That amount has already been achieved in 2019, while not in 2020 due to a different global situation of the pandemic year. In 2019, Slovenia allocated EUR 2,084,526 for climate financing in the part of multilateral development aid through the payment of contributions to the Green Climate Fund, the UNFCCC, the Montreal Protocol, the Global Environment Facility (GEF) and the International Development Association (IDA) and EUR 3,699,829 with bilateral contributions and projects (of which EUR 3,612,026 under program development assistance). The latter includes projects through the Center for International Development Cooperation (CMSR), projects of non-governmental organizations in partner countries, contribution to the Trust Fund for Economic Resilience at the European Investment Bank, membership fees and activities within DPPI SEE and preparation of proposals for financing climate measures and projects in the Western Balkans. However, in 2020, Slovenia allocated a total of 2,256,420 euros for climate financing, which is a 61% drop compared to the previous year, both due to the absence of payments to the Green Climate Fund, delayed payments to the World Environment Fund and lower implementation of projects through CMSR. In 2020, Slovenia allocated EUR 1,053,674 for climate financing in as part of multilateral development assistance through contributions to the UNFCCC, the Montreal Protocol, the International Development Association, the Food and Agriculture Organization and the payment of additional capital to the International Bank for Reconstruction and Development. Development (IBRD), and \in 1,202,746 through bilateral contributions and projects. The latter includes projects through the CMSR, NGO projects in partner countries, contributions to the European Investment Bank's Economic Resilience Trust Fund, membership fees and DPPI SEE activities, and preparation of proposals for financing climate action and projects in the Western Balkans. Among the projects implemented through the CMSR, co-financing of measures for sustainable forest use in the municipality of Adigeni in Georgia is worth mentioning, as well as water projects such as projects for the reconstruction and upgrade of sewage treatment plants in Zhytomyr and Nevesinje. Among the projects of non-governmental organizations in the partner countries, the project for more efficient use of resources for sustainable survival in Karongi County in Rwanda and the project for greater food security and more equality in Uganda are worth mentioning.

In the field of climate finance, Slovenia will also follow joint decisions and guidelines, both at EU and UNFCCC level agreements.

With regard to the guidelines for the preparation of the information required under article 7 of the Kyoto protocol (Decision 15/CMP.1, Section H), the following detailed information under point 24 can be provided:

(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

Slovenia has in recent years strived to progressively reduce environmentally harmful subsidies in line with the national programs and plans, however not fully incorporated or accounted for externalities. Being part of the internal market of the EU, Slovenian policies are determined to a considerable event by the EU (for details see Section 15 of the EU's National Inventory Report) and neighbouring countries, as due to its small territory having considerably different tax exemptions would not have a desirable climate effect.

(b) Removing subsidies associated with the use of environmentally unsound and unsafe technologies

Incentives that go against the goal of reducing greenhouse gas GHG emissions have grown steadily in recent years, and in 2018 and 2019 they were reduced. In 2019, they decreased by 28% compared to 2018. Target knowledge is not set, the direction of "gradual significant reduction of environmentally harmful incentives" is pursued. The refunds of excise duties on diesel fuel stand out, which have decreased compared to the previous year, but still represent 40% of the total amount of all incentives that go against the goal of reducing GHG. More

information can be found at http://kazalci.arso.gov.si/en/content/incentives-work-againstgoal-reducing-ghg-emissions-1.

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

Slovenia cannot report any activity to this end.

(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

Slovenia has stipulated in the Decree on the implementation of the international development cooperation and humanitarian aid of the Republic of Slovenia (accessible at http://www.pisrs.si/Pis.web/pregledPredpisa?id=URED7517) that one of the preconditions for financing programs and project in the bilateral development cooperation is that the project or program does not contribute to increased use of fossil fuels. To this end, Slovenia does not cooperate in development of fossil fuel technologies or their carbon capture and storage.

(e) 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

Due to the same reasons as above, no action was taken in this regard.

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

Slovenia did not take action in this area.

37. SPAIN

The following new information was included in NIR 2022:

[...]

Respecto a las medidas y acciones de adaptación a nivel nacional y subnacional, por sus características específicas, no se prevé que tengan efectos negativos en terceros países. Entre los efectos positivos destacan los relativos al mantenimiento de procesos ecológicos que operan en una escala supranacional y los asociados a la transferencia de conocimientos y replicabilidad de acciones.

```
[...]
```

MEDIDAS	POTENCIALES EFECTOS EN TERCEROS PAISES			
	Ambientales	Sociales	Económicos	
[]				
Proyectos de	(+) Implementación de	(+) Creación de	(+) Inversión	
reducción de	tecnologías ajas en	empleo a nivel	extranjera en el	
emisiones en	carbono en los países	local en los países	desarrollo de	
terceros países	en desarrollo.	en desarrollo.	infraestructuras	
promovidos a través	(-) Posible incentivo	-	en los países en	
de Instituciones	para no aplicar		desarrollo.	
Financieras	tecnologías menos			
Internacionales en	emisoras y generar			
las que España es	adicionalidad			
contribuyente	ambiental para los			
	proyectos.			

 Tabla 15.1.1. Potenciales efectos de medidas supranacionales

15.1.1.2 Medidas nacionales

Todas las medidas nacionales de mitigación quedan englobadas en el Plan Nacional Integrado de Energía y Clima 2021-2030 (PNIEC 2021-2030).

15.1.1.2.1 Medidas relacionadas con el aumento de las energías renovables, el uso de biocombustibles.

En España se aplican medidas que fomentan el uso de energías renovables cuyos impactos se recogen en la tabla 15.1.2. Está regulada una obligación de venta o consumo de biocarburantes con fines de transporte.

En el caso de los biocombustibles, se deben respetar los criterios de sostenibilidad y de reducción de emisiones de gases de efecto invernadero previstos en el artículo 29 de la Directiva (UE) 2018/2001 del Parlamento Europeo y del Consejo, relativa al fomento de energías procedentes de fuentes renovables.

A estos efectos es de aplicación el Real Decreto 1597/2011, de 4 de noviembre, por el que se regulan los criterios de sostenibilidad de los biocarburantes y biolíquidos, el Sistema Nacional de Verificación de la Sostenibilidad y el doble valor de algunos biocarburantes a efectos de su cómputo y el Real Decreto 1085/2015, de 4 de diciembre, de fomento de los biocarburantes.

El uso de biocombustibles para reducir las emisiones de gases de efecto invernadero podría tener impactos adicionales al generar posibles variaciones en los usos del suelo.

La citada directiva, en su artículo 26.2. establece que, para el cálculo de la cuota de energías renovables en el consumo final de energía en el sector transporte, la proporción de biocarburantes, biolíquidos o combustibles de biomasa con riesgo elevado de cambio indirecto del uso de la tierra, producidos a partir de cultivos alimentarios y forrajeros para los que se observe una expansión significativa de la superficie de producción en tierras con elevadas reservas de carbono (en adelante alto riesgo ILUC) no superará el nivel de consumo de dichos combustibles en ese Estado miembro en 2019, a menos que estén certificados como biocarburantes, biolíquidos o combustibles de biomasa con bajo riesgo de cambio indirecto del uso de la tierra. Asimismo, se establece que a partir del 2023 ese límite se tendrá que reducer gradualmente hasta alcanzar el 0 % en 2030.

[...]

Por Resolución del 29 de septiembre de 2021, de la Secretaría de Estado de Energía, se determinan las materias primas empleadas en la producción de los biocarburantes o combustibles de la biomasa con alto riesgo de cambio indirecto del uso de la tierra y su porcentaje máximo, a efectos del objetivo de venta o consumo de biocarburantes. Dispone que, a partir del año 2022 incluido, a los efectos del cumplimiento del objetivo de venta o consume de biocarburantes regulados, el porcentaje de biocarburantes o combustibles de biomasa considerados de alto riesgo ILUC no superará, para cada uno de los sujetos obligados, a los que hace referencia el artículo 3 del Real Decreto 1085/2015, de 4 de diciembre, el 3,1 % en contenido energético.

[...]

Se han tomado medidas de acuerdo con la Dimensión de Eficiencia Energética del Plan Nacional Integrado de Energía y Clima, PNIEC, que están en línea con la Directiva (UE) 2017/27 y sus sucesivas modificaciones.

Entre estas medidas están:

• Real Decreto 736/2020, de 4 de agosto, por el que se regula la contabilización deconsumos individuales en instalaciones térmicas de edificios, con el objetivo de reducer el consumo energético de los edificios en base a su control.

• Real Decreto 178/2021, de 23 de marzo, por el que se modifica el Real Decreto 1027/2007, de 20 de julio, por el que se aprueba el Reglamento de Instalaciones Térmicas en los Edificios. El objetivo es mejorar la eficiencia energética de las instalaciones térmicas de los edificios y contribuir a aumentar la presencia de renovables.

• Real Decreto 390/2021, de 1 de junio, por el que se aprueba el procedimiento básico para la certificación de la eficiencia energética de los edificios, con el objeto de mejorar la gestión, favorecer la rehabilitación energética de edificios y, con ello, acelerar la renovación de edificios en el país.

• Desarrollo del sistema de certificados de ahorro energético, CAE, para ampliar los mecanismos de promoción de la eficacia energética en los sectores de transporte, industria, residencial, servicios y agricultura.

- Programas de ayuda financiados por el Fondo Nacional de Eficiencia Energética, como:
 - la rehabilitación energética de edificios,
 - la adquisición de vehículos eléctricos y la infraestructura de recarga,

 la inversión en eficiencia energética en procesos industriales e implantación de sistemas de gestión energético

- la eficiencia energética en el sector agrícola

• Proyecto de RD que aprueba el Reglamento de ahorro y eficiencia energética y reducción de la contaminación lumínica en instalaciones de alumbrado exterior, en proceso de aprobación. El objetivo es modificar el Real Decreto 1890/2008, de 14 de noviembre, por el que se aprueba el Reglamento de eficiencia energética en instalaciones de alumbrado exterior y sus Instrucciones técnicas complementarias EA-01 a EA-07.

15.1.1.2.3 Medidas en el sector agrícola, LULUCF y residuos

Las medidas en el sector agrario están enfocadas fundamentalmente a la reducción de emisiones de CH4 y N2O. [...] Así mismo, muchas de las medidas que se implementan en el sector agrario generan reducciones de emisiones en otros sectores, como el sector energía, LULUCF o el sector residuos, y también están interrelacionadas con otras medidas transversales como la Huella de Carbono y los Proyectos de reducción de emisiones del Fondo de Carbono para una Economía Sostenible (FCPJ) (FES-CO2).

[...]

Los Proyectos de reducción de emisiones del Fondo de Carbono para una Economía Sostenible (FCPJ) (FES-CO2) fomentan la participación del sector privado a través de la promoción de proyectos de reducción de emisiones en el territorio nacional. Estos proyectos se incluyen en los sectores abordados en los capítulos anteriores, por lo que los impactos ya se detallan en las correspondientes tablas.

En el caso del PNIEC 2021-2030, al igual que los Proyectos de reducción de emisiones del FES-CO2, los efectos de estas medidas se corresponden con las consideradas en los capítulos anteriores.

En la siguiente tabla se resumen los potenciales efectos de medidas nacionales.

MEDIDAS	POTENCIALES EFECTOS EN TERCEROS PAÍSES			
	Ambientales	Sociales	Económicos	
[]				
Medidas que aumentan la eficiencia energética	 (+) Implican menor consumo de fuentes de energía fósil y, en su caso, renovable. (+) Menor consumo de materiales necesarios para generar la energía. (+) Menor generación de residuos generados por los materiales necesarios para la generación de energía 	 (+) Creación de empleo cualificado. (+) Creación de empleo local. 	 (+) Desarrollo de empresas tecnológicas. (+) Desarrollo de empresas locales. (+) Reducción de economía sumergida en el caso de la rehabilitación energética de edificios. 	

Tabla 15.1.2. Potenciales efectos de medidas nacionales

	(-) Aumento del	(+) Desarrollo de
	consumo de materiales,	nuevas tecnologías y
	generación de residuos	productos
	y consumo de energía	innovadores.
	por la digitalización	(+) Favorece la
	necesaria para mejorar	digitalización de los
	la eficiencia.	distintos sectores
		económicos
		implicados en el
		consumo de energía
		primaria y final.
[]		

38. SWEDEN

The following new information was included in NIR 2022:

[...]

The Government decided in 2021 to, by 1 January 2022, totally rescind the reduction of energy tax on heating fuels and fuel for operation of stationary engines in the manufacturing industry, both within the EU ETS and outside EU ETS, as well as for professional activities in agriculture, forestry and aquaculture. Earlier the tax level was only 30% of the general energy tax.

[...]

Since 2021 the Swedish Energy Agency has been tasked by the Government to be a national center for CCS and promote the appropriate application of CCS in Sweden. The Swedish Energy Agency will also produce a proposal for an agreement that enables the export of carbon dioxide from Swedish operations for long-term geological storage and that ensures that transport and storage take place in a safe and responsible manner.

39. SWITZERLAND

The following new information was included in NIR 2022:

[...]

In the framework of the Comprehensive Economic Partnership Agreement (CEPA) between member states of the European Free Trade Association and Indonesia, Switzerland is piloting a new regulatory mechanism to link the granting of certain trade preferences with sustainable production and processing methods.

[...]

Switzerland does not subsidise the use of environmentally unsound and unsafe technologies with a direct negative climate impact.

[...]

Switzerland is an active participant in the negotiations for a plurilateral initiative with five other members of the World Trade Organisation (Costa Rica, Fiji, Iceland, New Zealand, Norway) on the Agreement on Climate Change, Trade and Sustainability (ACCTS) that seeks to liberalise trade in environmental goods and services, eliminate harmful fossil fuel subsidies, and promote voluntary eco-labelling programmes.

Furthermore, Switzerland advocates the use of the most efficient technologies available for gas mid-stream and down-stream projects in developing countries. The Swiss policy on fossil fuel investments by multilateral development banks (MDBs) rejects investments in coal financing and up-stream fossil fuel activities but allows support to gas power plants as well as gas mid-stream and down-stream projects in limited circumstances when four cumulative criteria (need, efficiency, additionality and transition) are met. This ensures that the project is in line with the goals of the Paris Agreement.

[...] Switzerland also supports efforts aiming at the adoption of cleaner fuel standards (i.e. with lower sulphur content) as well as higher vehicle emission standards, which can reduce air pollution.

Switzerland also supports through different projects the energy efficiency and decarbonisation of end-use sectors such as construction and transportation. These projects support the use of low greenhouse gas construction materials and processes, the efficiency of heating of building and facilities, meeting the growing need for cooling while avoiding soaring energy demand and greenhouse gas emissions, and improve efficiency of energy use for transport.

[...]

Conversely, measures taken to help countries highly dependent on fossil fuel consumption to reduce this consumption through energy efficiency measures and the transition to renewable energies allows them to free up resources that were dedicated to this consumption, to accordingly invest in the diversifying of their economies – notably their energy sector, and to limit their exposure to the risk of a concomitant increase in fossil fuel prices.

40. TÜRKIYE

No information was included in NIR 2022.

41. UKRAINE

No new information was included in NIR 2022.

42. UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND

The following new information was included in NIR 2022:

[...]

In 2021, the UK government published the UK's first Net Zero Strategy, which includes our decarbonisation pathways to net zero by 2050, including illustrative scenarios, policies and proposals to reduce emissions for each sector, and cross-cutting action to support the transition. The Net Zero Strategy was submitted to the UNFCCC to be the UK's second long-term low greenhouse gas emission development strategy under the Paris Agreement, following the publication of the UK's Clean Growth Strategy in 2018.

[...]

In March 2021, the UK's new fossil fuels policy came into effect, committing to ending UK government support for any new direct financial or promotional support for the fossil fuel energy sector overseas, with very limited exemptions97. The policy applies to any new ODA investment, including support provided by UK Export Finance. It also determines the UK's voting position at the boards of Multilateral Development Banks and can be used to influence the investment policies of other development financial institutions (such as British International Investment and the Private Infrastructure Development Group) that receive UK Government funding.

As well as seeking to prevent further climate change, we continue to help those already most affected by it. The UK has also doubled its international climate finance to £11.6 billion over 2021/22 to 2025/26, with an extra £1 billion in 2025 if the economy grows as forecast, to help countries cut emissions, improve resilience, and reduce deforestation. We also continue to play a key role through the proven institutional machinery of the UN Montreal Protocol which is phasing down hydrofluorocarbons (HFCs).

Our commitment to support adaptation and resilience for the most vulnerable communities was outlined in the COP26 Presidency Paper, the Glasgow Imperative98. This called for transformative change to ensure those at the front line of climate change are supported as they adapt and build resilience to its impacts.

[...]

• BEIS has also commissioned the £4.98 million Climate Services for a Net Zero resilient World (CS-NOW) research programme, to translate existing and generate new actionable data and resources for decision-makers across many policy areas, including energy infrastructure resilience, future UK domestic building heating and cooling requirements, decarbonisation 'overshoot' pathways and implications for carbon budgets in the 21st century, a regional and country-level impacts database, maritime emissions analysis, assessments of mitigation-adaptation trade-offs and co-benefits of mitigation. This four-year programme started in summer 2021.

[...]

• The Foreign, Commonwealth & Development Office (FCDO) has funded ground-breaking research on understanding future climate trajectories, the potential impacts on vulnerable populations and interventions to reduce impact and build resilience through programmes, such as the Climate and Resilience Framework programme (CLARE).

• The FCDO has funded a portfolio of research and evidence innovation work in the last period with a focus on the delivery of Sustainable Development Goal (SDG) 7 to ensure access to affordable, reliable, sustainable, and modern energy for all in developing countries. The Transforming Energy Access (TEA) programme, scaled-up at COP26 in Glasgow, is the FCDO's flagship research and innovation platform supporting early-stage testing and scale-up of innovative technologies and business models that accelerate access to affordable, clean energy, enabling sustainable and inclusive growth. TEA is one of a portfolio of platforms and programmes delivering on the UK's £1 billion Ayrton Fund commitment on clean energy research and innovation, announced at the UN Climate Action Summit in New York in 2019.

• [...] BEIS are collaborating with the Royal Geographical society to promote My2050 and the MacKay Carbon Calculator as an aid to geography teaching in secondary schools relating to greenhouse gas emissions.

[...] Defra continues to support expanding knowledge on biodiversity, nature and climate. This includes up to £40m to support policy-relevant Research and Development on biodiversity, climate and poverty through a Global Centre on Biodiversity for Climate.

[...]

Recognising the growing importance and urgency of tackling climate change and its impact on growth and poverty reduction, the UK provided at least £5.8 billion of International Climate Finance (ICF) from 2015/16 to 2020/21 and in 2019 announced a further doubling to £11.6 billion from 2021/22 to 2025/26, to help countries cut emissions, build green infrastructure, improve resilience and reduce deforestation. In November 2021, the Prime Minister further announced an extra £1 billion in 2025 if the economy grows as forecast.

[...] To achieve this, the ICF delivers transformational change through well-targeted finance. The ICF helps to pay the incremental cost of making infrastructure investments climate smart and avoid lock-in of high carbon technologies. By promoting and supporting the implementation of nature-based solutions, ICF supports sustainable agriculture which is more resilient in the face of climate events such as drought, promotes sustainable land-use and marine management, and incentivises countries to reduce deforestation. The ICF aims to target finance to alleviate the interdependent crises of biodiversity loss climate change, whilst promoting sustainable livelihoods. This demonstrates that low-carbon, climate resilient development paths are viable and compatible with economic growth and poverty alleviation.

Cumulative data that we collect show that, between 2011/12 and 2020/21, UK ICF programmes have:

- Supported 88 million people to cope with the effects of climate change;
- Provided 41 million people with improved access to clean energy;
- Reduced or avoided 51 million tonnes of greenhouse gas (GHG) emissions;
- Installed 2,400 megawatts of clean energy capacity; and
- Mobilised £4.8 billion public and £3.2 billion private finance for climate change purposes in developing countries.

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

At COP26, the UK committed nearly £500 million to support developing countries to adapt to climate impacts. This includes £274 million for the Climate Action for a Resilient Asia (CARA) programme to help Indo-Pacific countries mobilise climate finance, strengthen water security, conserve ecosystems, and help vulnerable communities lead local adaptation efforts. It includes £15 million for the global Adaptation Fund which backs developing countries to lead action in line with their priorities. There is also £40 million for the 'Small Island Developing State Capacity and Resilience' (SIDAR) programme, which will support capacity-building for small island developing states (SIDS) to access funding and technical solutions at scale, and £12m to enable developing countries to make rapid progress on reducing HFCs and adopting energy efficient cooling solutions. Finally, there is £143.5m to support African countries to adapt and build resilience to climate change.

[...]

The GCF provides at least 50% and aims to allocate 69% of its adaptation support to particularly vulnerable countries including Least Developed Countries (LDCs), SIDS and African States. In the past year, the GCF has made progress in terms of programming, tightening its policy framework, and building the Secretariat's capacity. To date, the GCF has committed \$10 billion of funding to 190 projects, representing a balanced geographical and thematic split, and has a dedicated private sector facility. Projects approved by the GCF are expected to increase the resilience of 612 million beneficiaries.

The Nationally Appropriate Mitigation Action (NAMA) Facility is a multi-donor programme supported by the UK, working in partnership with the German Federal Ministry for the Environment (BMUB), Denmark, the European Commission and the Children's Investment Fund Foundation. [...] For COP26, the Facility launched a special call to support countries with the implementation of their enhanced NDCs.

Since 2012, 35 climate mitigation projects across 26 countries have been supported, with each project chosen for its ability to catalyse change in the sector. To support this demand the UK has committed over \pounds 275 million into the Facility.

[...]

The CIFs have also developed new areas of programming and at COP26 successfully launched two new programmes - Accelerating Coal Transition (ACT) and Renewable Energy Integration (REI) raising just under \$3 billion in pledges. Three further programmes were also agreed in principle: the Nature, People and Climate (NPC) programme, the Climate Smart Urbanisation (CSU) programme, and the Industrial Transition (IT) programme. But these programmes are yet to be fully funded. The CIFs also announced the CIFs Capital Markets Mechanism (CCMM) – a new funding modality that will utilise reflows from the CTF portfolio to raise up to \$7 billion in funding from capital markets for new programming.

[...]

GEF Sustainable Forestry Management interventions were estimated to have avoided 4,875 km2 of deforestation, sequestering in 1.33 tonnes of carbon per hectare per year and increasing household assets by \$163-353.

[...]

• The UK also supports the **BioCarbon Fund Initiative for Sustainable Forest Landscapes** with £115 million. This fund operates in five countries, Indonesia, Ethiopia, Mexico, Colombia and Zambia, and combines upfront technical assistance with results-based finance, rewarding countries which implement landscape-level approaches that reduce emissions from agriculture, forests and other land-use sectors. It also aims to catalyse investments from the private sector, working closely together to provide livelihood opportunities for communities in each jurisdiction.

• **REDD for Early Movers (REM)**. The UK has committed £73 million to the REDD Early Movers programme which is an accelerator for ambitious efforts to reduce emissions from deforestation. REM rewards countries through performance-based finance for historical

achievements in driving down deforestation, with finance re-invested in activities that support institutional strengthening and sustainable local socio-economic development. UK support focuses on the Colombian and Brazilian Amazon regions.

[...]

The Lowering Emissions by Accelerating Forest Finance (LEAF) Coalition is an ambitious public-private initiative focused on the protection of tropical forests. An initial \$1 billion of public-private funding pledged will buy high-quality carbon credits supplied by avoided deforestation as a first step to building this market at scale. Funding will be delivered to tropical and subtropical countries that successfully reduce emissions from deforestation and degradation. This will be done through payments for verified emission reductions payments which are made only after reductions in deforestation have been independently confirmed. Private finance will be provided only by companies already committed to deep emissions cuts in their own supply chains, in line with science-based targets. LEAF provides a model to unlock significantly greater financial flows to forest protection, particularly from the private sector, than we have seen before. It could be game-changing in helping to reward and incentivise forest nations to protect their forests, which are so critical for global climate, biodiversity and sustainable development goals. It also helps to raise global climate ambition. LEAF demonstrates that the demand and supply of results-based finance can follow a high integrity path, in line with the goals of the Paris Agreement. Buyers purchase in addition to, and not a substitute for, deep cuts in global carbon emissions, and forest country participants follow a rigorous, high-integrity approach that guarantees robust results in terms of carbon where payments come only upon verified results - and in terms of social and environmental safeguards. The UK is providing £200 million to the LEAF coalition - £175 million for results-based payments and £25 million for technical assistance.

UK Blue Carbon Fund – Defra have a £12.75 million investment in the UK Blue Carbon Fund. The Fund is a single donor trust fund managed by the Inter-American Development Bank. It aims to encourage the sustainable management of mangrove forests in target countries in Latin America and the Caribbean. It seeks to mobilise public and private sector investments to support mangrove protection and fund projects in areas such as sustainable aquaculture, coastal zone management and eco-tourism to tackle the main drivers of mangrove degradation. The project is expected to avoid 2,912,000 tonnes of GHG emissions, protect or restore 5,570 hectares of mangrove forest and protect or restore £48 million of ecosystem services. The Fund also aims to concurrently deliver significant livelihoods benefits.

Cities4Forests – The UK is a core donor of Cities4Forests, which is a multi-donor initiative delivered by the World Resources Institute, and have invested a total £4.96 million. The project works with over 80 city leaders and mayors to better conserve, manage and restore their inner forests (city trees, urban parks, natural areas and other green infrastructure); nearby forests (such as watersheds); and faraway forests, especially tropical forests. It does this by inspiring political action and engagement, providing technical assistance, building capacity, and facilitating economic analysis, finance, and investment. The programme also seeks to deliver a city-led call to action on the value of trees and forests is expected to benefit 62,133 hectares of land from avoided deforestation, restoration and improved management; avoid or sequester 593,104 tCO2; and benefit 322,986 people through improved source water protection, improved air quality, reduced extreme heat, and increased employment.

[...]

The fund (£200m of ICF) provides late-stage minority equity investments on a commercial basis to get projects off the ground that would not otherwise reach financial close. UKCI has now committed to invest the total £200m member loan into 7 projects:

•[...]

• A Commercial and Industrial (C&I) rooftop solar project across India

•[...]

• Supporting the creation of the largest BEE renewable energy platform in South Africa. The platform consists of five wind projects with a combined 735MW

• Sub Saharan Africa's first fully renewable yieldco in South Africa. This innovative financial structure will allow developers to recycle their capital into new renewable energy projects.

• A corner stone investment into a Kenyan Green Housing Fund. The fund invests in energy efficient, EDGE certified, and affordable housing in Nairobi, in partnership with International Housing Solutions (IHS).

The Renewable Energy Performance Platform (REPP) - REPP seeks to mobilise private sector development activity and investment in small and medium scale renewable energy projects (up to 25MW, or up to 50MW for wind power) in sub-Saharan Africa. Wholly funded by the UK, REPP aims to increase the number of 'bankable' smaller renewable energy projects by assisting project proponents throughout the project development lifecycle by providing technical assistance, access to risk mitigation instruments, and financing which enables projects to reach financial close. In doing so, REPP aims to develop viable markets for private investment in projects which can contribute to climate change and human development efforts.

The Climate Public Private Partnership (CP3) aims to increase low carbon investment in renewable energy, energy efficiency, water and forestry in developing countries by demonstrating the commercial viability of these sectors by showing that Low Carbon and Climate Resilient (LCCR) investments in developing countries can deliver competitive financial returns as well as climate and development impact. To date, CP3 has invested in two private equity funds - £50m into the International Finance Corporation (IFC) managed Catalyst Fund, a Private Equity Fund-of-Funds106, for investments in Africa, Asia and Latin America, and a further £60 million into the Asian Development Bank (ADB)-managed Asia Climate Partners Fund. These funds were expected to deliver fully commercial returns to investors by creating a diversified portfolio of investments in climate related sectors. The programme has so far mobilised private climate finance of over £280 million (attributable to the UK) for 116 projects across Asia, Africa and South and Central America. The funds have so far invested in 116 investments and renewable energy developers. CP3 is expected to avoid 2.6 MT of CO2 equivalent over its lifetime (to 2026).

[...]

The Market Accelerator for Green Construction (**MAGC**) is a £103 million programme launched at the end of 2018 in partnership with the IFC. The Programme is structured to systematically accelerate green construction across 24 countries, aiming to improve the enabling environment for green buildings, to raise awareness, build capacity and expand green lending by providing advisory and technical assistance to key market players. Buildings account for around a fifth of global greenhouse gas emissions and improving building design and construction will play an important role in avoiding climate change and meeting our Paris Agreement goals.

[...]

UK PACT (Partnering for Accelerated Climate Transitions) was established by BEIS in 2018 and works with countries with high emissions or potential for high emissions reduction to provide targeted, demand-led, capacity building support to accelerate the global green transition, and mitigate and adapt to the impacts of climate change. UK PACT delivers in multiple sectors, including green finance, clean energy, sustainable transport, sustainable livelihoods, and climate policy. The programme is currently supporting delivery in 16 countries and is funded with at least £200m of new funding for the period April 2022 to March 2026.

The Eco.business Fund (EBF) is an innovative private-public impact investment vehicle with a mission to promote business and consumption practices that contribute to biodiversity conservation, promote the sustainable use of natural resources, and increase the mitigation and adaptation potential of communities to climate change impacts. The Fund focusses its work in Latin America, and has recently expanded to Sub-Saharan Africa, providing finance to regional banks dedicated to working with businesses that are keen to incorporate environmental sustainability and certification into their practices. The Fund predominantly

works in the agriculture and forestry sectors, but is increasingly expanding into two focus areas – aquaculture and sustainable tourism. The EBF combines finance with technical assistance, demonstrating that this model is commercially and environmentally viable and that embedding environmentally sustainable lending practices within partner financial institutions can drive transformational change. Through the work of the Fund and the Development Facility, at the end of 2020, 1 million tonnes of CO2 were stored through agroforestry activities, 4.5 million m3 of water were saved, 430,000 hectares of farmland were under sustainable management, 37,000 litres of herbicide use was avoided and >450, 000 livelihoods were supported through environmentally sustainable agricultural businesses. The Fund has already sequestered 1 million tonnes of CO2 emissions, supported the livelihoods of 452,000 and continues to catalyse more public and private finance commitments.

The Land Degradation Neutrality (LDN) Fund's mission is to be a source of transformational capital bringing together public and private investors to fund projects complying with high environmental and social standards, demonstrating additionality, and promising sustainable financial returns. The fund does this through mobilising investment into large scale profit-generating sustainable land management projects or via niche investment funds in developing countries across the globe, combined with technical assistance. By leveraging long-term non-grant financing, the LDN Fund will invest in financially viable private projects on land rehabilitation and sustainable land management worldwide, including sustainable agriculture, sustainable livestock management, agroforestry and sustainable forestry. Eligible projects generate environmental and socio-economic benefits as well as financial returns. As of the end of 2020 40,753 hectares of farmland were under sustainable management and 35,851 jobs were created/supported. At the end of 2021, the LDN Fund portfolio was composed of seven investments in nine countries, focused on sustainable forestry and agroforestry.

The Global Agriculture and Food Security Program (GAFSP) is a leading global financing initiative dedicated to fighting hunger, malnutrition, and poverty in 47 of the world's poorest countries. The UK's funding since 2012 has totalled £176m (most recent commitment in 2018), making it the 5th largest donor. GAFSP's primary goal is to make much needed public and private sector finance available faster and more efficient, where agricultural projects and investments are based on strong demand, clear evidence of need, best practice, and expected impact in the poorest and most food and nutrition insecure countries. GAFSP supports smallholder farmers, countries, and agribusinesses adapt to climate change. Almost 100% of GAFSP-eligible countries include climate-resilient agriculture as a priority in their intended NDCs. As of December 2020, 100% of public sector projects and close to 62% of GAFSP funding (US\$563 million) delivered adaptation and resilience benefits. GAFSP published in 2021 Green-House Gas Accounting Analysis of the Public Sector Window portfolio. The study has established that the current portfolio of 44 ongoing projects is a net reducer of GHG emissions, with an overall carbon-balance of -7.58 million tCO2e.

Infrastructure for Climate Resilient Growth (ICRG) in India, is a FCDO funded, £25 million technical assistance programme, delivered in partnership with Government of India. ICRG interventions, at national and sub-national level, seek to facilitate more effective investment in natural resource management (NRM) infrastructure built under Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS) to support resilient livelihoods. By integrating climate information services and risk management into MGNREGS, ICRG helps improve abilities of poor and vulnerable people to cope with climate change impacts. MGNREGA is one of the world's largest social protection programme, supporting around 70 million households to cope with poverty and marginalisation every year. ICRG has demonstrated how well-designed programs within the framework of 'Social Protection' offer the pathways to local economic growth, inclusion and creation of decent work opportunities and contribute towards long term climate resilience for the most vulnerable communities. ICRG is being implemented in seven states of India, Odisha, Bihar, Chhattisgarh, Jharkhand, Uttar Pradesh, Madhya Pradesh and Rajasthan.

Adaptation for Smallholder Agricultural Programme (ASAP) is an International Fund for Agricultural Development (IFAD)-implemented climate fund to support smallholder farmers adapt to climate change. The UK was instrumental in supporting its 2012 launch, providing 64% of its funding (£150m of ICF). ASAP's grant funds have supported adaptation-related activities alongside IFAD loans in 41 developing countries, mainly in Africa and Asia. Activities to date have supported six million smallholder farmers build their resilience to climate change, with ancillary results including supporting the uptake of climate-resilient farming practices on 1.1m hectares of farmland and making \$87m worth of rural infrastructure climate resilient. Most projects also include policy components and contribute to ensuring governmental approaches towards agricultural sectors appropriately factor in climate change.

Transboundary Water Management in Southern Africa is a £35 million technical assistance programme primarily focused on continental countries in the Southern Africa Development Community (Angola, Botswana, Democratic Republic of Congo, Eswatini, Lesotho, Malawi, Mozambique, Namibia, South Africa, United Republic of Tanzania, Zambia, and Zimbabwe). The overall aim of the programme is to support countries in southern Africa to manage their shared water resources (rivers, lakes and groundwater) for economic development and contribute to climate resilience and poverty reduction. The Climate Resilient Infrastructure Development Facility (CRIDF) is now the sole component of the programme and was established to scope, design, and implement climate resilient water infrastructure projects. The facility supports regional cooperation, mobilises finance for projects, and aims to demonstrate how infrastructure can be built and operated differently – for the benefit of the poor and those vulnerable to climate change. To date there are more than 515,000 beneficiaries of development projects supported by the programme to cope with the effects of climate change.

[...] The UK continued to deliver on its international ambition during COP26, and will progress this work during its Presidency Year 2022. Examples of recent work include:

• Becoming the first G20 country to make disclosures aligned with the Task Force on Climate-related Financial Disclosures (TCFD) recommendations fully mandatory across the economy by 2025. As part of the roadmap to delivery, the government has laid regulations in parliament for the largest companies and limited liability partnerships to disclose their climate risks and opportunities, including a requirement for companies to undertake scenario analysis - a powerful tool to support companies in their assessment of climate-related risks and opportunities, and will support better resilience against climate risks. The regulations will come into force from 6 April 2022.

• The UK is introducing a Green Taxonomy to create a shared understanding of which economic activities are environmentally sustainable and tackle 'greenwashing'.

• A roadmap to Sustainable Investment was published on 18 October 2021. It sets out the Chancellor's vision to make the UK the best place in the world for green and sustainable investment. It focuses on the first step to deliver this by ensuring that every financial decision maker has the information needed to take climate and the environment into account.

• The government has updated the remit of the Bank of England and the Financial Conduct Authority to reflect the importance of environmental sustainability and the transition towards net zero.

• Committing to align all UK ODA with the Paris Agreement.

• UK Export Finance (UKEF) committing to make its first climate-related disclosure in its 2020/2021 Annual Report.

[...]

The FCDO Transforming Energy Access (TEA) programme includes support to Skills and Expertise Development. For example, **the Off-Grid Talent Initiative (OGTI)** provides training to existing mid-level managers in clean energy access companies and one-year, partfunded placements in such companies to young African graduates. Additionally, TEA has supported the establishment of clean energy access Masters courses at six African universities which have launched in 2021/21.

The Climate Adaptation and Resilience (CLARE) programme (see next section) has a focus on action-orientated research to deliver innovative solutions to enable vulnerable people to adapt to the impacts of climate change. The programme will include a significant knowledge transfer/brokering function as this is recognised as critical to ensuring research and evidence translates into action.

[...]

Mission Innovation 2.0 (MI 2.0) was announced at the Sixth Mission Innovation Ministerial in May 2021. This ambitious second phase of MI will drive a decade of innovation that can deliver affordable and accessible clean energy solutions for all and put the whole world on a faster track to net zero. The UK Government recognises the importance of international collaboration, and therefore is committed to active membership of Mission Innovation as the primary forum to strengthen intergovernmental cooperation on clean energy innovation to support our long-term climate and energy goals.

The UK co-leads two ambitious Missions (Green Powered Future Mission and the Clean Hydrogen Mission) focused on reaching tipping points in the cost and scale of clean energy solutions essential to achieving net zero, and is actively involved in other Missions.

[...]

• The Transforming Energy Access (TEA) programme is the flagship FCDO innovation programme supporting early stage testing and scale-up of innovative technologies and business models that accelerate access to affordable, clean energy for poor households, enterprises and social institutions in developing countries - enabling sustainable and inclusive growth. TEA has been operating since 2016 and was scaled-up by £126.4m at COP26, supporting innovations enabling a just and inclusive clean energy transition. Between 2016 and 2020 TEA has already:

• Improved access to clean energy for 9.5 million people (including 4.8 million women) in developing countries, through the incubation and scaling of new clean energy businesses in sectors like distributed solar, green mini-grids, and energy-efficient appliances.

• Stimulated clean energy innovation funding research and development (R&D) of 147 new technologies and 202 innovative business models in areas such as circular economy energy storage, sustainable cooling, electric pressure cookers, remote network management, energy access crowdfunding and many more.

• Created over 74,000 sustainable long-term jobs in clean energy and supported over 700 African graduates and trainees with placements in energy access businesses.

• Leveraged £599 million of additional investment in clean energy technology research, innovation and scale-up from both private and public sources

· Avoided around a million tonnes of carbon dioxide emissions

• The Low-Energy Inclusive Appliances (LEIA) programme is a research and innovation programme that seeks to double the efficiency and halve the cost of electrical appliances suited for off/weak grid households, small businesses, and industrial consumers, so that these appliances are affordable and accessible to some of the world's poorest people. The programme has pivoted where needed and achieved and/or exceeded all its output targets in the past 12 months. Notably, outputs are translating into outcomes and impacts – over nine million people have improved energy access through LEIA appliances. Since its inception the programme has tracked efficiency improvements of 55% for fans and 37% for TVs. Along with efficiency improvements, the average costs of TVs and fans have also tracked downwards, 41% and 22% from the respective baseline. To date, £214 million of further funding has been leveraged from the Efficiency for Access Coalition which contributes to LEIA's goal of doubling efficiency and halving costs of efficient appliances. Every £1 in FCDO LEIA spend to date has a corresponding £14 in private and public funding for efficient appliances.

• The Modern Energy Cooking Services (MECS) programme is a research and innovation programme that seeks to unlock the transition from biomass to genuinely clean cooking, delivering major health and environmental benefits for the 2.8 billion people who still live without access to clean cooking options. MECS has contributed key research that encourages

the provision of cooking loads into both grid and off-grid planning. It has shown that energy efficient electric pressure cookers (EPCs) have a strong role to play in making cooking with electricity cheap and effective for the poor. Since then, additional tech including induction hotplates and the validation of battery tech, together with developing a convincing evidence base on the cost of electricity, has influenced sectoral discussions in the last year. MECs continues to generate evidence on the viability of leveraging gains in access to electricity (SDG 7.1.1) to include clean cooking services (SDG 7.1.2). This approach enables agencies to consider an alternative strategy to the business-as-usual approach to biomass cooking.

• The Climate Compatible Growth Programme (CCG). [...] CCG has already played an important role informing and enabling climate action through the Energy Transition Council established for COP26 and continuing into the coming period.

• The Climate Adaptation and Resilience (CLARE) is a 5 year (2022-2027) £88 million research programme developed in partnership with the International Development Research Centre (IDRC) in Canada. CLARE supports adaptation through action-oriented research and capacity strengthening to build resilience, address knowledge gaps, and boost the response to the climate crisis in the Global South. The programme addresses the urgent need to scale up research and innovation efforts to provide better information on risks, better decision-making tools and better adaptation solutions to enable transformational change. CLARE will constitute a substantive commitment to the international Adaptation Research Alliance (ARA), an UK led initiative launched at COP26. ARA is an international coalition of over 110 organisations, bringing together governments, businesses, research institutes and local communities to increase the resilience of vulnerable countries at the forefront of climate change.

[...]

The UK has provided £45 million (2020-21 and 2021-22) to the international agriculture research organisation CGIAR, to support the development of climate resilient food systems in developing countries. 30% of GHG emissions originate in the food system and agriculture is the biggest global driver of biodiversity loss and environmental degradation. CGIAR supports actions to transform the food system towards net zero, delivering sustainable intensification of agriculture, reducing emissions intensity and mitigating emissions by slowing the pace of land conversation to food production, by developing agronomic practices able to reduce GHG emissions from farming and the environmental impact of agriculture, and by supporting actions to reduce food loss and waste and moderate demand for GHG intensive foods. The CGIAR supports this through new technology, institutional and policy innovation and new knowledge, metrics, tools and evidence support more effective national policies and investments. Between 2016 and 2021 CGIAR reached over 200m people with new technology and knowledge. A new UK Government initiative, the Gilbert Initiative, to transform climate-resilient food systems through research and innovation was launched at COP26. The Gilbert Initiative will coordinate UK investments in evidence generation, technology development and delivery to support a food system that, by 2030, feeds nine billion people with nutritious, safe foods, uses environmental resources sustainably, enhances resilience and adaptation to climate change, and generates inclusive growth and jobs.

[...]

• The Clean Technology Fund (CTF) provides concessional finance and technical assistance delivering significant development benefits, such as increased energy security, reduced local air pollution, and job opportunities. It has supported national governments to identify and implement ambitious low carbon investment plans and helped demonstrate technologies and create markets. In 2019, the CTF added a Global Energy Storage (GESP) window to which the UK contributed £200 million and in 2021 an Accelerating Coal Transition (ACT) window was established to which the UK contributed £200 million.

[...]

• The Africa Clean Energy (ACE) programme aims to increase access to modern, clean, affordable electricity for low-income households in Africa. It promotes a market-based approach for private sector delivery of off-grid energy services including solar household systems and green mini-grids. ACE has catalytic impact by improving the enabling

environment for off-grid energy, by supporting firms to scale-up their services, and by enabling greater integration of off-grid energy in sector planning and investment. This changes business as usual, with impacts far greater than the programme itself. It is implemented by Tetra Tech, the Africa Enterprise Challenge Fund, the IFC, the World Bank, and the African Development Bank.

[...]

At COP26 the UK policy on adaptation and resilience was shaped by the COP Presidency Glasgow Imperative118 paper. This paper recognised that while no one is immune from climate change, it is the poorest countries and the most vulnerable people, who are at the frontline of climate impacts. The Glasgow Imperative called for transformative change to create a climate resilient future for all, with no one left behind. The Glasgow Imperative also recognised five key pillars to drive change on adaptation and resilience. These are:

- · Building resilience across all of society
- Effective Risk Management
- Transforming Finance
- Catalysing Locally Led Action
- Harnessing the power of nature

The Least Developed Countries Initiative for Effective Adaptation and Resilience (LIFE AR) is an example of work, already supported by the UK, that supports these aims. It helps the poorest countries access and manage climate finance in order to address a locally led demanddriven process, whereby resilience and adaptation needs are articulated locally and supported strategically through national and local budget prioritisation.

[...]

• UK ICF also funds the CLARE programme which has substantial capacity strengthening elements focused on research and its use. CLARE will absorb previously separate capacity strengthening programmes such as CIRCLE and WISER-CR4D covered in previous reports. Development of the CLARE capacity work is currently at very initial stages.

• Launched at the UN Climate Action Summit (UNCAS) in September 2019, the Riskinformed Early Action Partnership (REAP) brings together an unprecedented range of stakeholders across the climate, development and humanitarian communities with the aim of making 1 billion people safer from disaster by 2025. REAP creates a space in which partners and aligned organizations from across its various constituencies will use the ambitious targets to mobilise commitments and inspire action. The UK was a convening partner and supports the partnership goals through initiatives such as FCDO's WISER, ARRCC, CLARE and the CREWS programmes; and policy such as the UK COP26 Presidency Glasgow Imperative paper119. There are three drivers of change for the partnership120; firstly, global commitment on policy and practice is required to scale up risk-informed early action. Second, under the leadership of partner countries, REAP will work to enable country and local level ownership of early action programmes. It will promote interventions by partners that are designed to work within and in support of national systems and local capacities, with a fundamental focus on the needs of the most vulnerable. Third, REAP will connect and scaleup existing efforts on early warning-early action by diverse actors, linking resources with gaps in capacity, or convening key stakeholders on a thematic or geographic basis.

Absorb

• The UK is a founder member, investor and donor to African Risk Capacity (ARC), Africa's regional risk pool, which helps countries to understand their disaster risks and buy insurance against drought and tropical cyclones. African countries have transferred nearly \$1 billion in drought and tropical cyclone risk to the risk pool since its establishment in 2014, with payouts of over \$60m in that time for early action to protect lives and livelihoods after disasters.

[...] The fourth CFD auction round opened for applications in December 2021 with results expected in Spring-Summer 2022. CFD auctions have run approximately every two years, however, government announced a review of CFD auction frequency as part of a wider

commitment in the Net Zero strategy to accelerate deployment of low-cost renewable generation. The outcome of the review will be announced in 2022.

[...]

The T-1 auction for the 2021/22 delivery year concluded on 2 March 2021 and secured 2.3 GW of capacity at a clearing price of £45/kW. The T-4 auction for the 2024/25 delivery year concluded on 10 March 2021 and secured 40.8 GW of capacity at a clearing price of £18/kW. The UK is continuing to reduce its reliance on coal and is bringing innovative and low-carbon technologies into its energy mix, as part of a cleaner, more flexible energy system. On 30 June 2021, the government announced that the phase out of unabated coal generation will be brought forward from 1 October 2025 to 1 October 2024. Ending unabated coal generation in 2024 will mean that we will have reduced its share of the electricity mix from a third to zero within just ten years.