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ANNEX III

of the Commission Implementing Decision on the Multiannual action plan in favour of Armenia for 2022-2023

Action Document on Sustainable energy, energy security and climate resilience in rural Armenia

MULTIANNUAL ACTION PLAN 2022-2023

This document constitutes the multiannual work programme in the sense of Article 110(2) of the Financial Regulation, and action plan/measure in the sense of Article 23(2) of NDICI-Global Europe Regulation.

1. SYNOPSIS

1.1. Action Summary Table

1. Title OPSYS Basic Act	Sustainable energy, energy security and climate resilience in rural Armenia Multiannual action plan in favour of Armenia for 2022-2023 OPSYS business reference: NDICI-GEO-NEAR /2022/ACT-60866 ABAC Commitment level 1 number JAD.1048032 Financed under the Neighbourhood, Development and International Cooperation Instrument (NDICI-Global Europe).
2. Team Europe Initiative	No
3. Zone benefiting from the action	The action shall be carried out in the Republic of Armenia
4. Programming document	EU-Armenia Multiannual Indicative Programming Document (MIP) 2021-2027 ¹
5. Link with relevant MIP(s) objectives/expected results	Priority area 3- Environmental and climate resilience
PRIORITY AREAS AND SECTOR INFORMATION	
6. Priority Area(s), sectors	Energy generation, renewable sources - 23210

¹ Commission implementing decision adopting a multiannual indicative programme for Armenia for the period 2021-2027 C(2021)9435 on 16.12.2021

7. Sustainable Development Goals (SDGs)	Main SDG: SDG 7 Ensure access to affordable, reliable, sustainable and modern energy for all Other significant SDGs (up to 9) and where appropriate, targets: SDG 01: No Poverty SDG 03: Good Health and Well-being SDG 05: Gender Equality SDG 06: Clean Water and Sanitation SDG 09: Industry, Innovation and Infrastructure SDG 11: Sustainable Cities and Communities SDG 12: Responsible Consumption and Production SDG 13: Climate Action			
8 a) DAC code(s) ²	41010 – Environmental policy and administrative management 23110 – Energy policy and administrative management 11110 – Education policy and administrative management			
8 b) Main Delivery Channel	47000 – Other multilateral organisations			
9. Targets	<input type="checkbox"/> Migration <input checked="" type="checkbox"/> Climate <input checked="" type="checkbox"/> Social inclusion and Human Development <input checked="" type="checkbox"/> Gender <input type="checkbox"/> Biodiversity <input type="checkbox"/> Human Rights, Democracy and Governance ³			
10. Markers ⁴ (from DAC form)	General policy objective	Not targeted	Significant objective	Principal objective
	Participation development/good governance	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	Aid to environment	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
	Gender equality and women’s and girl’s empowerment	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	Reproductive, maternal, new-born and child health	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Disaster Risk Reduction	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Inclusion of persons with Disabilities	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

² DAC sectors (codes and descriptions) are indicated in the first and fourth columns of the tab ‘purpose codes’ in the following document: <http://www.oecd.org/dac/financing-sustainable-development/development-finance-standards/dacandcrscodelists.htm>

³ Thematic target for geographic programmes (at least 15%) in delegated act.

⁴ For guidance, see <https://www.oecd.org/development/financing-sustainable-development/development-finance-standards/> (go to “Data collection and resources for reporters”, select Addendum 2, annexes 18 (policy) and 19 (Rio) of the reporting directive). If an action is marked in the DAC form as contributing to one of the general policy objectives or to RIO principles as a principal objective or a significant objective, then this should be reflected in the logframe matrix (in the results chain and/or indicators).

	Nutrition	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	RIO Convention markers	Not targeted	Significant objective	Principal objective
	Biological diversity	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Combat desertification	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	Climate change mitigation	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
	Climate change adaptation	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
11. Internal markers and Tags	Policy objectives	Not targeted	Significant objective	Principal objective
	Digitalisation	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Tags	YES	NO	/
	digital connectivity	<input type="checkbox"/>	<input type="checkbox"/>	
	digital governance	<input type="checkbox"/>	<input type="checkbox"/>	
	digital entrepreneurship	<input type="checkbox"/>	<input type="checkbox"/>	
	digital skills/literacy	<input type="checkbox"/>	<input type="checkbox"/>	
	digital services	<input type="checkbox"/>	<input type="checkbox"/>	
	Connectivity	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Tags	YES	NO	/	
digital connectivity	<input type="checkbox"/>	<input type="checkbox"/>		
energy	<input checked="" type="checkbox"/>	<input type="checkbox"/>		
transport	<input type="checkbox"/>	<input type="checkbox"/>		
health	<input type="checkbox"/>	<input type="checkbox"/>		
education and research	<input type="checkbox"/>	<input type="checkbox"/>		
Migration	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Reduction of Inequalities	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
COVID-19	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
BUDGET INFORMATION				
12. Amounts concerned	Budget line(s) (article, item): 14.020111 Eastern Neighbourhood Total estimated cost: EUR 6 500 000 Total amount of EU budget contribution EUR 6 500 000			
MANAGEMENT AND IMPLEMENTATION				
13. Implementation modalities (type of financing and management mode)	Project Modality Indirect management with the entity to be selected in accordance with the criteria set out in section 4.3.1			

1.2. Summary of the Action

The updated Nationally Determined Contribution (NDC)⁵, the National Adaptation Plan (NAP) and the Decree on Inter-agency Climate Council adopted by the Government of Armenia (GoA) in 2021⁶ define the green transition and climate resilience as the strategic priorities for Armenia and appoint the Deputy Prime Minister to manage the climate related policy. In line with this policy, the Ministry of Environment builds its activities on the principles of green, resilient and low carbon growth, which entail scalability of adaptation and bankability of mitigation efforts, ranging from reforestation at scale, to investments in renewable energy and energy efficiency.

By 2030, Armenia's target is to reach 15% of solar energy share within the total energy production, and the share of zero-emission power generation in the total to reach 54%⁷. This goes in the direction of the European Green Deal⁸ principles, which serve as a guidance and ambition scale for Armenia's path towards green recovery and sustainable development. Therefore, this Action will work in parallel with the regional EU support to Decarbonisation and Climate Adaptation in Armenia, ultimately aiming to put Armenia on track towards climate neutrality by 2050⁹.

This Action builds on the donor mapping and gap analysis carried out in the framework of the High-level Energy Efficiency Initiative at the beginning of 2019¹⁰, the Comprehensive and Enhanced Partnership Agreement (CEPA) Implementation Roadmap¹¹, as well as the list of priority projects of the Government of Armenia. The investment potential for energy efficiency in buildings is estimated to over EUR 3 billion and energy savings could reach up to 60%. The Action is in line with the Multi-Annual Indicative Programme 2021-2027 priorities for Armenia (i.e. connectivity, energy efficiency, environment and climate change, agriculture components) and complements the ongoing work under EU4Climate¹² and EU4Energy as well as the planned Action Document for Supporting Decarbonisation, Climate Resilience and Energy Security in the Eastern Partnership. It supports CEPA implementation, and contributes to the European Green Deal and the commitments taken under the Paris Agreement.

The Action aims to alleviate energy poverty, increase energy security and independence, as well as contribute to climate change mitigation and the preservation of natural resources and ecosystem services in Armenia. The action will also contribute to increasing the climate resilience of the rural population by improving access to energy efficiency and sustainable energy solutions. The innovative approaches will be piloted in households, particularly low-income, and community buildings in four rural areas, namely Tavush, Shirak, Gegharkunik and Syunik marzes, where there is overall difficult access to sustainable

⁵ Armenia's new Nationally Determined Contributions 2021-2030 demonstrate increase in Government's climate ambition. This is to define that country's new mitigation goal to be implemented by 2030 is equivalent to 40% reduction compared to the level of emissions in 1990, which is driven by the energy sector. Being a country that is not a fossil fuel producer, Armenia's transition to carbon neutrality is at the core of the country's energy independence, energy security and green growth. Armenia maintains its 2050 mitigation target of achieving climate neutrality in the second half of this century. This is to be reflected in Armenia's Long Term - Low Emission Development Strategy (LT LEDES) under the Paris Agreement on Climate Change. Government of the Republic of Armenia – Position Paper on the EU-Armenia Cooperation in the framework of the EU Green Deal.

⁶ See Prime Minister of the Republic of Armenia Decree July 6, 2021, N719-A on establishing an Inter-Agency Coordinating Council on implementation of requirements and provisions of the United Nations Framework Convention on climate change and the Paris Agreement, approving its composition and rules of procedure, and on invalidating decree N955-A of the Prime Minister of the Republic of Armenia dated October 2, 2012

⁷ Republic of Armenia Energy Sector Development Strategic Program to 2040. See http://mtad.am/u_files/file/energy/Energy%20Strategy_%20Jan%2014%202021_English.pdf

⁸ COM(2019) 640 final.

⁹ See EU4Climate <https://eu4climate.eu/armenia/>

¹⁰ See European Commission https://energy.ec.europa.eu/topics/energy-efficiency/energy-efficiency-targets-directive-and-rules/energy-efficiency-directive_en

¹¹ European Commission EEAS https://www.eeas.europa.eu/eeas/eu-and-armenia-comprehensive-and-enhanced-partnership-agreement-enters-force_en

¹² EU4Climate, Climate policy development and advancing cooperation with the EU in Armenia.

energy¹³. Some solutions to realise potential energy savings, to increase renewable energy generation, and to reduce dependency on fuel wood or imported fossil energy include, but are not limited to, i) efficient equipment, such as improved heating and cooking stoves in combination with substitution of fuel wood, ii) better insulation of buildings, iii) production of hot water through solar thermal heaters, and iv) photovoltaic-installations. Further energy savings will be achieved through raising public awareness concerning the benefits of energy efficiency, renewable energy sources and changing practices and behaviours among local work force and citizens.

2. RATIONALE

2.1. Context

Armenia is a landlocked country, bounded to the north and east by Georgia and Azerbaijan, and to the southeast and west, respectively, by Iran and Turkey. Borders with two of its neighbours, Azerbaijan and Turkey, are currently closed. Based on the criteria by the Development Assistance Committee of the Organisation for Economic Co-Operation and Development (OECD/DAC), Armenia is an upper middle-income country with projected Gross Domestic Product (GDP) per capita of USD 5.080 in 2022¹⁴. Following the 7,4% drop in GDP in 2020 caused by the COVID-19 outbreak and the hostilities in and around Nagorno-Karabakh, the economic recovery is expected at 3,5%¹⁵ or even higher 4,5%¹⁶ in 2022. The economic recovery, however, is slowed down by the weak connectivity, the aging population and consequent fiscal challenges, while geopolitical tension undermine investors' confidence.

Armenian population is estimated at 2.963 million¹⁷ out of which 64% live in urban areas and 36% live in rural areas. According to the National Statistics Service¹⁸ in 2020, 57 % of the urban population live in the capital city of Yerevan. As of 1 of January 2021¹⁹, 47.2 % of the population of the country were men, and 52.8% were women. Poverty rate in 2019 (described as income equal or less than USD 5.5/day 2011 purchasing power parity (PPP) terms) amounted to 44%²⁰. The proportion of women suffering from poverty is higher than that of men (54.7% and 45.3% respectively). The poverty rate in Lori, Tavush and Armavir marzes is higher than the country average poverty rate of 23.5%²¹. Shirak marz is the poorest in Armenia and the least poor region is Syunik (42.2% and 12% respectively). The majority of the extremely impoverished people live in the regions of Aragatsotn and Gegharkunik²².

High poverty has become a negative factor in the climate change track of the country as it is one of the reasons for deforestation in Armenia due to unaffordability of gas and electricity for heating. The Government is making efforts to improve the situation, thus, the Armenian Development Strategy (ADS) for 2014-2025²³ sets out national development objectives and includes energy and environmental priorities. It describes incentive mechanisms for environmentally friendly operations, energy and resource preserving (including the

¹³ Armenian Ministry of Environment's needs assessment conducted in public buildings shows margin of manoeuvre for integration of rooftop PV for net metering connection with the grid which may be implemented with modification of rooftop with land-mounted systems (35 Kw).

¹⁴ IMF: <https://www.imf.org/external/datamapper/NGDPDPC@WEO/OEMDC/ADVEC/WEOWORLD/ARM>

¹⁵ ADB: <https://www.adb.org/countries/armenia/economy>

¹⁶ IMF: <https://www.imf.org/en/Countries/ARM>

¹⁷ ibid

¹⁸ National Statistical Committee of the Republic of Armenia: The Demographic Handbook of Armenia
https://www.armstat.am/file/article/demog_2021_2_.pdf

¹⁹ ibid

²⁰ IMF: <https://www.imf.org/en/Countries/ARM>

²¹ Armenia – Poverty Snapshot over 2008-2018 https://armstat.am/file/article/poverty_2019_english_2.pdf

²² https://euneighbourseast.eu/wp-content/uploads/2022/03/eu4genderhelpdesk_armeniagenderprofile.pdf

²³ The Asian and Pacific Energy Forum :
https://policy.asiapacificenergy.org/sites/default/files/Development%20Strategy%20of%20the%20Republic%20of%20Armenia%20for%202014-2025_ENG.pdf

introduction of the principles of public-private partnership), and the maximum use of Armenia's own sources, especially renewable sources, as well as diversification of energy supplies and regional integration. In turn, the priorities of the Armenian Transformation Strategy 2050 adopted in 2020²⁴, include clean and green environment, sustainable regional development, productive and responsible agriculture, as well as renewable and accessible energy.

Armenia is highly dependent on imported fuel. In 2019, the country produced 7,7 TWh of electricity, of which natural gas covered 40%, hydro 31%, and nuclear 29%. Natural gas represents over 80% of Armenia's energy imports (2.1 Mtoe out of 2.6 Mtoe in 2019), followed by oil imports (0.5 Mtoe in 2019). Russia is the main supplier of natural gas to Armenia (85% in 2019), with the rest of imports coming from Iran. Armenia pays for gas supplies from Iran by exporting electricity²⁵. The dependence of Armenia on fossil fuels supplied mostly by a single supplier is concerning with regards to sustainability of energy supply.

The Energy Sector Development Strategic Programme of Armenia adopted in January 2021 defines the Armenia Government's priorities in the energy sector development up to 2040²⁶. These priorities include among others, the maximum use of the country's potential for renewable energy and energy efficiency. The Government aims to increase the share of solar power generation at least 15% of total generation by 2030. For that purpose solar PV plants with total installed capacity of 1,000 MW will be constructed, including 300 MW by 2024. (Government Decision N 248-L dated 3 March, 2022). In 2020, PV installations amounted to 95 MW and made up 3% of the electricity generating capacity²⁷. Some increase in wind power is expected, although the sites with the highest wind potential are located in the remote areas with low density of population.

The program and 1st phase Action plan on Energy Saving and Renewable Energy for 2022 to 2030 adopted by Government Decision N398-L on 24 March 2022, aims at increasing economic and energy security, power system reliability, strengthening economic and energy independence, promoting energy efficiency and renewable energy based on new production and services organization as well as reducing man-made impact on environment and human health.

In parallel, on 29 April 2022 the Government of Armenia has formally requested the reallocations of the funds within the Financing Agreement ENI/2019/042-021 – EU4 Energy Efficiency and Environment to enable piloting innovative and scalable energy efficiency solutions, alongside the enhancement of the institutional set-up and developing and enforcing relevant laws and regulations. Improve protection of Lake Sevan would be increased to 7 700 000 EUR from the initially foreseen amount of EUR 5,000,000. This reallocation would serve to pilot innovative and scalable energy efficiency solutions under the indirect management led by Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH.

Armenia is a signatory to the Paris Agreement and is committed to stop and reverse the severe deforestation observed in the country. The latest Nationally Determined Contribution (NDC) of 2021, the National Adaptation Plan (NAP) and the decree on Inter-agency Climate Council adopted by the Government of Armenia (GoA) in 2021, appoint climate related decision-making to the office of the Deputy Prime Minister. In this context, the GoA considers the prospect for the EU-Armenia cooperation within the European Green Deal a unique opportunity to make the country's vision towards green transition and climate resilience a reality. The Ministry of Environment's vision rests on the principles of green, resilient and low carbon growth, which entail scalability of adaptation and bankability of mitigation efforts, ranging from reforestation at scale, to investments in renewable energy and energy efficiency.

Armenia has signed in November 2017 the Comprehensive and Enhanced Partnership Agreement (CEPA) with the European Union, which entered into force on 1 March 2021, and pledged to ensure its implementation through domestic reforms and building stronger cooperation with the EU. The energy efficiency provisions of

²⁴ <https://armenianweekly.com/2020/09/23/armenia-transformation-strategy-2050-briefly-explained/>

²⁵ IEA: <https://www.iea.org/reports/armenia-energy-profile>

²⁶ IEA: <https://www.iea.org/reports/armenia-2022>

²⁷ IRENA: https://www.irena.org/IRENADocuments/Statistical_Profiles/Eurasia/Armenia_Eurasia_RE_SP.pdf

the CEPA include requirements to align with key EU policies on energy efficiency, such as the Energy Efficiency Directive (EED) and the Energy Performance of Buildings Directive (EPBD). The EU-Armenia Partnership Priorities agreed in 2018²⁸ continue to shape the cooperation agenda and remain a solid programming basis for the period of 2021-2027. The Multiannual Indicative Programme 2021-2027 for Armenia²⁹ includes sustainable energy in the framework of the specific objectives (SO) 3 “Decarbonisation, scaling up renewable energy generation and improving energy efficiency and security, mitigation and adaptation to climate change impacts”, belonging to the priority area (PA) 3 “Environmental and climate resilience”. One of the focus areas set in the Annual Action Programme 2022 for Armenia is climate resilience: Thus, this Action also aims at improving the policy and regulatory framework and local capacity in affordable energy efficiency (EE) and sustainable energy solutions and their implementation. Synergies with regional EU initiatives are also envisaged.

In line with the green transition agenda and Armenia’s commitment to the Paris agreement, this Action will target reduction of energy consumption and consequently greenhouse gas emissions in the rural areas of Armenia. Further climate change actions will be implemented in line with the EU’s Joint Communication on the Eastern Partnership policy beyond 2020³⁰ as well as under the Economic and Investment Plan flagships³¹ with EU blending support under the Neighbourhood Investment Platform (NIP)³².

At the regional level, the EU4Energy programme (EU contribution EUR 3 million) supports Armenia in the transposition and implementation of energy-related *Acquis* under the CEPA, including on energy efficiency and electricity market reform. The programme also supports the reform of the gas market in accordance with EU best practice. Moreover, the EU4Climate programme (EU contribution EUR 8 million) is ongoing and supports Armenia’s Nationally Determined Contribution commitment, with the goal to identify a realistic implementation strategy to limit greenhouse gas emissions and prioritisation of adaptation measures for coping with risks to the country’s sustainable development. The EU4Climate programme also assists in developing the Programme on Energy Saving and Renewable Energy of Armenia for 2022-2030, which is considered the Low-emission Development Strategy (LEDS) in the energy sector.

In the framework of blending, energy investment projects (total amount of EUR 360.7 million) implemented through the NIP/Eastern Europe Energy Efficiency and Environment Partnership in Armenia include recent examples such as:

- EUR 3.2 million investment grant in the Masrik Solar Power Plant in Armenia;
- EUR 0.35 million investment grant in the Caucasus Transmission Network (Back-to-Back Converter Station; Substation; Transmission line);
- EUR 11.47 million investment grant in the Armenian Public Buildings Energy Efficiency Programme (Kindergartens; Universities);
- EUR 5 million investment grant in Yerevan Energy Efficiency in Buildings (Kindergartens);
- EUR 3.9 million investment grant in Yerevan and Gyumri Street Lighting Modernisation.

²⁸ [eu-armenia_partnership_priorities_0.pdf \(europa.eu\)](#).

²⁹ [C_2021_9435_F1_ANNEX_EN_V2_P1_1621110.PDF \(europa.eu\)](#).

³⁰ JOIN(2020) 7 final.

³¹ SWD(2021) 186 final.

³² Officially launched in 2008 as the Neighbourhood Investment Facility (NIF), the Neighbourhood Investment Platform (NIP) is a mechanism aimed at mobilising additional funding to finance capital-intensive infrastructure projects in EU partner countries covered by the European Neighbourhood Policy (ENP) in sectors such as transport, energy, environment and social development. The NIP also supports the private sector, mainly through investment grants and risk capital operations targeting small and medium-sized enterprises.

2.2. Problem Analysis

Short problem analysis

In 2018, 23,5% of the population of Armenia lived below the national poverty line³³. Following the hostilities in and around Nagorno-Karabakh and the COVID-19 pandemic, poverty rate has increased by 7% in 2020 as reported by the World Bank³⁴.

Armenia is ranked as fourth among Europe and Central Asian countries in its very high exposure and sensitivity to climate change³⁵. The vulnerability to the threats of climate change is especially high due to very low adaptation capacity. Forests play a critical role in enhancing the country's resilience and potential to cope against the risks that are already happening due to climate change and foreseen to further escalate according to the Intergovernmental Panel on Climate Change (IPCC).

The Armenian population also faces pronounced fuel poverty (defined as use of over 15-20% of disposable income on energy in heating months), especially in rural areas, where 7-12 % can be considered as energy poor³⁶. Communities that use wood are so-called energy-poor communities and include non-gasified communities, gasified communities where gas fees are unaffordable for most of the community members, as well as communities that are remote and/or adjacent to forests and/or to the border. The findings of the Gap Analysis for Buildings Energy Efficiency implemented under the High-Level Initiative on Energy Efficiency³⁷ indicate under Gap 6 that reasons for untapped energy savings potential are the absence of energy efficiency (EE) product and service delivery mechanisms for rural households, as well as the lack of awareness on the benefits of energy efficiency among decisions makers, service vendors and end-users. Other gaps include incomplete legal-regulatory reforms and enforcement, insufficient technical and institutional capacities of energy efficiency promoters, lack of tailor-made and affordable financing schemes for upscaling investments.

The electricity and natural gas tariffs in Armenia are at cost-recovery rate and do not have explicit energy tariff subsidies, which makes them unaffordable for more than 40% of population. Thus, despite almost universal access to electricity and gas supply, fuelwood remains the choice for many urban citizens, and nearly every rural households (HHs). Using fuelwood in rural areas as major heating choice relates to socio-economic conditions (mainly high poverty levels, high level of indebtedness due to agricultural farming investments), and forest proximity.

Housing sector is the Armenia's largest energy-consuming sector and buildings account for around 40% of the electricity demand and over 25% of the gas demand. The buildings stock in Armenia comprises mainly buildings with very high energy losses. The potential for energy savings in Armenia's building sector estimated by the National Program on Energy Saving and Renewable Energy amounts to 40%. However, the full use of this potential is obstructed by several barriers:

- Lack of funds - 76% of HHs surveyed in 2019³⁸ noted the lack of finance as the main obstacle for solving the efficiency issues. Thus, most rural HHs would only try basic, low-cost measures due to income constrains. More affluent rural dwellers could afford more intensive EE retrofits. Lower-income rural dwellers can afford the comprehensive EE measures only if significant co-financing grant is available.
- Lack of knowledge by HHs on the benefits from implementing EE and renewable energy (RE) measures. There are several EE solutions available in Armenia (e.g. EE windows, insulating materials) as well as a broad spectrum of high-efficiency biomass stoves and boilers, but vendors report low

³³ Armenia – Poverty Snapshot over 2008-2018 https://armstat.am/file/article/poverty_2019_english_2.pdf

³⁴ ARKA News: http://arka.am/en/news/society/world_bank_poverty_rate_in_armenia_jumped_to_over_51_percent_in_2020/

³⁵ FAO: <https://www.fao.org/europe/news/detail-news/en/c/1411866/>

³⁶ GIZ: Astghine Pasoyan, Nune Sakanyan, Energy demand, supply and efficiency in rural Armenia: baseline data collection and analysis, GIZ, December, 2019.

³⁷ UNECE: <https://unece.org/sustainable-energy/regional-advisory-services/gap-analysis-and-national-studies>

³⁸ GIZ: Astghine Pasoyan, Nune Sakanyan, Energy demand, supply and efficiency in rural Armenia: baseline data collection and analysis, GIZ, December, 2019.

demand. Straw is abundant and can be converted to bio fuel. All these technical solutions have varying levels of readiness for market penetration depending on their prices, availability throughout the country, and effectiveness in mitigating the environmental impacts of energy use (i.e. saving energy while saving the environment).

- Low institutional capacity. Armenia does not have a dedicated energy agency to coordinate energy efficiency policy development and implementation across relevant ministries and departments.
- Lack of knowledge and capacity of the local educational and health branches concerning possible EE and RE measures.

The public service buildings in rural area most times lack heating and constant source of water heating. The Ministry of Environment implemented a study of the urgent needs in water solar heaters and photovoltaic panels, including a list buildings in the Astghadzor Community - The Centre of Primary Healthcare of Astghadzor and the Secondary school, Yeros Community - the nursery-kindergarten, Martuni community 3 schools, arts school and a kindergarten, Tsovagyugh community - the Municipality of Tsovagyugh, the Centre of Primary Healthcare, the kindergarten and the secondary school, Vardenik Community (Gegharkunik Marz) - three public schools, one musical school, Vardenik Health Centre SNCO and one kindergarten.

There is positive experience of using renewable energy sources for heating in rural areas in other regions, for example Syunik, where renewable sources were also utilised for economic diversification: three small scale biogas plants have been constructed in Shaki, Shaghat and Angeghakot villages in the Syunik marz, which were used for heating three greenhouses with 120 m² surface³⁹.

In the three target marzes selected by the Ministry of Environment (i.e. Tavush, Shirak and Gegharkunik) and the Syunik marz, the use of fuelwood is particularly pronounced as indicated in the table 1. Tavush marz is a major source of water in Armenia and most of its territory is covered with thick forests. In 2018, the poverty level accounted for 25,6%⁴⁰. Shirak is the poorest marz with the poverty level of 42,2%⁴¹. Almost 54%⁴² of the households use wood for heating although its plains are not covered with the forest. Gegharkunik is the largest marz in Armenia, although 24% of its territory is covered by Lake Sevan⁴³, the largest lake in Transcaucasia and a major tourist attraction of the marz. The poverty level is 22,4%⁴⁴. Syunik is the richest region in Armenia, endowed with mineral resources, rich forest (12.17% of the total land is covered by forest) and alpine meadows. Syunik cluster villages are mountainous communities located on altitudes between 1710 and 1800 meters above sea level. The dominant branches of economy are agriculture and industry, contributing to the regional output respectively with 61.9% and 23.8%⁴⁵.

Nevertheless, poverty does not seem to be the most important factor influencing the decision to use fuel wood for heating. As presented in table 1, the use of fuelwood in the least poor marz is higher than in the poorest one.

³⁹ PRDP projects ENPI/2016/381-876

⁴⁰ Statistical Committee of the Republic of Armenia, Social Snapshot and Poverty in Armenia, 2019, https://armstat.am/file/article/poverty_2019_e_2.pdf

⁴¹ *ibid*

⁴² GIZ: Astghine Pasoyan, Nune Sakanyan, Energy demand, supply and efficiency in rural Armenia: baseline data collection and analysis, GIZ, December, 2019

⁴³ https://en.wikipedia.org/wiki/Gegharkunik_Province

⁴⁴ Statistical Committee of the Republic of Armenia, Social Snapshot and Poverty in Armenia, 2019, https://armstat.am/file/article/poverty_2019_e_2.pdf

⁴⁵ Syunik Region 2017-2025 development Strategy

Table 1: Use of fuelwood in the four target marzes of the Action

Marz	Forest, %	Poverty Level, %	Heating Fuel Use Breakdown, %			
			wood	NG ⁴⁶	Electricity	Other
Tavush– regularly registered temperatures in winter: -13 to – 18°C	50	(25,6**) 23,6*	94	5,9	0,1	0
Gegharkunik – regularly registered temperatures in winter: –20 to – 25°C	Less 5	(22,4**) 9*	72	14	0	12
Shirak – regularly registered temperatures in winter: - 20 to - 25°C	0	(42,2**) 17,3*	54	2	40	4
Syunik	12.17	16,7**	67	6	0	27

Source: Adopted from GIZ: Astghine Pasoyan, Nune Sakanyan, Energy demand, supply and efficiency in rural Armenia: baseline data collection and analysis, GIZ, December, 2019; * - data from the Ministry of Environment of Armenia; ** Armenia – Poverty Snapshot over 2008-2018 https://armstat.am/file/article/poverty_2019_english_2.pdf

Using fuelwood does not ensure healthy heating. Energy audits show that most homes are heated up to 60% of optimal thermal comfort (20-22°C for indoor comfort). Burning of solid fuels in inefficient stoves indoor creates a danger for women and children who spend most of their time next to the stoves breathing polluted air, which according to the World Health Organisation has the same adverse health impacts as smoking two packs of cigarettes a day. In rural areas, 70% of HHs using ovens have problems with indoor air pollution, because of the difficulties with ventilation of the smoke⁴⁷.

Gender inequalities within the Armenian society, and in particular in rural areas due to traditional views on women’s role and responsibilities, are present in the energy related occupations too, such as food preparation, laundry, water heating along with childcare and other HH related works. Women are more prone to fuel poverty, as female-headed HHs are more likely to suffer from extreme poverty compared with male-headed HHs (31.5 % and 29.4 % respectively) because of women’s limited economic opportunities⁴⁸.

While organised manufacturing of high-efficiency heating stoves are absent, skilled professionals who can wield metal and make stoves are present even in the most remote villages. Thus, if provided with the tested blueprints and basic training, EE stoves can be produced locally to provide lower cost alternatives, compared to the organised import from abroad. This local production of the stoves should be combined with the promotion of the substitute fuels (not wood based). On top of energy efficiency measures, a significant improvement in reduction of the use of fuelwood could be achieved also through the installation of solar water heaters. The solar photovoltaic (PV) for electricity generation will contribute to energy independence, and through the net-metering scheme reduce customers’ bill.

Identification of the main stakeholders and corresponding institutional and/or organisational issues (mandates, potential roles, and capacities) to be covered by the action:

Beneficiaries: rural households, public institutions in Tavush, Shirak, Gegharkunik and Syunik marzes of Armenia.

Counterparts:

The Ministry of Environment is the main body for environmental policy. It is responsible for coordinating Armenia’s implementation of activities and communications under the United Nations Framework Convention on Climate Change (UNFCCC), including National Communications, Biennial Updates and

⁴⁶ NG – Natural Gas

⁴⁷ ibid

⁴⁸ GIZ: Astghine Pasoyan, Nune Sakanyan, Energy demand, supply and efficiency in rural Armenia: baseline data collection and analysis, GIZ, December, 2019.

Green House Gases (GHGs) Inventories. The Ministry of Environment is the designated national authority for the Green Climate Fund.

The Ministry of Territorial Administration and Infrastructure (MTAI) is responsible for the overall energy policy-making.

The Urban Development Committee is responsible for key energy efficiency measures.

The Ministry of Health elaborates and implements the policies of the Government of Armenia in the healthcare sector.

Ministry of Education, Science, Culture and Sports of the Republic of Armenia elaborates and implements the policies set out by the Government of Armenia in the education and science sectors.

2.3 Lessons Learned

So far, the efforts of the International Financial Institutions (IFIs) in Armenia were concentrated on development of the infrastructure and to a less extent to the existing energy saving potential. Still, the accumulated experiences of several interventions have showed that energy efficiency (EE) improvements can help vulnerable households (HHs) in Armenia, and that EE is the quickest, cleanest and cheapest way to bring comfort and economic mitigation to these HHs. IFIs resources can cover only a small fraction of the investment needs and the private sector should thus be crowded in to address the modernisation and efficiency improvement needs over the next 20-30 years.

The conclusions of the Gap Analysis for Buildings Energy Efficiency implemented under the High-Level Initiative on Energy Efficiency in Armenia, reveal that the use of the existing on-lending credit lines offered by the IFIs through local banks for EE improvements in buildings is quite low, particularly in rural areas, as they are considered unfavourable both by the potential borrowers as well as the local banks. The latter, see them as too expensive and the former consider the established lending procedures too cumbersome.

The experience from the Central and Eastern European countries which faced similar barriers, suggests that high potential of energy saving in the public and residential buildings (which will also bring considerable comfort improvement to the buildings' residents) can be tapped if intervention mechanisms and tools are tailored to the current market needs of Armenia.

The experience of the pilot implementation of EE solutions in buildings as well as relevant studies conclude that there is a considerable number of local technicians/small businesses who are able to produce EE heating devices at an affordable cost and provide after sales service. The local market also offers a variety of solutions for increase of buildings efficiency and EE heating devices.

3. DESCRIPTION OF THE ACTION

3.1. Objectives and Expected Outputs

The Overall Objective (Impact) of this action is to alleviate energy poverty, increase energy security and independence, as well as contribute to climate change mitigation and the preservation of natural resources and ecosystem services in Armenia, by improving access to energy efficiency and sustainable energy solutions in rural areas.

The Specific(s) Objective(s) (Outcomes) of this action are to:

1. Improve enabling environment for energy efficiency and sustainable energy investments in Armenia in line with the EU best practices.
2. Upscale energy efficiency and sustainable energy solutions in households and public buildings of rural communities in Tavush, Shirak, Gegharkunik and Syunik.

The Outputs to be delivered by this action contributing to the corresponding Specific Objectives (Outcomes) are contributing to Outcome 1 (or Specific Objective 1)

- 1.1 Improved policy and regulatory framework and local capacity in affordable energy efficiency (EE) and sustainable energy solutions and their implementation.

Contributing to Outcome 2 (or Specific Objective 2)

- 2.1 Improved awareness and access to products and services and financing of EE and sustainable energy solution for households in rural areas.
- 2.2 Increased awareness and financial support for renewable energy (RE) and EE solutions in social infrastructure in rural areas.

It is important to mention that the objectives of the Action will further contribute to the green transition of Armenia, the Sustainable growth and jobs, and Human Development for Eastern Partnership, in general.

3.2. Indicative Activities

Activities related to Output 1.1:

- To organise training events for local branches of education and health authorities on planning, financing, implementation, monitoring and reporting of EE and sustainable energy measures;
- To increase awareness about affordable EE and sustainable energy technological solutions available in Armenia;
- To improve environmental education and in particular awareness on benefits of EE and importance of substitution of wood with other solutions for reducing deforestation in line with biodiversity protection and sustainable forest management;
- To support the required improvement of the policy and regulatory framework for EE (e.g. planning, monitoring and reporting)⁴⁹.

Activities related to Output 2.1:

- To inform households on useful changes in energy consumption related behaviour and/or equipment use;
- To select, in consultation with local authorities and stakeholders, including the Ministry of Environment of Armenia and Ministry of Territorial Administration and Infrastructures, low-income households for implementation of renewable energy (RE) and sustainable energy interventions.
- To provide grant co-financing for RE and EE to low-income, rural households (some 350 vulnerable households would be concerned). Market mechanisms, such as long-term operation and maintenance contracts with private sector, and training of the owners in use of the new equipment as well as creation of the monitoring procedure are some examples of activities to secure sustainability of the intervention;

Activities related to Output 2.2:

- To select on the basis of the Energy Needs Assessment provided by the Ministry of Environment and Ministry of Territorial Administration and Infrastructure, and provide grant support for the implementation of EE and RE solutions in social infrastructures, including thermal insulation technologies and green-roof applications (e.g. kindergartens, schools, health centres). Long-term operation and maintenance contracts with private sector and training of the personnel in use of the

⁴⁹ The required improvements to the policy and regulatory framework for RE and energy poverty will be implemented by EU4Energy, with inputs from this action

new equipment as well as creation of the monitoring procedure are some examples of activities to secure sustainability of the intervention;

- To identify and promote bankable projects along with involvement of the private investment capital in covering the modernisation, seismic/energy efficiency/renewables sources rehabilitation of public buildings and housing sector in the targeted marzes.

3.3. Mainstreaming

Environmental Protection, Climate Change and Biodiversity

The Environmental Impact Assessment (EIA) screening represents an analytical tool for establishment of the relationships between a programme/project and the environment and climate change. The EIA screening for project and/or specific interventions within a project should be implemented according to national legislation (Law of the Republic of Armenia "On environmental impact assessment and expert examination").

The Climate Risk Assessment (CRA) screening (relevant for projects and/or specific interventions within a project) concluded that this action is no or low risk (no need for further assessment). Nevertheless, this Action will make an input into environmental protection through raising awareness among the population and the local authorities on the importance of elimination of use fuel wood as an urgent measure for preserving forests in Armenia. The influence of deforestation on the climate change and the consequences of the climate change in Armenia will be described in practical terms relevant to the targeted marzes against the expected impacts of implementing the Action.

Gender equality and empowerment of women and girls

Gender equality is a core value of the EU and a universally recognised human right. In line with the EU Gender Action Plan III⁵⁰, this Action shall be implemented in a way that maximises the contribution to gender equality. As per OECD Gender DAC codes identified in section 1.1, this action is labelled as G1. This implies that the Action will reflect gender balance in all activities and ensure female participation in training and capacity building, and encouraging participation of women in all activities (through at least 30% of female participation during information events and ensuring at least 30% of female households (HHs) to be among the ones selected for support by the Action).

Human Rights

This Action will support the right to work and the right to social service.

Disability

As per OECD Disability DAC codes identified in section 1.1, this action is labelled as D1. This implies that the needs of vulnerable groups in terms of access to information and knowledge on energy efficiency (EE) and renewable energy (RE) technologies will be taken into consideration in the planning of activities of the Action. Sustainable and affordable energy for all will be supported through promotion and implementation of the appropriate EE and RE measures. People with disabilities may benefit from improvement of schools and health centres. The families with disabled members might be given a priority in the selection of beneficiaries HHs.

Democracy

The project will build its impact on the increasing knowledge and capacity of HHs and public institutions in benefits of EE and RE measures, while promoting the involvement of private sector. This means that the Action will attempt to support active and inclusive dialogue between energy consumers, and energy and environment protection authorities concerning difficult decisions on the political and social effects of the sustainable energy policy.

⁵⁰ EU Gender Action Plan III: An ambitious agenda for gender equality and women's empowerment in EU external action, 2020, https://ec.europa.eu/international-partnerships/system/files/join-2020-17-final_en.pdf

Conflict sensitivity, peace and resilience

Energy poverty apart from negative influence on health and wellbeing of population, especially women and children, can be a reason for unrest. The action aims to increase the energy security and independence of Armenia through the reduction of imported carbon-based energy and increase of RE use. Additional benefit will be provided by practical measures demonstrating how energy poverty can be alleviated and comfort in the houses improved with limited resources. This shared knowledge and analysis will help integrating conflict sensitivity into energy poverty reduction measures and to maximise the positive impact on peace.

Disaster Risk Reduction

The objective of this Action is to contribute to climate change mitigation and the preservation of natural resources through reduction of use of fuelwood and consequent deforestation.

Other considerations if relevant

The creation of synergies with the EU Actions at the regional level and cooperation with the International Financial Institutions for ensuring necessary funds can increase the impact of the Action. The Action is also intended to identify a number of bankable projects in EE and RE in rural housing and social service buildings.

3.4. Risks and Assumptions

4. Category	Risks	Likelihood (High/ Medium/ Low)	Impact (High/ Medium/ Low)	Mitigating measures
3 People and Organisation	Low capacity in EE and Renewable Energy measures of the local branches of the Government for education and health	Medium	High	Tailored training on planning, financing, implementation, monitoring and reporting of EE and sustainable energy measures will be designed and implemented.
2 Planning Processes and Systems	Low interest of population and Local Health and Education Authorities in implementation of REs and EE measures	Medium	High	Carefully planned awareness campaigns and targeted information. Selection and promotion of appropriate technological solutions.
2 Planning Processes and Systems	Lack of knowledge in EE and RE technologies among Small and Medium Enterprises leading to low interest in the proposed EE and RE Facility	Medium	Medium	Dissemination of targeted information and training.

1 External environment	Escalation of conflict between Armenia and Azerbaijan	Medium	High	Mediation process put in place by the EU to work towards a peace agreement.
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External Assumptions

It is assumed that the policy of the Government of Armenia with respect to climate change and, consequently energy efficiency and renewable energy use remains unchanged.

3.5 Intervention Logic

The Action aims to alleviate energy poverty and increase energy security and independence, contribute to climate change mitigation and the preservation of natural resources and ecosystem services, by improving access to energy efficiency and sustainable energy solutions in rural areas. The Action will contribute to this aim by:

- *Improving policy and regulatory framework for energy efficiency and sustainable energy.* The Action will build on the experiences on the ground under outcome 2 (up-scaled energy efficiency and sustainable energy solutions in households and public buildings of rural communities in Tavush, Shirak, Gegharkunik and Syunik) and focus on removing the constraints to investment in the existing policy and regulation instruments. The institutional setup and capacity of relevant stakeholders, including local health and education officers in planning, implementation, and monitoring energy efficiency (EE) and renewable energy (RE) interventions will be strengthened both through formal and on-the-job training. The Action is in line with the EU-Armenia Comprehensive and Enhanced Partnership Agreement (CEPA)⁵¹ commitments, the European Green Deal⁵², the Joint Communication on the Eastern Partnership policy beyond 2020 together with its Staff Working Document⁵³.
- *Upscaling energy efficiency and sustainable energy solutions in households and public buildings of rural communities.* The Action will increase awareness and access to products, services and financing in rural areas. Energy savings in buildings will be achieved, for instance, by improved thermal insulation, use of solar water heaters and energy generation with renewable sources (ex. photovoltaic installations). The Action will promote innovative and scalable solutions available in the local market (e.g. LED bulbs, building insulation, efficient stoves) in partnership with existing initiatives such as EU4Business and mobilising several funding instruments and cooperation modalities with Development Financing Institutions active in Armenia. The ongoing dialogue with the Government of Armenia will be further strengthened, and marketing and financing mechanisms in support of EE and sustainable energy solutions will be developed.

The Action will be complementary to and create synergies with the EU4Energy Phase II, where Council of European Energy Regulators (CEER) and Armenian experts will develop an energy efficiency action plan in line with CEPA, the ongoing EU4Climate project, as well as the planned programme on Supporting Energy Security, Decarbonisation, Green Finance and Climate Adaptation in the Eastern Partnership. Synergies with these regional initiatives will be sought in particular on: strengthening legislative and regulatory frameworks; and promoting a conducive environment for sustainable energy investments in line with the Economic and Investment Plan. Regular exchange of experiences in meeting CO₂ reduction commitments and implementing climate change mitigation measures can be shared with the new Covenant of Mayors East III project National and Territorial Coordinators as well as Covenant Supporters.

⁵¹ Official Journal of the European Union L 23/4, 26.1.2018.

⁵² COM(2019) 640 final.

⁵³ JOIN(2020) 7 final; SWD(2021) 186 final.

To ensure impact and visibility it was agreed with the Ministry of Environment and Ministry of Territorial Administration and Infrastructure of Armenia to focus the action on four target marzes, namely Shirak, Tavush, Gegharkunik and Syunik.

3.6 Indicative Logical Framework Matrix

Results	Results chain: Main expected results	Indicators	Baselines	Targets	Sources of data	Assumptions
Impact	To alleviate energy poverty, increase energy security and independence, contribute to climate change mitigation and the preservation of natural resources and ecosystem services in Armenia, by improving access to energy efficiency and sustainable energy solutions in rural areas	<p>1- Reduced number of households (HHs) facing energy poverty, %</p> <p>2- Reduced share of fuelwood in energy balance of Armenia, %</p> <p>3- Greenhouse Gas (GHG) emissions avoided (tonnes CO₂eq)/ Relative (net) Greenhouse gas emissions impact with EU support</p> <p>4- Renewable energy generation capacity installed (MW/kW) with EU support</p>	<p>1- 12% in 2019</p> <p>2- 3% in 2020</p> <p>3-0</p> <p>4-0</p>	<p>1- 6% in 2027</p> <p>2- 1% in 2027</p> <p>3- 500 CO₂ tons eq/year in 2027</p> <p>4- 1 MW in 2027</p>	<p>1- State Statistics</p> <p>2- State Statistics</p> <p>3- State Statistics</p> <p>4- State Statistics</p>	<i>Not applicable</i>
Outcome 1	1. Improved the enabling environment for energy efficiency and sustainable energy investments in Armenia in line with the EU's best practices	<p>1.1 Local plans for reduction of use of fuelwood in public and residential buildings developed</p> <p>1.2 Practical and efficient measures are proposed in the NEEAP</p> <p>1.3 % of laws and regulations in EE adopted following internal and external consultations and</p>	<p>1.1 None</p> <p>1.2 NEEAP 2 does not include explicit measures for fuel wood use reduction</p> <p>1.3 0</p>	<p>1.1 3 in 2027</p> <p>1.2 NEEAP 3 includes explicit measures for fuel wood use reduction</p> <p>1.3 20% in 2027</p>	<p>1.1 Reports by Local education and health authorities</p> <p>1.2 Announcement of the Government</p> <p>1.3 Project Performance Reports. CEPA implementation reports</p>	Energy Policy of Armenia continues support of energy efficiency (EE) and renewable energy (RE) measures

		brought in line with the CEPA commitments				
Outcome 2	2. Upscaled energy efficiency and sustainable energy solutions in households and public buildings of rural communities in Tavush, Shirak, Gegharkunik and Syunik	2.1 Proportion in % of fuel wood use by HHs in selected marzes 2.2. share of residential buildings in selected marzes that disallows healthy heating (20-22°C)	2.1 average 70 % in 2019 2.2. 60% of residential buildings that disallows healthy heating (20-22°C) in 2019	2.1 average 50 % in 2027 2.2 55% of residential buildings that disallows healthy heating (20-22°C) in 2027	2.1 State Statistics 2.2. State Statistics	Measures implemented by the Action are sustainable and replicated
Output 1 related to Outcome 1	1.1 Improved policy and regulatory framework and local capacity in affordable EE and sustainable energy solutions and their implementation	1.1.1 Number of training events on planning of EE measures 1.1.2 Number of awareness raising events 1.1.3 Number of people informed on substitution of fuel wood 1.1.4 Number of drafted documents for required improvement of the EE policy and regulatory framework	1.1.1 None 1.1.2 None 1.1.3 None 1.1.4 None	1.1.1 At least 6 events by 2027 1.1.2 At least 6 events by 2027 1.1.3 At least 20,000 people by 2027 1.1.4 At least 2 drafted documents for required improvement of the EE policy and regulatory framework by 2027	1.1.1 Quarterly Project Progress and Monitoring Reports 1.1.2 Quarterly Project Progress and Monitoring Reports 1.1.3 Quarterly Project Progress and Monitoring Reports 1.1.4 Quarterly Project Progress and Monitoring Reports	Local Health and Education Authorities are available for capacity building
Output 1 related to Outcome 2	2.1 Improved awareness and access to products and services and financing of EE and sustainable energy solutions for households in rural areas	2.1.1 Number of participants to information events 2.1.2 Number of low-income HHs with EE and sustainable energy solutions	2.1.1 None 2.1.2 None	2.1.1 at least 20,000 out of which at least 30% women by 2027 2.1.2 at least 8,500 out of which at least 30% female headed HHs by 2027	2.1. Quarterly Project Progress and Monitoring Reports 2.1.2 Quarterly Project Progress	There is interest among rural HHs in implementation of EE and RES measures

		2.1.3 Number of mid-income HHs with EE and sustainable energy solutions	2.1.3 None	2.1.3 at least 1,500 by 2027	and Monitoring Reports 2.1.3 Quarterly Project Progress and Monitoring Reports	
Output 2 related to Outcome 2	2.2 Increased awareness and financial support for RE and EE solutions in social infrastructure in rural areas	2.2.1 Number of social infrastructures with EE and RE improvements	2.2.1 none	2.2.1 at least 16 by 2027	2.2.1 Quarterly Project Progress and Monitoring Reports	Local Health and Education Authorities support implementation of REs and EE measures in public buildings
		2.2.2 Number of identified bankable projects	2.2.2 none	2.2.2 at least 5 by 2027	2.2.2 Quarterly Project Progress and Monitoring Reports	

4 IMPLEMENTATION ARRANGEMENTS

4.1 Financing Agreement

In order to implement this action, it is envisaged to conclude a financing agreement with the Republic of Armenia.

4.2 Indicative Implementation Period

The indicative operational implementation period of this action, during which the activities described in section 3 will be carried out and the corresponding contracts and agreements implemented, is 48 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 financing Decision and the relevant contracts and agreements.

4.3 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 measures⁵⁴.

4.3.1 Indirect Management with a pillar-assessed entity⁵⁵

This action may be implemented in indirect management with a pillar assessed entity, which will be selected by the Commission's services using the following criteria:

- with experience in implementing small scale energy efficiency (EE) and renewable energy (RE) measures in rural areas;

This implementation by this entity entails carrying out all the activities identified in section 3, in particular promoting behaviour changes regarding the energy consumption practices through environmental education and awareness raising on the benefits of energy efficiency, and increase energy efficiency and sustainable energy solutions in rural households and in public buildings in rural communities.

4.3.2 Changes from indirect to direct management (and vice versa) mode due to exceptional circumstances

If the implementation modality under indirect management as defined in section 4.3.1 cannot be implemented due to circumstances beyond the control of the Commission, the modality of implementation by grants under direct management would be used according to the following parameters:

Type of applicants targeted: civil society organisations.

4.4 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, subject to the following provisions.

The Commission's authorising officer responsible may extend the geographical eligibility on the basis of urgency or of unavailability of services in the markets of the countries or territories concerned, or in other

⁵⁴ www.sanctionsmap.eu Please note that the sanctions map is an IT tool for identifying the sanctions regimes. The source of the sanctions stems from legal acts published in the Official Journal (OJ). In case of discrepancy between the published legal acts and the updates on the website it is the OJ version that prevails.

⁵⁵ The signature of a contribution agreement with the chosen entity is subject to the completion of the necessary pillar assessment.

duly substantiated cases where application of the eligibility rules would make the realisation of this action impossible or exceedingly difficult (Article 28(10) NDICI-Global Europe Regulation).

4.5 Indicative Budget

Indicative Budget components ⁵⁶	EU contribution (amount in EUR)
Implementation modalities – cf. section 4.3	
Objective/Outputs 1. Improved local capacity in affordable EE and sustainable energy solutions and their implementation	1 000 000
Objective/Outputs 2 Improved awareness and access to products and services and financing of energy efficiency and sustainable energy solution for households in rural areas	5 200 000
Indirect management with pillar-assessed entity – cf. section 4.3.1	6 200 000
Evaluation – cf. section 5.2 Audit – cf. section 5.3	300 000
Totals	6 500 000

4.6 Organisational Set-up and Responsibilities

The Contracting Authority will be responsible for all administrative, legal and financial issues relating to the contract, and will also monitor and supervise the implementation of the project. The implementation of the activities will be under the oversight of the Contracting Authority's Programme Managers.

The Contractor will be responsible for day-to-day management of the project, mobilisation of the technical assistance and provision of outputs and reports.

A Steering Committee for the project shall be set up to oversee and validate its overall strategic direction, review project implementation and provide guidance for project planning.

The Ministry of Environment and Ministry of Territorial Administration and Infrastructure (MTAI) will nominate 2 Contact Persons who will be the focal points for the communications with the Ministries and will be the Chairs of the Steering Committee.

As part of its prerogative of budget implementation and to safeguard the financial interests of the Union, the Commission may participate in the above governance structures set up for governing the implementation of the action.

5. PERFORMANCE MEASUREMENT

5.1. 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 partner's responsibilities. To this aim, the implementing partner 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 Outputs and contribution to the achievement of its Outcomes, and if possible at the time of

⁵⁶ N.B. The final text on audit/verification depends on the outcome of ongoing discussions on pooling of funding in (one or a limited number of) Decision(s) and the subsequent financial management, i.e. for the conclusion of audit contracts and payments.

reporting, contribution to the achievement of its Impacts, as measured by corresponding indicators, using as reference the logframe matrix.

The Commission may undertake additional project monitoring visits both through its own staff and through independent consultants recruited directly by the Commission for independent monitoring reviews (or recruited by the responsible agent contracted by the Commission for implementing such reviews).

Internal monitoring: Each of the project activity is related to specific outcomes/outputs and equipped with quantified indicators and deliverables. Throughout the implementation, the achieved results will be checked against original activity plans and project deliverables set as milestones. Indicator-based reporting will be performed based on the logframe. Relevant indicators will have to be disaggregated by gender. Where feasible, data specific for most vulnerable groups should be included.

The implementing partners will be responsible for the day-to-day execution and monitoring of the activities. In case of discrepancies, the project team will propose and introduce corrective measures. The normal procedure for eliminating discrepancies will be (a) recognition of discrepancy, (b) estimation of the level of discrepancy and potential impact (time, quantity and quality wise), (c) definition of reasons (internal and external), (d) preparation of a contingency plan (responsibilities, activities), (e) implementation of a contingency plan and (f) review.

Roles and responsibilities for data collection, analysis and monitoring:

The data necessary for verification of the indicators for the Outputs will be collected and presented in the Action Quarterly and Monitoring reports. These reports will be prepared by the Project or Monitors accordingly. At the level of Outcomes, the data will be collected from the State Statistics, announcements by the Government, reports by the local education and health authorities.

5.2. Evaluation

Having regard to the nature of the action, a mid-term evaluation will be carried out for this action or its components via an implementing partner.

It will be carried out for problem solving, learning purposes, in particular with respect to selected households and social buildings and progress of implementation of energy efficiency (EE) and renewable energy (RE) measures.

The Commission shall form a Reference Group (RG) composed by representatives from the main stakeholders at both EU and national (representatives from the government, from civil society organisations (private sector, NGOs, etc.), etc.) levels. If deemed necessary, other donors will be invited to join. The Commission shall inform the implementing partner at least 3 months in advance of the dates envisaged for the evaluation exercise and missions. The implementing partner shall collaborate efficiently and effectively with the evaluation experts, and inter alia provide them with all necessary information and documentation, as well as access to the project premises and activities.

The evaluation reports shall be shared with the partner country and other key stakeholders following the best practice of evaluation dissemination. The implementing partner 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 and any adjustments necessary, including, if indicated, the reorientation of the project.

5.3. Audit and Verifications

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 audit or verification assignments for one or several contracts or agreements.

6. STRATEGIC COMMUNICATION AND PUBLIC DIPLOMACY

All entities implementing EU-funded external actions have the contractual obligation to inform the relevant audiences of the Union's support for their work by displaying the EU emblem and a short funding statement as appropriate on all communication materials related to the actions concerned. To that end they must comply with the instructions given in the [Communicating and raising EU visibility: Guidance for external actions - 2022](#)(or any successor document).

This obligation will apply equally, regardless of whether the actions concerned are implemented by the Commission, the partner country, service providers, grant beneficiaries or entrusted or delegated entities such as UN agencies, international financial institutions and agencies of EU Member States. In each case, a reference to the relevant contractual obligations must be included in the respective financing agreement, procurement and grant contracts, and delegation agreements.

For the purpose of enhancing the visibility of the EU and its contribution to this action, the Commission may sign or enter into joint declarations or statements, as part of its prerogative of budget implementation and to safeguard the financial interests of the Union. Visibility and communication measures should also promote transparency and accountability on the use of funds. Effectiveness of communication activities on awareness about the action and its objectives as well as on EU funding of the action should be measured.

Implementing partners shall keep the Commission and the EU Delegation/Office fully informed of the planning and implementation of specific visibility and communication activities before the implementation. Implementing partners will ensure adequate visibility of EU financing and will report on visibility and communication actions as well as the results of the overall action to the relevant monitoring committees.