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ANNEX 3

of the Commission Implementing Decision on the financing of the Annual Action Programme, part 2, in favour of Ukraine for 2020

Action Document for Climate package for a sustainable economy: (CASE) in Ukraine

ANNUAL PROGRAMME/MEASURE

This document constitutes the annual work programme in the sense of Article 110(2) of the Financial Regulation and action programme/measure in the sense of Articles 2 and 3 of Regulation N° 236/2014.

1. Title/basic act/ CRIS number	Climate package for a sustainable economy: (CASE) CRIS number: ENI/2020/042-818 financed under the European Neighbourhood Instrument			
2. Zone benefiting from the action/location	European Neighbourhood region, Ukraine The action shall be carried out at the following location: Ukraine			
3. Programming document	Single Support Framework 2018-2020 for Ukraine ¹			
4. Sustainable Development	Main SDGs - 13: Climate Action; 12: Responsible Consumption and Production;			
Goals (SDGs)	Other significant SDGs - 7: Affordable and Clean Energy; 9: Industry, Innovation and Infrastructure; 11: Sustainable Cities and Communities.			
5. Sector of intervention/ thematic area	Sustainable Development DEV. Assistance: YES			
6. Amounts concerned	Total estimated cost: EUR 10 000 000 Total amount of European Union (EU) contribution: EUR 10 000 000			

¹ Commission decision C(2017)8264

7. Aid	D ' (M 11')						
modality(ies)	Project Modality						
• • •	Direct management through prod	curement					
and implementation modality(ies)	Indirect management with entrusted entities to be selected in accordance with the criteria set out in section 5.3.2 and 5.3.3.						
8 a) DAC code(s)	23183 - Energy conservation and	demand-si	de efficiency-	- 36%			
	23210 - Energy generation a	nd renewa	able sources	multiple			
	technologies – 10%						
	41010 – Environmental Policy and	d Administ	rative Manage	ement- 54%			
b) Main Delivery Channel	Private Sector Institutions – 60000 be defined at a later stage.	0; Indirect N	Management l	Institutions to			
9. Markers	General policy objective	Not targeted	Significant objective	Principal objective			
(from CRIS DAC	Participation development/good		Ī				
form) ²	governance						
	Aid to environment			\square			
	Gender equality and Women's and						
	Girl's Empowerment						
	Trade Development	V					
	Reproductive, Maternal, New born and child health	V					
	RIO Convention markers	Not	Significant	Principal			
		targeted	objective	objective			
	Biological diversity	<u> </u>					
	Combat desertification		<u> </u>				
	Climate change mitigation			☑			
	Climate change adaptation						
10. Global Public Goods and Challenges (GPGC) thematic flagships	Not applicable						
menings in po							

SUMMARY

Climate action and the move towards a sustainable economy has so far not been a generalised policy priority for Ukraine, despite participation in the relevant international treaties, achievements in significantly reducing gas consumption and the high interest in cooperation in the framework of the EU Green Deal. Energy efficiency and modernisation measures remain insignificant, and the climate mitigation ambition is considered inadequate given the potential of the country. Ukraine still needs to develop and implement a strategy for "green" sustainable growth, including dramatic improvements in resource use efficiency, including: reducing waste; investment in sustainable resources, technologies and infrastructures; and systematically decoupling economic activity from environmental impact. The economic crisis

following the measures applied to restrict the Covid-19 expansion creates at the same time risks and opportunities for more sustainable growth in line with the EU Green Deal. Climate imbalances make the country more vulnerable to such crises, and the anticipated negative environmental impact.

Measures foreseen in the Green Deal Communication of December 2019 cannot be simply replicated in Ukraine, given the different level of preceding developments and the volume of investments required. Nevertheless, Ukraine is in a position to set a new holistic development path, taking inspiration from the EU Green Deal and with the technical and financial support from the EU. The action will prepare grounds for a new comprehensive growth program for Ukraine by implementing feasible measures, in line with the EU Green Deal, EU-Ukraine Association Agreement and with the already adopted Ukrainian policy documents. The support activities will include both consultancy and local actions aiming to support pilot replicable projects and will be grouped under three components, all effectively contributing to the reduction of greenhouse gas emissions:

- 1. Support to the implementation of measures towards climate neutral, clean and resource efficient energy production and use in Ukraine, in particular through sustainable development of small-scale renewables and implementation of projects in local communities:
- 2. Climate change mitigation through the operation of a climate innovation resource and consultative centre; feasibility studies for application of climate innovative technologies and development of projects; "greening" of transport and support for more reliable monitoring and accounting of GHG and ozone depleting substances;
- 3. Regulatory measures for and promotion of circular economy concepts, in particular through the facilitation of efficient use of resources, use of secondary raw materials, reusability and repairability of products, waste and pollution prevention and reduction.

The Action represents a part of the EUR 190 million EU response package to the COVID-19 crisis. The events of Spring 2020 in Ukraine clearly demonstrated how the aftermath of the warmer and drier climate (forest fires) put additional strains on the society already coping with health and economic challenges. It is expected that the action will contribute to post-COVID-19 recovery through a cleaner environment, less conducive for transmittable diseases, lessening of economic pressures on households through the reduction of resource intensity of products and services and creating of new job opportunities in climate-friendly initiatives. While having affected the economy, the COVID crisis also reduced the demand for energy generation and offered an opportunity to recover the economic growth in a more sustainable way. The action should contribute to make SMEs more resilient to high energy prices and, by stimulating energy efficiency, increase the competitiveness of the Ukrainian economy.

1 CONTEXT ANALYSIS

1.1 Context Description

The recent climate changes in Ukraine affected by global warming processes showed significant rise of air temperatures and increased number of hazard meteorological phenomena affecting country's population and various economy sectors. In Ukraine, the raise of the average temperature has been higher than worldwide (1.1 C), and the climate

change manifested itself first of all in the frequency and intensity of unusual weather patterns, affecting infrastructure, agriculture, animal and plant species.

Based on the scientific consensus on the human-made origin of the global warming, a series of international treaties have been concluded, including and the Kyoto Protocol of 1997. The Paris Agreement on Climate Change, which entered into force in November 2016, sets out a global action plan to put the world on track to avoid dangerous climate change acknowledging that this will require a global peaking of greenhouse gas emissions as soon as possible and achieving climate neutrality in the second half of this century. Ukraine was among 10 first States, which ratified the Paris agreement and submitted its Nationally Determined Contribution (NDC). 17 Parties, including the EU and Ukraine, submitted their long term (mid-century) low emission development strategies.

Another important climate-related treaty is the Montreal Protocol of 1987, also ratified by Ukraine, obliging developed and developing countries to phase out the consumption and production of ozone-depleting hydrochlorofluorocarbons (HCFCs) by 2015 and 2030 respectively. The European Union phased-out the consumption of virgin HCFC since 2010.

The Kigali Amendment, which was agreed by the parties to the Montreal Protocol in 2016 and which entered into force on 1 January 2019, will phase-down potent greenhouse gases hydrofluorocarbons (HFCs) by more than 80 per cent over the next 30 years. If fully supported, the amendment can avoid up to 0.4° C of global warming by the end of this century.

Parties that have ratified the Kigali Amendment are now focusing on setting up licensing and quota systems for HFCs, enhancing training on the containment of HFCs and the safe use of HFC alternatives. The European Union has already adopted the revised F-gas regulation 517/2014 on fluorinated greenhouse gases which introduced HFC freeze in 2015 and gradually leading to 79% reduction below the HFC baseline by 2030. Ukraine has not yet ratified the Kigali amendment, largely due to the difficulties in accounting the use of HFC and in establishing baselines values for phase-down commitments.

The different phase-out / phase-down schedules for controlled substances for different parties to the Kigali amendment imply that chemicals already banned, restricted or expensive in some countries are still available for use and affordable in other countries — a situation which makes illegal trade a profitable business. Besides the prevention of illegal trade, the future challenge will be to overcome barriers to the large-scale introduction of ozone- & climate-friendly technologies in developing countries.

The other challenge is to overcome still persisting climate scepticism, denying the many lines of evidence for human-caused global warming. The primary tactic is to cast doubt on environmental science, alleging that the science is corrupt and either fabricated or exaggerated. Underlying the attack on science often is the campaign against government regulation of allegedly self-balancing free markets.

The coronavirus pandemic, currently turning into an unprecedented international crisis, with serious repercussions for people's health and economic activity, may distract attention from environmental challenges. The risk is exacerbated by certain positive effects observed in nature due to slowdown of economies. These effects are likely to be temporary, meanwhile, the threat posed by climate change, which requires us to reduce

global emissions significantly this decade, will remain. Today's crisis should not compromise efforts to tackle the world's inescapable challenge. The evolution of the world towards hotter and more crowded conditions, coupled with such direct effects of global warming as droughts and storms, sets a conducive environment for spreading of contagious diseases. The surge of the already unprecedented level of consumption of single-use materials aggravates the already profound challenges to human wellbeing, and the natural environment as well as for the future of the planet.

1.2 Policy Framework (Global, EU)

The EU has already over-achieved its 2020 emissions reduction target and has completed the binding legislative framework that will allow to over-deliver on the 40% emission reduction target for 2030, including a mechanism for governance, monitoring and verification. The proposed EU objective of climate neutrality by 2050 was already endorsed by the large majority of EU Member States. Climate neutrality clean and resource-efficient economy is for the EU an investment and modernization opportunity as well as a great opportunity to create new jobs, increase standards of living for people while leaving no one behind.

Building on its own experience, the EU advocates that the green transition offers ample opportunities for sustainable growth. Emissions in the EU are now 23 % below the 1990 level, while the economy has grown by 61% in the same period. The EU is also actively working to adapt to the impacts of climate change and enhance the resilience of citizens, assets and ecosystems. The EU is committed to empowering civil society, youth and the private sector to contribute to solving the climate challenge.

The European Green Deal Communication of December 2019 includes, inter alia:

- ❖ A European Climate Law to enshrine the 2050 climate-neutrality target has been developed;
- ❖ The Emission Trading System will be extended to cover the maritime sector and free allowances for airlines will be reduced:
- ❖ A Carbon Border Tax, compliant with the World Trade Organisation, will be introduced to avoid carbon leakage;
- ❖ A new Just Transition Fund will be set up to help people and regions cope with the adjustments towards a decarbonized economy;
- ❖ Parts of the European Investment Bank's operations will be dedicated to fighting climate change via a Sustainable Europe Investment Plan aiming at supporting EUR 1 trillion of investment in the next decade;
- ❖ For 2030, the European Union's target for carbon emissions reduction will be increased to 55%;
- New legislation for measures effectively supporting increase of biodiversity and resource efficiency, including in buildings and supporting effective reduction of waste and water-, air- and soil pollution will be developed.
- New/ updated strategies will be adopted for Adaptation to Climate Change, Smart Sector Integration, Clean and Circular Economy, Sustainable and Smart

Mobility, Biodiversity, "Farm to Fork" in Agriculture Sector, as well as for Forest Strategy and Chemicals Strategy for Sustainability.

The Green Deal Communication, presented in December 2019, was backed up with financial proposals, including the Green Deal Investment Plan and the Just Transition Mechanism only a month later. The European Climate Law was presented in January 2020, enshrining the objective to become climate neutral by 2050.

The external chapter of the Green Deal Communication sets out the EU's global ambition for leadership in tackling climate and environmental challenges. On the one hand, the EU will set a credible example and will promote concrete climate and environmental action. On the other hand, the EU will engage in active advocacy in bilateral and multilateral settings aimed at generating meaningful impact on climate change and environmental degradation at the global level, while also recognising the need to uphold the EU's economic interests and avoiding threats to global security. The Foreign Affairs Council conclusions on climate diplomacy of 20 January 2020 showed Member States' support to this ambition.

Within the Eastern Partnership the EU will aim at supporting energy efficiency, decarbonisation and depollution, creating jobs, contributing to peacebuilding and poverty reduction through sustainable management of natural capital.

Most recently, on 11-12 March 2020 the Commission presented its Industrial Strategy and Circular Economy Action Plan. The EU's second Circular Economy Action Plan will allow the EU to inspire third countries to leapfrog to an economic model where growth is decoupled from resource use and pollution. The EU will promote circular economy norms and standards and circular economy missions and other outreach activities. The EU Industrial strategy will stimulate the development of lead markets for climate neutral and circular products, in the EU and beyond. The Commission has identified batteries, as strategic value chain for the energy transition, electro-mobility and achieving climate neutrality by 2050.

While the EU's immediate focus is on combating the spread of the coronavirus, work on delivering the European Green Deal continues. The climate crisis is still a reality, and necessitates continued attention and efforts. While emissions are reduced in the short-term, the outbreak of the coronavirus slows down the economy and brings hardship on people. This is not a sustainable and viable situation. It is contrary to the objectives of the European Green Deal, which is focused on transforming the economy in a sustainable way, reducing emissions on a structural basis, while growing the economy for the benefit of all.

1.3 Public Policy Analysis of the partner country/region

The key declared goals of Ukraine's environmental policy are the safety of people, a balanced system of resource use and the conservation of natural ecosystems.

Basic principles of the environmental policy of Ukraine were introduced in 2010 by the Law of Ukraine "On the main principles (strategy) of the public environmental policy of Ukraine by 2020". According to this Law, the municipal waste management was one of the most acute environmental problems taking into account its generation per capita and predominant disposal to the landfills. The results of the evaluation of the said Strategy

revealed that its implementation had nearly failed, in particular in the areas of sustainable consumption and production and the assessment of environmental risks.

A new Strategy for the state environmental policy of Ukraine until 2030 was adopted in March 2020. It includes the objectives to reach 17% of renewables in the total energy consumption; reduce the discharge of polluted wastewater into water bodies, and to cut the landfill to below 35% by 2030.

Ukraine has committed to shape its legal framework in line with EU climate acquis made applicable under the EU-Ukraine Association Agreement (AA) and the Energy Community Treaty (EnCT).

The Association Agreement foresee a "dynamic approximation" of legislation to EU law, and that the Association Council periodically revises and updates the agreement's annexes, including in order to reflect the evolution of EU law and relevant applicable standards set out in international instruments. The Energy Annex XXVII has been updated. The work continues on update of climate and environment annex.

Climate

To strengthen its response to the global threat of climate change and efficiently contribute to joint efforts at reducing GHG concentrations in the atmosphere, Ukraine ratified the Paris Agreement and submitted its first Nationally Determined Contribution (NDC) in 2015. The targets therein include the drop of emissions to 20% below 1990 by 2020, and not to exceed 60% of 1990 level by 2030. These targets are not ambitious and will likely be overachieved even without energy efficiency and modernisation measures. The intention to enhance ambitions was confirmed by Ukrainian representatives at the UN Climate Action Summit in September 2019. According to Ukraine's Greenhouse Gas Inventory 1990-2017 Submitted to UNFCC in May 2019, the current emissions data stands at 310.3 million tCO2eq of all GHG including Land Use, Land Use Change and Forestry (LULUCF) versus 889.3 million tCO2eq in 1990, i.e. at 35% of the 1990 level. Data are missing or considered unreliable in particular from the transport sector and on LULUCF emissions and absorptions. The latter represents an acute problem in view of the progressing deforestation, which is recognised as one of the main contributors to climate change processes.

The Strategy on Low Carbon Development until 2050 was developed and submitted to the UNFCCC secretariat in July 2018. It sets three objectives:

- 1. Transition "to energy sources with low carbon content; development of sources for clean electricity and heat energy; increase in energy efficiency and energy saving in all sectors of economy, housing, utilities and infrastructure facilities; stimulation of use of alternatives to oil motor fuels and transition of cargo and passenger carrying operations to more "clean" transport means;
- 2. Increase carbon absorption and introduce climate change mitigation practices in agriculture and forestry;
- 3. Reduction in GHG emissions associated with fossil fuel production, agriculture and waste.

However, the scenarios of GHG emissions dynamics included in the Strategy are already considered outdated. New simulations are being currently conducted to be reflected in the updated NDC and the integrated Energy and Climate Strategy, both due in late 2020.

In December 2019, two new Laws were adopted in Ukraine - the Law of Ukraine "On Monitoring, Reporting and Verification of GHG Emissions" No. 377-IX (hereinafter – MRV law) and the Law of Ukraine "On the regulation of economic activities with ozone-depleting substances and fluorinated greenhouse gases" No. 376-IX (hereinafter – the ODS and F-gases law).

The newly adopted MRV law for the time being is the main piece of legislation transposing MRV-related provisions in line with Directive 2003/87/EC. Despite the transposition delay and its pending entry into force, it aims at establishing a regulatory regime for Ukrainian MRV system being fundamental pre-condition for setting up an emissions trading system (ETS).

Green energy transition

Since the announcement of the EU Green Deal, Ukrainian authorities took an active interest in it, and declared Ukraine's wish to collaborate closely. In January 2020, the Ministry of Energy and Environmental Protection (MEEP) published the Concept for Ukraine's Green Transition by 2050, aiming at a transition to a climate-neutral Ukrainian economy in 2070 in a socially acceptable manner.

The Concept includes the following main directions for economy decarbonisation:

• Energy efficiency and energy conservation

Energy intensity and carbon intensity of Ukraine's GDP remain extremely high compared to not only the OECD standards (by three times), but also to Ukraine's Eastern European neighbours. Policies and measures should be put in place to improve energy usage and energy efficiency while improving the quality of energy services and energy supply. The planned focus should is on the housing sector, which has the highest potential for improving energy efficiency, in particular through large-scale thermal modernization of public buildings.

• Renewable energy sources (RES)

It is considered economically feasible for Ukraine to reach 70% of the share of RES in electricity production by 2050. Moreover, a significant part (up to 15%) should be electricity generation from the roof solar power plants in households and businesses.

The role of decentralized power supply is expected to increase significantly, which will require the use of modern technologies related to demand management, distributed storage and distributed generation.

- Waste management
- Innovative agriculture and forestry
- Digitization of economic processes

Digitization is seen as a way to reduce the consumption of natural and technical resources and to accelerate the speed of economic and administrative processes, optimize the movement of people and the use of transport. These effects will help build a resource- and energy-efficient, climate-neutral economy.

The decarbonisation of energy will be accompanied by its decentralization and the development of distributed generation, which will lead to a rapid increase in the number of energy objects, connections and complications of energy systems.

Environmentally friendly transport

Transport is a heavy sector of energy consumption in Ukraine. In 2017, transport (including pipeline) accounted for more than 20% of final energy consumption. The vast majority of the fuel used in the transport sector is petroleum products (diesel and gasoline) and natural gas.

The national Transport Strategy foresees the following measures for decarbonisation and greening of transport:

- to completely re-equip the vehicle fleet with internal combustion engines for electric, hydrogen vehicles and fuel cell vehicles or others that meet the criteria of sustainability and environmental friendliness;
- optimize the structure of passenger and freight traffic by increasing the share of passenger traffic by public transport, and the share of freight traffic by rail;
- improve the planning of the transport network and public transport routes, develop the use of green transport and micro-mobility in cities;
- introduce technologies of intermodal freight transport;
- upgrade and increase the number of water and river ports;
- introduce energy savings throughout the technological chain.
- Climate research and innovations
- Financial and state support in stimulating transition

Ukraine is seeking to hold structural dialogue with the EU on the Green Deal through the development and implementation of a roadmap. For this purpose, an Inter-ministerial Working Group was established by Vice-Prime Minister for European and Euro-Atlantic Integration of Ukraine in January 2020.

Spring 2020 was marked by the change of the Ukrainian Government and the expansion of Covid-19. The long-term Government plan is rather superficial, while the short-term one is focused on the public health issues and on relieving economic and social aftermath of the pandemic. The EU, with the help of this program, should support that the strategic agenda is back in the authorities' vision after the pandemic peak will have been passed.

1.4 Stakeholder analysis

Given the multi-faceted nature of the action, it would be the most appropriate for it to be coordinated by the Cabinet of Ministers of Ukraine.

Other key Government stakeholders for the action include the Ministry of Energy and Environment Protection, Ministry of Infrastructure and Ministry for Communities and Territorial Development.

The Ministry of Energy and Environment Protection (MEEP) ensures the formulation and implementation of the state policies in the fields of energy, energy efficiency

(except in buildings), RES, environmental protection and environmental safety, rational use, reproduction and protection of natural resources. Its competencies include ozone layer conservation, regulation of the negative human impact on climate change and adaptation to its changes and implementation of the requirements of the United Nations Framework Convention on Climate Change, the Paris Agreement and the Montreal Protocol.

Out of the MEEP subordinated entities, the relevant ones for this action include the State Ecological Inspection, the State Agency on Energy Efficiency and Energy Saving, the State Agency on Water resources and the State Agency on Forest Resources.

Ministry of Communities and Territorial Development of Ukraine (MinRegion) is one of the key players in energy efficiency, including on municipal utilities and the restructuring of the district heating sector. It is responsible for the State policy state regional policy, local self-governance, state housing policy and policies in the field of landscaping, housing and communal services, energy efficiency in buildings, household waste management, construction, urban planning, spatial planning and architecture, architectural and construction control and supervision.

The Ministry of Infrastructure (MoI) is the central authority in the areas of transport, roads, postal service and infrastructure. Its main tasks, relevant for this action, include the state policy on issues related to transport, the use of Ukrainian airspace and roads. It coordinates the State Aviation Administration, the National Sea and River Transport Inspection Agency, the National Land Transport Inspection Agency and the National Automotive Road Agency.

The Ministry of Digital Transformation of Ukraine is responsible for digitalisation policy and measures, including in sectors of relevance for the project objectives and activities aiming to improve the efficiency of climate, energy, transport and environmental information and management systems, consumer information and participation in the markets, as well as integration, as well as cybersecurity, data protection and SMEs services development;

The Ministry of Economic Development, Trade and Agriculture of Ukraine is responsible for the SMEs policy, resource efficient and competitive economy, as well as for the sectors with high relevance for addressing the climate and environmental challenges, such as agriculture and forestry sectors.

Other relevant stakeholders at the central government level include the Ministry of Science and Education (in charge of innovation policy and of mainstreaming EU research and innovation programmes), the Ministry of Digital Transformation, and the Ministry of Economic Development, Trade and Agriculture and its subordinated State Service on Geodesic, Mapping and Cadastre.

Parliamentary Committees on Energy and utility services; Economic development; Ecological policy; Transport and Infrastructure; Financial, tax and customs policies; Agriculture and land policies and on EU Integration are involved in different legislative initiatives that may fall under the area of the project activities.

Local authorities (especially in amalgamated communities - hromadas) and their associations become very important stakeholders due to the decentralisation progress. They have gained strong incentives to develop local energy efficiency projects, many of

them joined the Covenant of Mayors. They will be key partners in the implementation of the pilot projects component of the action, the communication campaigns and the district heating reform.

Civil society organisations (SCOs) are an integral part of the political, educational and regulatory process on the issues related to administrative capacity support, communication of the reform steps and consumer related issues. Recently SCOs working on sustainable development and climate issues have grown in numbers and activities. Youth climate movement emerged and strengthened.

1.5 Problem analysis/priority areas for support

Although Ukraine is on track to achieve and surpass its first NDC, industrial decline has been the major factor in the emission reductions observed since 1990. Only in 2017 first signs of decoupling of economic development and emissions emerged. According to the latest GHG inventory report (May 2019), emissions decreased by 3.1% in 2017 in the energy sector; 11% in industry; 2.4% in agriculture and 1% in waste. LULUCF absorption raised by 465.2%. The decrease was achieved in the conditions of modest economic growth. Still, energy efficiency and modernisation measures remain insignificant, and the climate mitigation ambition is considered inadequate given the potential of the country. Furthermore, even the modest economic growth is not going to sustain in 2020 and likely not in 2021, as the economy is suffering losses due to the lockdown measures applied to restrict the Covid-19 expansion.

In early 2020, fall of GHG emissions is observed in a number of countries as a result of the impact of the pandemic on activity, particularly transport. The emissions are likely going down also in Ukraine, although no reliable data are yet available to confirm that. Being not the result of governments and companies adopting new policies and strategies, this development is not sustainable and could well be followed by a rebound in emissions growth as economic activity ramps back up.

Ukraine still needs to develop and implement a strategy for "green" sustainable growth. This is in line with the declared intentions of "synchronization" with the EU Green Deal. The ongoing Covid-19 crisis and its aftermath make the importance of addressing these challenges even more important:

- The new weather and environment patterns, induced by the climate change, set favourable conditions for contagious diseases, while at the same time weakening the population's health and resistance. According to the Public Health Centre of Ukraine, the population of the country is affected by the following climate factors: air pollution, heat stress, worsened quantity and quality of drinking water, weather anomalies and accidents, increase of incidence of allergic and auto-immune diseases;
- The hard impact of the pandemic on the economy and the society call for new ways of development, more adapted to challenges posed by the external environment;
- Despite the observed short-term reduction of emissions, the influence of the pandemic on the environment is going to be harsh, first of all due to the surge of consumption of chemicals and single-use goods.

Measures foreseen in the Green Deal Communication of December 2019 cannot be simply replicated in Ukraine, given the different level of preceding developments and the volume of investments required. Nevertheless, Ukraine is in a position to set a new holistic development path, taking inspiration from the EU Green Deal and with the technical and financial support from the EU.

The action will support Ukraine to implement feasible measures, in line with the EU Green Deal and with the already adopted Ukrainian policy documents, in preparation for a future comprehensive "green" transformation program. The support will include both consultancy and local actions/grants aiming to support pilot replicable projects.

The action will cover all areas under the draft Concept of Ukrainian Green Energy Transition, with the exception of agriculture, forestry and waste management addressed in other programmes.

- 1. Support to the implementation of measures effectively supporting progress towards climate neutral, clean and resource efficient energy production and use in Ukraine, in particular through sustainable development of small-scale renewables and implementation of projects in local communities;
- 2. Climate change mitigation through the operation of a climate innovation resource and consultative centre; feasibility studies for application of climate innovative technologies and development of projects; "greening" of transport and support for more reliable monitoring and accounting of GHG and controlled substances, such as ozone depleting substances and fluorinated GHG;
- 3. Regulatory measures for and promotion of circular economy concepts, in particular through the facilitation of efficient use of resources, waste and pollution prevention and reduction. This component will not tackle the waste management aspects of the circular economy, in view of the implementation of other policy and pilot activities in this area.

2 RISKS AND ASSUMPTIONS

Risks	Risk level (H/M/L)	Mitigating measures
Short-term emissions reduction, resulting from the epidemic-related decline of economic activities, may create a false impression of lessening the climate threats	MM	To explain the temporary nature of the current trends, with no lasting difference to the future.
The sharp decline in the global oil and gas markets may undermine clean energy transitions by reducing the impetus for energy efficiency and renewable energy sources policies.	М	To remind the high import dependency of oil and oil products, continued gas import dependency and increasing import dependency on coal imports as well as air pollution risks related to outdated and inefficient coal power plants. To remind the higher costs of new (and needed)

Decentralisation process is stalled with revert trends of revenue and authority centralisation.	M	power plants for fossil fuels (incl. nuclear) compared to renewables. Continuous policy dialogue and cooperation with Ukrainian authorities at all levels to strengthen decentralisation processes; increased support to local economic initiatives.
Populism, resulting in supporting allegedly "poverty alleviating" decisions to the detriment of environment	Н	Policy dialogue explaining the role of sustainable development in poverty reduction
Sustainable development and climate action are not included in the new Government's priorities, continuing changes in the Government.	Н	To draw Government's attention to the fact that the current pandemic crisis should not blur the vision of the long-term path

Assumptions

- Overall political, macroeconomic and financial stability in the country.
- Government is committed to implement the Association Agreement with the EU.
- COVID-19 epidemic situation development continues to be moderate in Ukraine under control
- Selected implementation partners remain committed to the action and to the implementation of underlying policies in Ukraine.

3 LESSONS LEARNT AND COMPLEMENTARITY

3.1 Lessons learnt

Past and ongoing projects, policy dialogue on energy efficiency and climate issues has led to the following lessons learnt:

- There is a good commitment from some local authorities (cities, amalgamated territorial communities) to implement energy efficiency and climate-friendly technologies;
- In the climate area, beyond the completion of the policy framework, there is a need
 to implement practical actions with good demonstration potential; the FINTECC
 model has proven to be successful in supporting those companies in the corporate
 sector that have decided to implement advanced technologies with low market
 penetration;
- Awareness raising events should more involve citizens and businesses, to
 overcome the persisting "climate scepticism" and climate change denial. Simple
 and compelling messages are to be developed to explain that human activity is now
 the dominant driving force of disruptions in the planet's balances, outpacing
 natural drivers, and that climate reacts strongly to it. A public opinion study is
 however necessary to establish a viable baseline;
- The specific barriers for private sector (SMEs and mid-caps) to invest in climate technologies in Ukraine include: best-in-class climate technologies usually incur

higher investment costs compared to the traditional technologies; underdeveloped local supply chains; limited development of legislation and specific standards; limited dedicated finance; lack of know-how and technical knowledge in the country, resulting in sub-optimal risk allocation; business models not well suited to move to circular economy.

3.2 Complementarity, synergy and donor co-ordination

The table below summarises other complementary actions, the results of which should be taken into account (for completed actions), or with which a coordination mechanism should be established.

Programs with EU funding:

Other relevant work	Timeframe	Implementing partners	Relevant content
ClimaEast Program	Completed in 2017	DAI, UNDP	Project supporting Climate Change mitigation and Adaptation in Neighbourhood East and Russia. Delivered outputs related to GHG emissions/sequestration monitoring, MRV systems and sectoral planning in the forestry and land use sectors.
EU4Climate Program	2019-2023	UNDP	The work plan for Ukraine includes the development of a national and sectoral climate adaptation strategies; analysis and development of legislation on ODS and F-gases; climate mainstreaming in other sectoral policies; awareness raising. Ukraine wil also participate in regional events on MRV, NDC and long-term strategies issues.
EU4Energy Program	2019-2023	International Energy Agency (IEA); Energy Community Secretariat; Energy Charter Secretariat	Coordination may be necessary with Component 3 – "Legislative and Regulatory Environment and Key Energy Infrastructure" implemented by the Energy Community Secretariat and the Energy Charter Secretariat, as well as International Energy Agency responsible for Components 1 and 2 (energy data and policy recommendations).
Covenant of Mayors East (CoM East)		Municipalities in the EaP countries	Provides specific assistance to local and regional authorities from the EaP region in developing Sustainable Energy and Climate Action Plans (SECAPs) and helping implementing them
			431 municipalities in the EaP countries are signatories. The majority of the signatories (49 % of the signatories) are committed to the 2030 target proposed (30 % reduction in CO2 emissions by 2030). A growing number of signatories are committing to climate adaptation.
			Coordination with the CoM East will be

Support to Ukraine in approximation of the EU environmental acquis (air quality, waste management, industrial pollution)	2020-2023	To be contracted	necessary in the pilot component of the action (1.1) in two directions: - To take into account the lessons learned from the CoM projects; - To target the local communities not already involved in the CoM. - Further assist in the transposition and implementation of Annex XXX to the Chapter 6 (Air Quality, Waste management, Industrial pollution) of the EU-Ukraine Association Agreement; - Further raise the institutional capacity of authorities in charge (MEEP, MinRegion) and public awareness on environment
			issues ("greener lifestyles"); - Support to the concrete implementation of the National Waste Management Strategy.
Strengthening the capacity of regional and local administrations for implementation and enforcement of EU environmental and Climate Change legislation and Development of Infrastructure projects	2020-2023	To be contracted	- Reinforce Ukraine-EU cooperation by addressing the priorities of the Ukraine-EU Association Agreement as to enhance regulatory convergence in the areas of environment assessment, waste management and climate change; - Strengthen the capacity of local and regional administrations to implement new EU compliant Ukrainian legislation in the area of environmental impact assessments, waste management, and climate change; - To support and train business and civil assessments and regional level to deal
			society at local and regional level to deal with new environmental legislation in the above areas; - To support local and regional authorities as well as business to prepare bankable infrastructure projects, including in the area of waste, in line with EU environmental standards and existing Ukrainian legislation that is in line with EU standards; - to support local civil society in increasing awareness in the population on waste issues, promote circular economy principles, EIA, SEA, and climate change.
Green for Growth Fund (GGF)			Provides financing and technical assistance for energy efficiency and renewable energy Extended in 2012 to cover EaP countries Also contribution from the EU to the Eastern Europe Energy Efficiency and Environment Partnership (E5P), aimed at promoting energy efficiency and environment investments in EaP countries

European Fund for			Part of the EU's External Investment Plan
Sustainable Development (EFSD)			aimed at boosting private and public investment in EaP countries
			Addressees obstacles to growth and the root causes of irregular migration
			Integral financing mechanism to support investments by public financial institutions and the private sector
Eastern Europe Energy Efficiency and Environment Partnership (E5P)		EBRD	The E5P is a €200 million multi-donor fund initiated during the Swedish Presidency of the European Union in 2009 to encourage municipal investments in energy efficiency and environmental projects in the Eastern Partnership region. The E5P merges financial contributions from the European Union and a group of 21 nations, including countries which are benefiting from the fund. The contributions are used as grants to support municipal sector projects.
EU4Environment Programme	2019-2023	OECD, UNECE, UNEP, UNIDO, WB	- Greener decision-making: Further align knowledge, decision-making, and stakeholder interaction mechanisms with environmental imperatives and make political leaders, civil servants and the
			general public aware and supportive of green growth
			- Circular economy and new growth opportunities: Scale-up public and private action on circular economy and sustainable production and lifestyles
			- An environmental level playing field: Improve incentives and governance mechanisms that aim at correcting market failures related to the environment thus ensuring a level playing field in the context of intensified economic exchange with the EU
			- Ecosystem services and livelihoods: Boost resilience through the preservation of ecosystem services, with a focus on forests and protected areas
			- Knowledge sharing and coordination: Facilitate regional knowledge sharing and coordination
Financing Technologies against Climate Change / FINTECC	2015-2019, Phase II is inder preparation	EBRD	The project provided specific mechanisms to promote climate technology transfer for industries and industrial processes, and developed measures necessary to create enabling environments and systematically address policy, institutional, financial, technical and awareness barriers. Phase II plans to address the following: - Accelerate

			adoption of climate technologies with low market penetration; - Mainstream best-in-class technologies available in local market to SMEs through investment grants combined with EBRD direct finance; Support implementation of circular economy measures; - Promote green innovation through the Climate Innovation Voucher (CIV) scheme.
SEIS II	2019-2023		The specific objective is to strengthen the regular production of environmental indicators and assessment as a contribution towards knowledge-based policy-making and good governance in the field of the environment. This will result in improved national capacity related to the provision of environmental data and information in line with national and EU environmental legislation and practices:
			- Improved implementation of regional/international commitments related to environmental reporting in line with EU/EEA best practices;
			- Improved capacities in the national administrations to manage and use environmental statistics, data and information in support to decision-making in line with EU/EEA best practices;
			- Preparation of regular State and Outlook on the Environment reports (SOER) and indicator-based assessments in line with EU/EEA best practices.
Energy Efficiency Support Programme for Ukraine (EE4U)	2018-2023	IFC UNDP	Through this programme the EU is supporting the activities of the Ukrainian Energy Efficiency Fund by providing grants for energy efficiency measures in multiappartment buildings. The main objective s to reduce energy consumption and CO2 emissions. The programme also focuses on awareness-raising activities for final

Other donors' programs:

Global EnGvironment Facility	UNDP / UNEP	Set up of UNFCCC monitoring and reporting frameworks through the on-going Global Support Programme on National Communications and Biannual Update Report Support to adaptation planning has been provided with the UNDP assistance in the framework of the Global Support Programme on National Adaptation Plans UNDP have been supporting the countries in the region to develop National Adaptation Plan (NAP) applications to the Green Climate Fund (GCF)
Low Carbon Development	GIZ	Preparation for the ETS implementation in Ukraine
Multilateral Fund for the Implementation of the Montreal Protocol. Regional Montreal Protocol network for Europe and Central Asia (ECA network)	UNDP	To share experiences and information between the participating national Montreal Protocol officers.
Support to Climate Technology Needs Assessment	UNEP	

Donor coordination

In the thematic areas covered by this action, donor coordination functions well for energy, energy efficiency and waste management. Currently there are several donor coordination mechanisms on energy efficiency. While the EU Delegation is in charge of an energy donor coordination group since 2014, an energy efficiency donor coordination group is chaired by Germany. In addition, IFC regularly calls donor coordination meetings on energy efficiency in the residential sector. A special group has been established for the Energy Efficiency Fund. All these groups include the main donors and IFIs active in Ukraine. The waste management donor coordination group also meets on regular basis.

A regular donor coordination mechanism is yet to be established for the climate action. So far, there have been ad-hoc meetings organised at the occasion of various events. A special event was convened in November 2019 to take stock of different initiatives on the climate change adaptation. A promising sign for possible Government-led coordination mechanism was the establishment, in December 2019, of a working group led by Vice-Prime Minister for EU Integration, to formulate proposals for Ukraine's participation in the EU Green Deal. National authorities, donors and IFIs have been invited to take part in the working group.

The action will join the already established donor coordination activities (on Energy Efficiency, on Transport) and will strive to organise a regular donor dialogue on the climate action.

4 DESCRIPTION OF THE ACTION

4.1 Overall objective, specific objective(s), expected outputs and indicative activities

- 4.1.1. The action will contribute to the following *Overall Objectives*:
 - ➤ To contribute to the rendering of Ukrainian economy modern, clean, resource-efficient and competitive, with economic growth decoupled from resource use, and citizens' health and well-being protected from environment-related risks and impacts;
 - ➤ To contribute to the achievement of climate neutrality in Ukraine by 2070.
- 4.1.2. The *Specific objectives* of the action are as follows:
 - 1. Development and implementation of policies and measures effectively supporting the transition to climate neutral, clean, resource efficient and secure energy supply and consumption;
 - 2. Support to climate change mitigation through the reduction of emissions of greenhouse gases and ozone depleting substances;
 - 3. To stimulate a shift to a clean and circular economy through the development and implementation of policies and effective supporting measures.
- 4.1.3. Expected *outputs* and indicative *activities*.

Below the expected outputs, grouped under the three components corresponding to the three specific objectives, are presented along with lists of indicative activities for each of them.

Component 1- Support to the implementation of measures effectively supporting progress towards climate neutral, clean and resource efficient energy production and use in Ukraine.

Output 1.1. Local communities and businesses are better equipped for green, clean and resource efficient policies:

- Support to energy efficiency of local SMEs, through the implementation of a grant scheme for energy audits and small energy efficiency improvements;
- Support to the development of small-scale renewable energy projects;

- Local District heating reform, consultancy on optimal solutions for the cost-efficient supply of heat and hot water in municipalities;
- Smart local mobility development of Sustainable Urban Mobility Plans (SUMPs);
- Local Circular economy support to Local Communities on understanding, development and effective implementation of measures covering the full product lifecycle: from production and consumption to the market for secondary raw materials; assistance to pilot projects on circular production and use of goods and services;
- Local awareness raising campaigns addressed to citizens and local businesses.

Output 1.2. Position of RES in the Ukrainian energy supply is strengthened:

- O Identification of measures to address gaps and barriers for the digitalisation of energy infrastructure, aiming at better balancing demand and supply;
- Development and implementation of regulatory, administrative and market support measures facilitating larger uptake and integration of variable, including small-scale, renewable energy sources to the energy infrastructure and markets:
- Assessing the flexibility potential of the energy systems at selected municipalities/ distribution areas along the supply and demand chain to handle decentralised supply.
- O Support to a technology needs assessment (TNA) in the renewable energy sector, including identification and prioritization of technologies, barrier analysis and articulation of technology action plans for selected renewable energy technologies.

Component 2: Climate change mitigation through the operation of a climate innovation resource and consultative centre; feasibility studies for application of climate innovative technologies and development of projects; "greening" of transport and support for more reliable monitoring and accounting of GHG ozone depleting substances.

Output 2.1. A joint EU-Ukraine climate innovation resource centre has been established and is instrumental in supporting climate-friendly legislation, technologies and projectsprojects:

- Analysis of barriers to climate technology innovations;
- Market analysis and assessment of options for the integration and expansion of climate technologies;

- Technical assistance in making a more strategic use of public procurement to select sustainable products and services;
- Develop an enabling framework to support the cost competitiveness of climate neutral, clean and circular economy products;
- Development of financial products to support sustainable solutions;
- Boosting the participation of Ukrainian partners in EU research and innovation programs;
- Promoting participation in the dedicated Ukrainian funds (if established) –
 assistance to applicants in the development of proposals focusing on achieving climate-neutrality;
- Development of training courses in cooperation with key technical universities/institutes of Ukraine to organise education on modern technologies;
- Development of State Aid measures to support 'climate friendly frontrunners':
- FacilitateServe as a national technological mechanism for cooperation and experience exchange with the international Climate Technology Centre and Network (CTCN) of the UNFCCC Technology Mechanism;
- A study of climate change mitigation and adaptation perceptions in Ukraine and a communication campaign aiming to overcome the "climate scepticism" and the psychological distance;
- Communication campaign to attract private capital into climate and environmental actions.

Output 2.2. Smart mobility is enhanced:

2.2.1. Promotion of transport decarbonisation:

- Promotion of public procurement for low- and zero-emission vehicles in public transport fleets in accordance with the EU legislation and best practices;
- Development of economic mechanisms for compensation of environmental damage caused by transport means;
- Development of amendments to rules of the road, construction codes etc. to facilitate the safe use of cycling and micro-mobility2.2.2. Assistance in the implementation of the National Transport Strategy (NTSU) 2030 Green Measures:

- Development and adoption of a national Action plan for reduction of environmental impact from transport;
- Economic incentives for transition of cargo and passenger transport to more environment friendly modes;
- Feasibility study for Integrated transport management;
- Support the use of sustainable alternative transport modes;
- Develop strategies for e-mobility including for inland and water transport;
- Support legislative changes to boost the production and uptake of sustainable alternative fuels for the different transport modes.

Output 2.3. Emissions of GHG and ODS are reliably accounted and gradually phased out:

- Support to the integration of GHG monitoring data into a public environmental information platform;
- Facilitating effective GHG reporting under UNFCCC and enable the link-up with the Shared Environmental Information System (SEIS) of the European Environment Agency;
- Facilitating the use of European satellite data and Ukraine's potential interaction with the EU's planned Copernicus CO2 Mission;
- Feasibility study to apply in Ukraine full life-cycle approaches to measure greenhouse gas footprint of products and materials;
- Institutional support to the authority responsible for GHG monitoring, Reporting and Verification;
- Amendments to and implementation support to the Law "On regulation of economic activities with ozone depleting substances and fluorinated greenhouse gases" adopted on 12.12.2019;
- Assistance to ratify and further implement by Ukraine of the Kigali Amendment to the Montreal Protocol.

Component 3: To stimulate a shift to a clean and circular economy through the development and implementation of policies and effective supporting measures.

Output 3.1. Move to a clean and resource efficient circular economy has been accelerated.

- 3.1.1. Barriers identified to the expansion of markets for circular products;
- 3.1.2. Regulatory measures for establishing a market for secondary raw materials and by-products and producers' responsibility for products performance throughout lifecycle;
- 3.1.3. Assessment of existing methodologies to analyse products based on the appropriate and standardised life-cycle approach;
- 3.1.4. Identification of priority product groups in the context of the value chains to develop new regulatory approaches;
- 3.1.5. Establishment of links between Ukrainian SMEs and European SMEs in this area, including through the promotion of EU programs;
- 3.1.6. Communication campaign to encourage businesses to offer, and to allow consumers to choose, reusable, durable and repairable products.

4.2 Intervention logic

The action will prepare the ground for a larger scale program aiming to define and implement a new "green" growth strategy for Ukraine in an integrated manner ensuring consistency and coherence between different policy areas, such as climate change mitigation and adaptation, environmental protection, resource efficient energy sector and economic development, including in the municipalities and regions, digitalisation etc. The action will assist in the specification and implementation of sustainable development measures already identified in the Ukraine's adopted and draft strategic documents. Together with other complementary bilateral and regional projects on climate, environment, energy efficiency and waste management, the action will steer Ukraine to effective climate policies and formation of a new sustainable growth strategy.

All three components of the action will contribute, in different ways, to the reduction of GHG emissions:

- 1. Support to the implementation of measures towards climate neutral, clean and resource efficient energy production and use in Ukraine, in particular through sustainable development of small-scale renewables; support to district heating reform and implementation of projects in local communities;
- 2. Climate change mitigation through the operation of a climate innovation resource and consultative centre; feasibility studies for application of climate innovative technologies and development of projects; "greening" of transport and support for more reliable monitoring and accounting of GHG and controlled substances, such as ozone depleting substances and fluorinated GHG;
- 3. Regulatory measures for and promotion of circular economy concepts, in particular through the facilitation of efficient use of resources, and pollution prevention and reduction. This component will not tackle the waste management

aspects of the circular economy, in view of the implementation of other policy and pilot activities in this area.

The Action represents a part of the EUR 190 million EU response package to the COVID-19 crisis. The events of spring 2020 in Ukraine clearly demonstrated how the aftermath of the warmer and drier climate (forest fires) put additional strains on the society already coping with heath and economic challenges. It is expected that the action will contribute to post-COVID-19 recovery through a cleaner environment, less conducive for transmittable diseases, lessening of economic pressures on households through the reduction of resource intensity of products and services and creating of new job opportunities in climate-friendly initiatives. While having affected the economy, the COVID crisis also reduced the demand for energy generation and offered an opportunity to recover the economic growth in a more sustainable way. The action should contribute to make SMEs more resilient to high energy prices and, by stimulating energy efficiency, increase the competitiveness of the Ukrainian economy.

4.3 Mainstreaming

Mitigating climate change and sustainable development will be the key elements of the action.

The action will promote a participatory approach thus reinforcing the role of citizens and civil society. The Action will take full account of the need for CSOs to be represented in debates and decision-making on regulatory reforms.

The Action will also contribute towards promoting good governance and accountability, by supporting the implementation of transparent green growth policies and enhancing transparency in the planning and decision-making processes. Transparency will be enhanced through the strengthened monitoring of and reporting on the GHG emissions and use of ozone depleting substances.

In Ukraine, women are better represented than men in the civil society movements against climate change. However, I business they still face disadvantages in grasping innovation opportunities and responding to new economic incentives. The action will support a balanced participation of both women and men in the implementation of project activities, both pilot demonstration activities and supporting policy making to promote the creation of an enabling environment. The action will strive to advance women's participation in the process of policy development and decision-making through targeted consultations. In the areas of practical implementation, specifically for the capacity building and pilot components, special attention will be paid to the equal involvement of women and men entrepreneurs. Also, it is expected that women, who are exposed to poor quality jobs and harmful substances, will benefit more from the cleaner environment, which the action will contribute to. Throughout the action implementation, gender disaggregated studies and analyses will be carried out to the highest extent possible.

The action will also contribute to the fight against corruption through increasing the transparency and quality of data related to GHG emissions, use of controlled substances, transport and energy. In particular, better accounting of ozone depleting substances will help fighting the illegal trade in them. Larger uptake and integration of variable,

including small-scale, renewable energy sources to the energy infrastructure and markets will help reducing the domination of oligarch-controlled entities on these markets.

4.4 Contribution to SDGs

This action is relevant for the United Nations 2030 Agenda for Sustainable Development. It contributes primarily to the progressive achievement of SDGs 13: Climate Action; 12: Responsible Consumption and Production; 7: Affordable and Clean Energy; 9: Industry, Innovation and Infrastructure; 11: Sustainable Cities and Communities.

5 IMPLEMENTATION

5.1 Financing agreement

In order to implement this action, it is foreseen to conclude a financing agreement with Ukraine.

5.2 Indicative implementation period

The indicative operational implementation period of this action, during which the activities described in section 4 will be carried out and the corresponding contracts and agreements implemented, is **60 months** from the date of entry into force of the financing agreement.

Extensions of the implementation period may be agreed by the Commission's responsible authorising officer by amending this Decision and the relevant contracts and agreements.

5.3 Implementation modalities

The Commission will ensure that the EU appropriate rules and procedures for providing financing to third parties are respected, including review procedures, where appropriate, and compliance of the action with EU restrictive measures.

5.3.1 Procurement (direct management)

Procurement contract(s) will be concluded to support policymaking and implementation actions of national authorities, deliver training and consultancy services and conduct studies (outputs 1.2, 2.2, 2.3 and the whole Component 3).

5.3.2 Indirect management with entrusted entities

A part of this action, aimed at achievement of output 1.1 "Local communities and businesses are better equipped for green, clean and resource efficient policies..." of Component 1, may be implemented in indirect management with an entity which will be selected by the Commission's services using the following criteria:

- Experience in implementing community-based energy efficiency and/or climate action projects;
- Experience in administering grant schemes for local development, organisation and management of calls for proposals for local authorities and other eligible

partners to implement a selection of local priority projects, inter alia attracting investments of migrant capital into local projects on sustainable development;

Absence of conflicts of interest.

The implementation by this entity entails the assistance to local communities, authorities and businesses in the development and implementation of green, clean and resource efficient policies and pilot replicable projects in the areas of energy efficiency, district heating, small-scale renewable sources of energy, smart mobility and circular economy. This will contribute to the achievement of Specific Objective 1 "Contribute to the development and implementation of policies and measures effectively supporting the transition to climate neutral, clean, resource efficient and secure energy supply and consumption".

Another parts of this action, aimed at achievement of output 2.1 "A joint EU-Ukraine climate innovation resource centre has been established and delivers services" of Component 2, may be implemented in indirect management with an entity, which will be selected by the Commission's services using the following criterion:

 Experience in delivery of policy advice on energy efficiency, renewables and/or climate action; experience in design and implementation of projects in these areas.

The implementation by this entity entails the establishment and running of a Joint EU-Ukraine Climate Resource Centre, and delivering research, technical assistance and consultancy services on climate innovation policies and projects. This will contribute to the achievement of Specific Objective 2 "Support to climate change mitigation through best practices on climate policies and technologies; containment of GHG emissions by transport and phasing out of ozone depleting substances and fluorinated GHG".

5.3.3 Changes from indirect to direct management mode due to exceptional circumstances

If negotiations with the entity(ies), identified for implementation of outputs 1.1 and 2.1 (as described in section 5.3.2 above) fail, those parts of this action may be implemented in direct management in accordance with the implementation modality provided in section 5.3.1 - Procurement.

5.4 Scope of geographical eligibility for procurement and grants

The geographical eligibility in terms of place of establishment for participating in procurement and grant award procedures and in terms of origin of supplies purchased as established in the basic act and set out in the relevant contractual documents shall apply.

The Commission's authorising officer responsible may extend the geographical eligibility on the basis of urgency or of unavailability of products and services in the markets of the countries concerned, or in other duly substantiated cases where the eligibility rules would make the realisation of this action impossible or exceedingly difficult.

5.5 Indicative budget

	EU contribution (amount in EUR)	Indicative third party contribu- tion, in currency identified
Component 1 "Climate neutral energy production" and Component 2 "Climate change mitigation" composed of:	8 900 000	N.A
- Indirect management with partner(s) TBD – cf. section 5.3.2	6 500 000	N.A
- Procurement (direct management) – cf. section 5.3.1	2 400 000	N.A
Component 3 "Circular economy" composed of:	900 000	N.A
- Procurement (direct management) – cf. section 5.3.1	900 000	N.A
Evaluation (cf. section 5.8) and Audit/ Expenditure verification (cf. section 5.9)	200 000	N.A.
Communication and visibility (cf. section 5.10)	N.A.	N.A.
Total	10 000 000	N.A.

5.6 Organisational set-up and responsibilities

The EU Delegation will ensure coherence among all action components and involved stakeholders. It will carry out routine monitoring of the activities carried out by the contractors. The results indicators and targets will be reviewed on annual basis and revised, if appropriate, in line with the beneficiaries' needs and ambitions.

The organisational set-up of the joint EU-Ukraine Climate resource centre will be defined jointly with the key involved Ukrainian stakeholders.

In order to ensure coordination between the action components and the numerous stakeholders, a Steering Committee, involving the institutions listed in section 1.4 above, will be established to guide the action implementation. The Committee will also include representatives of the involved local authorities, the implementing partners, key climate action and energy efficiency CSOs and the EU Delegation, and may include also other stakeholders and donors. It will meet at least on semi-annual basis, to be agreed during the inaugural meeting of the partners of this action. This will be supplemented by regular meetings at component level.

5.7 Performance and Results monitoring and reporting

The day-to-day technical and financial monitoring of the implementation of this action will be a continuous process, and part of the implementing partners responsibilities. To

this aim, the implementing partners shall establish a permanent internal, technical and financial monitoring system for the action and elaborate regular progress reports (not less than annual) and final reports. Every report shall provide an accurate account of implementation of the action, difficulties encountered, changes introduced, as well as the degree of achievement of its results (outputs and direct outcomes) as measured by corresponding indicators, using as reference the Logframe matrix or the partners strategy.

Reports shall be laid out in such a way as to allow monitoring of the means envisaged and employed and of the budget details for the action. The final report, narrative and financial, will cover the entire period of the action implementation.

The components of the action will be subject to Results Oriented Monitoring (ROM) reviews.

5.8 Evaluation

Final evaluations will be carried out for this action and/or its components via independent consultants contracted by the Commission.

A mid-term evaluation may be carried out for problem solving purposes, with particular attention to the level of expected results achievement and corrective measures in case of deviations or lack of effectiveness. The final evaluation will be carried out for accountability and learning purposes at various levels (including for policy revision), taking into account the fact that this actions serves as a preparatory one for a large-scale green growth program.

The evaluation reports shall be shared with the partner country and other key stakeholders. The implementing partners and the Commission shall analyse the conclusions and recommendations of the evaluations and, where appropriate, in agreement with the partner country, jointly decide on the follow-up actions to be taken or any adjustments necessary, including, if indicated, the reorientation of the project.

Evaluation services may be contracted under a framework contract.

5.9 Audit

Without prejudice to the obligations applicable to contracts concluded for the implementation of this action, the Commission may, on the basis of a risk assessment, contract independent audits or expenditure verification assignments for one or several contracts or agreements.

It is foreseen that audit services may be contracted under a framework contract.

5.10 Communication and visibility

Communication and visibility of the EU is a legal obligation for all external actions funded by the EU.

This action shall contain communication and visibility measures which shall be based on a specific Communication and Visibility Plan of the Action, to be elaborated at the start of implementation.

In terms of legal obligations on communication and visibility, measures shall be implemented by the Commission, the partner country, contractors, grant beneficiaries and/or entrusted entities. Appropriate contractual obligations shall be included in, respectively, the financing agreement, procurement contracts and delegation agreements.

The Communication and Visibility Requirements for European Union External Action (or any succeeding document) shall be used to establish the Communication and Visibility Plan of the Action and the appropriate contractual obligations.

Appendix 1: Glossary

• Appendix 2: Indicative Logframe Matrix (for Project Modality)

APPENDIX 1 - GLOSSARY

AA Association Agreement between the EU and Ukraine

ATC Amalgamated Territorial Communities or *Hromadas*

CoM Cabinet of Ministers of Ukraine

CS Controlled Substances

CSO Civil Society Organisation

CTCN Climate Technology Centre and Network - the operational arm of

the UNFCCC Technology Mechanism

DCFTA Deep and Comprehensive Free Trade Area

DGs Directorates General

E5P Eastern Europe Energy Efficiency and Environment Partnership

EaP Eastern Partnership

EC European Commission

ECS Energy Community Secretariat

ETS Emissions Trading System

EU European Union

EUD European Union Delegation

F-gases Fluorinated Greenhouse Gases

GCF Green Climate Fund

GDP Gross Domestic Product

GEF Global Environmental Facility

GHG Greenhouse gases

GoU Government of Ukraine
HFC Hydrofluorocarbons

HCFC Hydrochlorofluorocarbons

ICT Information and Communication Technologies

IFI International Financial Institution

LEDS Low greenhouse-gas Emission Development Strategies

LULUCF Land Use, Land Use Change and Forestry

Ministry of Economic Development, Trade and Agriculture of

Ukraine

MEEP Ministry of Energy and Environment Protection of Ukraine

MCTD Ministry of Communities and Territories Development

MMR/MR Monitoring Mechanism Regulation

MRV Monitoring, Reporting, and Verification

NAP National Adaptation Plan

NDC Nationally Determined Contribution

NIF / NIP Neighbourhood Investment Facility / Neighbourhood Investment

Platform

NSSD National Strategy for Sustainable Development

NTSU National Transport Strategy of Ukraine

ODS Ozone Depleting Substances

OECD Organisation for Economic Cooperation and Development

PAR Public Administration Reform

SDG Sustainable Development Goals

U-LEAD Ukraine – Local Empowerment, Accountability and Development

Programme (EU-funded)

UN United Nations

UNDP United Nations Development Programme

UNFCCC United Nations Framework Convention on Climate Change

WB World Bank

APPENDIX 2 - INDICATIVE LOGFRAME MATRIX (FOR PROJECT MODALITY)

	Intervention logic	Indicators	Baselines (incl. reference year)	Targets (incl. reference year)	Sources and means of verification	Assumptions
Overall objective: Impact	ToTo contribute to the rendering of Ukrainian economy modern, clean, resource-efficient and competitive, with economic growth decoupled from resource use, and citizens' health and well-being protected from environment-related risks and impacts;	Trend in GHG emissions versus GDP trend	885.1 million tons CO2 equiv. (incl. LULUCF) in 1990 2017 Greenhouse Gas Emissions decreased by 7% compared to 2016, while GDP rose by 2.5%.	31-34% of 1990 level emissions by 2030	National Inventory of GHG submitted to the UNFCCC Ukrainian Nationally Determined Contributions to Paris Agreement GDP dynamics data to come from the Ukrainian State Statistics Service, National Bank of Ukraine, IMF, World	
		GDP rate	3.2% growth rate in 2019	Positive trend in 2021-2- 26	Bank	
		Unemployment rate Poverty headcount ratio at	9.3% in 2019	At least 1% reduction in 2021-2026		

		national poverty lines (% of population) GDP rate in industry	2.4% in 2017	At least 1% reduction in 2021-2026		
		Net Foreign Direct Investment (% of GDP) Current Account Balance (% of GDP)	-2% in 2019 2.1 in 2019	Positive trend in 2021-2026		
		Lower middle income poverty rate WHO environmental burden of disease indicator (DALYs	-0.7 in 2019			
		(Disability Adjusted Life Year)/1000 capita)	0.3 in 2019 43 in 2009			
	To contribute to the achievement of climate neutrality inin Ukraine by 2070.	Level of GHG emissions	310.7 million tons CO2 equiv. (incl. LULUCF) in 2017	No GHG emissions in 2070		
Specific objective:	Development and implementation of policies and measures effectively supporting the	Level of fossil fuel subsidies	Still significant fossil fuel subsidies in 2020	No fossil fuel subsidies in 2026	Adoption and implementation of Government's decisions on the	Overall political, macroeconomic and financial stability in the

	_				
transition to climate				cancellation of fossil	country.
neutral, clean, resource				fuel subsidies	Government is committed to
efficient and secure				Raised GHG emissions	implement the Association
energy supply and		TTATT 10		tax is introduced by the	Agreement with the EU.
consumption	Level of GHG emission tax	UAH 10 per ton (2020)	At least EUR 40 per ton in 2026	Law on State Budget of Ukraine for 2026	COVID-19 pandemic is contained.
				Statistical data of MEEP	The sharp decline in the global oil and gas markets does not undermine clean
	Share of coal fuel in the energy generation.	31 % – the share of coal burning energy generation in the	10 % – the share of coal burning energy generation in the electric		energy transitions by reducing the impetus for energy efficiency policies.
		electric energy production in 2018.	energy production in 2030.		Decentralisation process is not stalled with revert trends
2. Support to climate change mitigation through the reduction of					of revenue and authority centralisation.
emissions of greenhouse gases and ozone	Share of use of public transport in cities	About 43% in 2019	60% in 2030	Statistical data by the	No populistic allegedly "poverty alleviating"
depleting substances	Share of city roads safe for cycling and micro-mobility	Less than 5% in 2019	50% in 2030	Ministry of Infrastructure	decisions to the detriment of environment
	% of population in cities using cycling and micro-mobility	Less than 1% in 2019	10% in 2030		Sustainable development and climate action are included in the new Government's priorities,
	Share of use of private electric transport means	Less than 1% in 2019	Over 20% in 2030		despite changes in the Government.
	Share of use of electric transport	2017			

	means in cities' public transport GHG emissions by transport	54% in 2018 35 millions of tons of CO2 equiv. in 2017	75% in 2030 Less than 25 millions of tons of CO2 equiv. by 2030	National Inventory Report on GHG emissions	Economic and poverty conditions in the country do not deteriorate to the extent distracting the public attention away from the environmental issues
	Fiscal measures discouraging use of outdated emitting vehicles and fossil fuels	Excise duties for fossil fuels and for vehicles using fossil fuel exist since 2015 and depend on	More strict fiscal measures discouraging using outdated vehicles introduced by 2026	Tax Code of Ukraine	
	Funding for projects related to green transport modes, in particular rail infrastructure and rolling stock, from the UAH 72 billion Road fund.	the vehicles' age		Reports on the use of the Road Fund	
	State aides to airlines based in Ukraine would made conditional on reducing their carbon footprint through a pledge to reduce short-haul flights, increased cooperation with Ukrainian railways and heavier use of eco-friendly	None n 2019	Ecological conditions to the state aids to airlines introduced by 2026 No use of HCFCs by 2030 10% reduction of HFC use by 2032	Adoption and implementation of legal acts on state aid to airlines by the Government and the Parliament of Ukraine	
3. To stimulate a shift to a clean and circular economy through the development and implementation of facilitating policies and	Hydrochlorofluorocarbons (HCFC) consumption Use of hydrofluorocarbons			Data from the State	

effective supporting	(HFCs)	HCFC are still in		Statistics Service and	
measures and awareness	(use in 2020		by MEEP based on the	
raising				reports required from	
				economic operators	
		Not available		•	
				Data from State	
				Customs Service	
		Precise data are not			
		available, however			
	Decreased illegal trade in	there are complaints	To be established by a		
	HCFCs and HFCs	from the EU	survey at the end of the		
		Member States on	project		
		the HFC imports			
		through Ukraine			
		To be established			
	Number of goods with	by a survey at the		Official publications of	
	improved durability, reusability,	beginning of the		regulatory acts by the	
	upgradability and reparability,	project		Parliament and the	
	with higher share of recycled			Government	
	content;				
				Sociological surveys,	
	New regulations adopted to			focus groups	
	stimulate circularity in goods				
	with high environmental				
	potential;				
	Consumers prefer more circular				
	products in their daily choices.				

	1.1. Local communities	Number of local projects	None in 2020	At least 10 projects		
	and businesses are better equipped for green, clean and resource efficient policies.	implemented Number of people living in local communities where the projects are implemented	None n 2020	implemented by 2026 At least 100,000 people	Project reports	Local authorities are committed to reforms related to resource efficiency and climate change mitigation
		Local communities are better informed about the opportunities offered by "green" projects	None in 2020	At least 75% of implemented projects are covered by media		
Outputs	1.2. Position of RES in the Ukrainian energy supply is strengthened.	The share of renewable sources in the energy supply in Ukraine	The share of RES in electric energy generation - 8,6 %; 7.6% in heating and cooling systems; 6.6 % in total energy supply. (2017).	To reach 17% of renewables in the total energy consumption by 2030; 70% of the share of RES in electricity production by 2050. A significant part (up to 15%) should be electricity generation from the roof solar power plants in households and businesses.	Reports by the State Agency on Energy Efficiency (SAEE) of Ukraine	Government remains committed to energy efficiency reforms

2.1. A climate innovation resource centre has been established and is instrumental in supporting climate-friendly legislation, technologies and projects.	Legislative proposals, studies, projects, communication initiatives by the Centre. Climate-friendly technology projects launched with consultancy services by the Centre	0 studies in 2010 No projects in 2020 To be established by surveys conducted at the beginning of the project	At least five studies by 2026 At least 20 projects by 2026	Project reports; action plans and reports produced by the centre	Demand for climate consultancy services exists both within the authorities and businesses.
	Public in Ukraine is more convinced of the threats posed by the climate change Businesses more prepared to invest in climate friendly technologies		To be established by surveys conducted at the end of the project	Results of sociological surveys and focus groups	
2.2. Smart mobility is enhanced.	National Action Plan is adopted to reduce the environmental impact by transport;	No National Action Plan in 2020	Adoption of the National Action Plan by 2026	Government's decision on the adoption of the National Action Plan	Authorities are not tempted to take populistic decisions favouring continuing use of outdated vehicles
	Share of railroads in transporting people and cargo	7.5% of passenger transportations made by railways in 2016 20% of cargo	At least 15% of passenger transportations made by railways by 2030 At least 30% of cargos	Statistical data published by the State Statistics Service and	

		transportations	are transported by	the Ministry of	
		made by railways in	railways in 2030	Infrastructure;	
		2016	Tuni ways in 2000	initaga actaro,	
	Replacement rate of inefficient and polluting vehicles in public and private use;		Less than 50% vehicles use fossil fuels by 2030		
	Strategies developed for e- mobility for inland and water transport;	No strategies in 2020	Strategies adopted by 2026	Official publications of legal acts by the Parliament and the	
	Legislation adopted to boost the production and uptake of sustainable alternative fuels for the different transport modes;	No incentives for alternative fuels in 2020	Incentives for alternative fuels introduced by 2026	Government. Tax code of Ukraine	
	Legislation adopted for taxation of movable emission sources and fossil fuels;	No taxation in 2020	Taxation of movable emission sources and fossil fuels introduced n	Official publications of legal acts by the Parliament and the	
	Amendments developed to rules of the road, construction codes etc. to facilitate the safe use of cycling and micro-mobility.	No amendments in 2020	Amendments to rules of the road, construction codes on micro-mobility introduced by 2026	Government.	

2.3. Emissions of GHG and ODS are reliably accounted and gradually phased out.	The new legislation on MRV and ODS and F-gases is in force, with clear and transparent implementing regulations. Reliable data are available on use of HCFCs and HFCs Ukraine ratifies the Kigali Amendment to Montreal Protocol	2019 - no implementing rules for the new MRV and ODS and F-gases legislation are adopted yet 2020 - Kigali amendment is not yet ratified	2024: Implementing rules for monitoring and reporting on GHG emissions and Controlled substances are in force, reports by economic operators are collected and analysed by the MEEP, registry of economic operators is established Kigali amendment to Montreal Protocol is ratified by 2026	Reports on GHG emissions and on the use of Controlled Substances (ODS and F-gases) are produced by the MEEP Parliament's decision on the ratification of Kigali Amendment to	Lobby from industries using HCFCs and HFCs is not strong enough to block the phasing down.
3.1. Move to a clean and resource efficient circular economy has been accelerated.	Barriers to the expansion of markets for circular products are identified; Enabling legislation adopted for establishing a market for byproduct and secondary raw materials; incentivising productas-a-service or other models where producers keep the	List of barriers to be established No enabling legislation in 2020	At least 30 % of identified barriers are removed by 2026 Enabling legislation adopted by 2026	Montreal Protocol Project reports; legislation acts adopted Official publications of te Ukrainian legislation acts	Economic and poverty conditions in the country do not deteriorate to the extent distracting the public attention away from the environmental issues

high environmental impact are identified to develop new regulatory approaches; Surveys of businesses and consumers demonstrate increase of offer and use of goods To be established by the final surveys Project reports; concept and planning documents developed by Government bodies To be established by the final surveys Project reports; results of sociological surveys
Surveys of businesses and consumers demonstrate increase final surveys Project reports: results