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EU4Climate

Better Climate Policies for Eastern Partner Countries

Climate Mainstreaming Activities in EaP Countries

Summary of sectoral mainstreaming studies and experiences made in Armenia, Azerbaijan, Georgia, Republic of Moldova and Ukraine

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The information provided is based on the sectoral mainstreaming studies and information received during the course of the mainstreaming workshop for EaP countries, held on 26th April in Brussels.

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List of Abbreviations:

EaP	Eastern Partnership
EED	Energy efficiency Directive
EPBD	Energy performance of Buildings Directive
ETS	Emission trading scheme
GHG	Greenhouse gases
LULUCF	Land use, land use change and forestry
M&E	Monitoring & evaluation
MBT	Mechanical biological (waste) treatment
NAP	National Adaptation Plan
NECP	National Energy and Climate Plan
SAF	Sustainable alternative fuels
SECAP	Sustainable energy and climate action plan

1 EU4Climate Project in Focus

The EU4Climate project assists governments in the six Eastern Partnership countries - Armenia, Azerbaijan, Belarus[1], Georgia, the Republic of Moldova and Ukraine - to take action against climate change. It supports countries in implementing the Paris Climate Agreement and in improving climate policies and legislation with an ambition of limiting climate change's impact on citizens' lives and making them more resilient to it.

The EU4Climate project has a total budget of €8.8 million and is funded by the European Union (EU) with €8 million. The United Nations Development Programme (UNDP) is the implementing body and supports the project with €0.8 million. In each of the six beneficiary countries national coordinators have been appointed, who coordinate the national activities and ensure regional cooperation. The project started in December 2018 and lasts until December 2023 (60 months duration).

One of the nine expected results refers to mainstreaming climate in other sectors, interinstitutional awareness and sectoral guidelines for implementing the Paris Agreement (PA). EaP countries have developed a series of studies and plans looking at the following topics: energy, agriculture, health, gender, transport and waste, with the objective to develop specific sectoral recommendations and guidelines for addressing climate change across various policy fields as a basis for the implementation planning process.

The EU4Climate project assisted EaP countries with the following activities, carried out by national expert(s):

- Review and analyse national policy documents, strategies, programs, development plans and leigislative and regulatory framework documents
- Identification of priority development directions
- Development of policy recommendations for the sectoral planning process

An EU4Climate Regional Workshop on Climate Mainstreaming[2] was held in Brussels on 26th April, 2023, offering an opportunity to share and exchange information. Representatives of the European Commission from DG Energy, DG Clima, DG Near and the Energy Community shared the European approach and vision, as well as representatives of the countries presented some of their ongoing climate mainstreaming activities. The workshop was attended by 46 representatives of UNDP, EU and Eastern Partner (EaP) governments.

2 Relevance of Climate Mainstreaming

Climate change is caused by GHG emissions from various sectors (energy, industries, agriculture, transport, waste management) and has impacts on economies, environment, health, biodiversity, energy systems, food systems, land use and our wellbeing. Therefore, climate actions require mainstreaming of policies, finances, legislation, institutional cooperation with the ambition to develop and implement effective and efficient programmes to support low carbon development and adapt to climate change.

[1] Participation of Belarus in the EU4Climate was suspended as of 24.02.2022 until further notice

[2] https://eu4climate.eu/2023/04/27/eu4climate-workshop-special-focus-energy-agriculture/

Climate mainstreaming refers to the systematic integration of climate mitigation and adaptation considerations across all policy sectors, as well as financial, legislative and procedural frameworks. Mainstreaming is not a single action, but is a continuous process which needs to be enshrined in policy planning. Policy makers in all fields and all institutional levels should be aware of their responsibility and power to support the implementation of low carbon and climate resilient development pathways. This requires institutional coordination and cooperation to set an enabling legislative, financial and political environment.

Basis for this coordinated and concerted action is the fact that causes of climate change as well as impacts of climate change cannot be allocated to a single policy field. For example, the production of energy still represents the main source of CO2 emissions and is therefore a key acting field, which has at the same time to consider energy security, energy poverty and structural changes to the economy. Agriculture is the main source for N2O and CH4 emissions and is also the sector largely affected by global warming through changed precipitation and temperature and natural disasters. Therefore climate mainstreaming in this policy field will interact with human and environmental health, food security and food systems. The multiple benefits – such as reduced environmental pollution, clean air, better health, circular economies, green jobs, energy security, water security…- climate action can achieve should be clearly communicated, to support the implementation of climate mitigation and adaptation in various policy fields.

3 Climate Mainstreaming at EU level

The EU as a global frontrunner in tackling climate change has already integrated climate action in its financial, institutional and legislative frameworks and continues to do so. This enables and requires EU Member States to develop mechanism to integrate climate action in other policy fields at the national level, as well. In the following some overarching frameworks are shortly described, showing how the EU is ensuring mainstreaming in practise.

3.1 EU Green Deal

The EU Green Deal striving to for climate neutrality by 2050 and achieving an emission reduction of 55% by 2030 is based on policies and strategies which affect the whole economy and society.

The well-know figure below shows clearly that climate action is being integrated in all economic sectors bringing benefits to society, environment and economy.

Figure 1: The European Green Deal (Source: European Commission, COM(2019) 640 final)

Mainstreaming is a fundamental principle in delivering this transformation change. This also becomes transparent when looking at the sectoral visions for 2030:

- Making transport sustainable for all
- Leading the third industrial revolution
- Cleaning our energy system
- Renovating buildings for greener lifestyles
- Working with nature to protect our planet and health
- Boosting global climate action

The EU has amended or newly established a set of legislation and initiatives to realise this visions. Three overarching and principal legislative frameworks are described in more detail in the following chapters.

3.2 Energy and Climate Governance Mechanism

In 2018, the EU established an energy and climate governance mechanism through the regulation (EU)2018/1999. It is designed to integrate national climate and energy planning to deliver on 2030 climate targets and 2050 climate objectives.

The goal of the Energy Union, established through the energy and climate governance regulation, *"is to give Union consumers, including households and businesses, secure, sustainable, competitive and affordable energy, and to foster research and innovation by means of attracting investment, which requires a fundamental transformation of Europe's energy system. Such a transformation is also*

closely linked to the need to preserve, protect and improve the quality of the environment and to promote the prudent and rational utilisation of natural resources in particular through the promotion of energy efficiency and energy savings and the development of new and renewable forms of energy. That goal can be achieved only through coordinated action, combining both legislative and non-legislative acts at Union, regional, national and local level [Regulation EU2018/1999, Para (3))".

One core element is the requirement for EU Member States and Members to the Energy community[3] to establish integrated National Climate and Energy Plans (NECP) covering a period of 10 years. These need to address national objectives and targets, policies and measures, provide analytical data and impact assessments along the following five dimensions: energy security; the internal energy market; energy efficiency; decarbonisation; and research, innovation and competitiveness.

3.3 European Multiannual Financial Framework

Climate mainstreaming is also considered in European financial frameworks, as climate expenditures need to be monitored and evaluated in a transparent and systematic way to support the achievement of climate and environmental goals.

In 2020, the EU laid down its multiannual financial framework for the years 2021 to 2027 (Council Regulation 2020/2093). The climate mainstreaming architecture in this multiannual financial framework is described in a separate Commission Staff Working document (see SWD(2022) 225 final).

Box 1 – What is 'mainstreaming'?

To achieve policy objectives of a horizontal nature, it is necessary that multiple instruments, legislative and/or budgetary, contribute to their fulfilment. In the context of the EU budget, mainstreaming is defined as the inclusion of a specific priority in the design, preparation, implementation and evaluation phases of all budgetary programmes, in order to maximize their contribution to policy objectives, promote synergies and improve spending coherence. It may involve defining a specific target for the amount of budget to be spent and monitoring progress towards achieving it.

In a wider sense, mainstreaming is about the way policies, programmes and actions are conceived, designed, implemented and monitored. It may be supported by a number of tools and measures, at various stages of the programming cycle (e.g. integration into work programmes, environmental screening, risk and environmental impact assessments, climate and environmental management plans, capacity development and technical assistance).

Figure 2: Definition of mainstreaming in a financial context (source: European Commission, SWD (2022) 225 final))

The EU 2020 target for climate expenditure was to spend 20% of the EU budget supporting climate goals. It showed that this target has been met. The target for 2030 is 30%, which has been broken down into specific targets for individual programmes.

To track climate relevant expenditures a methodology has been developed to earmark relevant expenditures. This methodology is based on EU climate coefficients, rating the contribution to climate change mitigation or adaptation goals, and the activity addressed as specified in the EU taxonomy (see also chapter 3.4).

[3] Among the EaP countries, Georgia, Moldova and Ukraine are Members of the Energy Community

In order to avoid expenditures counteracting climate and environmental goals, the 'do no harm' principle is applied. There is an obligation to respect this 'do no harm' principle and also guidance how this principle is implemented in different EU funding programmes.

3.4 EU Taxonomy

With the EU taxonomy regulation[4] ((EU) 2020/852) the EU introduced a classification system, establishing a list of environmentally sustainable economic activities which make a substantial contribution to at least one of the EU's climate and environment objectives. This will help to meet the EU's climate and energy objectives and shift finance flows towards a low greenhouse gas and climate-resilient development. The regulation provides a clear guidance on activities that qualify as contributing to environmental objectives, which help inform investors about the investments that fund environmentally sustainable economic activities.

It defines sustainable activities to support:

- climate change mitigation,
- climate change adaptation,
- sustainable use and protection of water and marine resources
- transition to a circular economy
- pollution prevention and control
- protection and restoration of biodiversity and ecosystems

Four conditions that all economic activities have to meet are:

- making a substantial contribution to at least one environmental objective;
- doing no significant harm to any other environmental objective;
- complying with minimum social safeguards;
- complying with the technical screening criteria

In complementary delegated acts contains the list of economic activities covered by the EU taxonomy. The climate delegated act was amended in 2022 taking into account specific gas and nuclear activities, which will help accelerate the shift from solid or liquid fossil fuels, including coal, towards a climate-neutral future.

4 Summary of mainstreaming studies

The five countries (Armenia, Azerbaijan, Georgia, Moldova, Ukraine) developed 17 sectoral mainstreaming studies, dealing with energy, agriculture, LULUCF, transport, health, gender, waste and water (see Figure 3).

[4] Regulation (EU) 2020/852 of the Euorpean Parliament and of the Council of 18 June 2020 on the establishment of a framework to facilitate sustainable investment, and amending Regulation (EU) 2019/2088

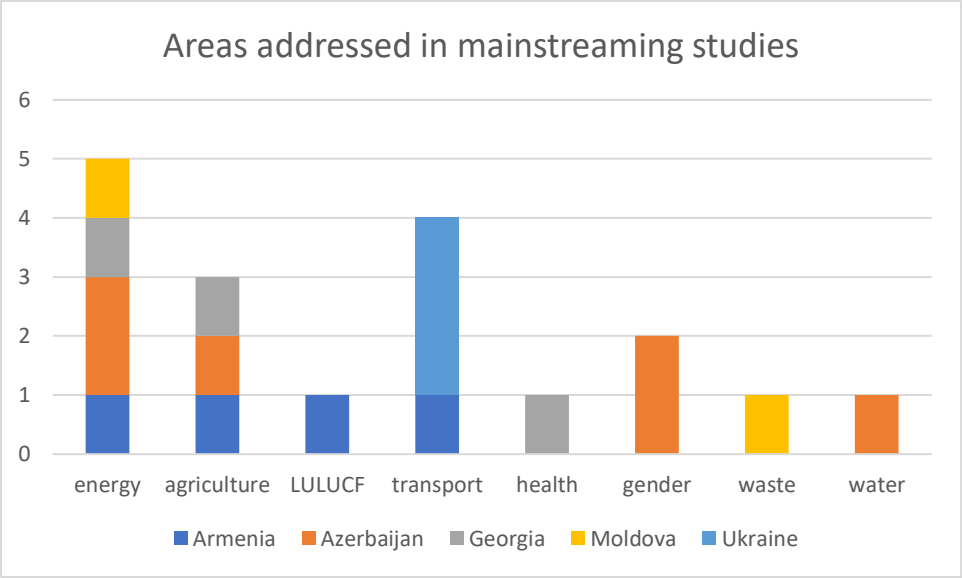

Figure 3: Overview of mainstreaming studies per area addressed and country
Note: One study from Azerbaijan addressed gender AND climate change integration in energy policies.

In the following chapters, a summary of each of the studies per country is presented, providing details on objective, approach and main results, which are mostly the policy recommendations for each sector.

4.1 Armenia

Country	Armenia	**Sector**	Energy
Title	Mainstreaming Climate Policy in Armenia's Energy Sector	**Author**	Astghine Pasoyan
		Date	Dec 2021
Objective	identification of gaps, needs, and opportunities for mainstreaming climate change considerations in energy sector in line with Government commitments		
Approach	Stocktaking on legal and institutional developments during the 2018-2021 under the CEPA implementation in the context of climate change objectives/low carbon development. This includes review of the technical reports developed under the project EU4Energy-Armenia, assess progress reached in implementation of CEPA Implementation Roadmap as part of the temporary enforcement and its past and pending contribution towards NDC implementation.		
Main results/policy recommendations	Policy recommendations largely focus on energy efficiency of buildings, such as • Step by step guidelines for setting up effective enforcement and compliance procedure and establishing a system for issuing minimum energy performance requirements • Roadmap for Nearly Zero Energy Buildings (NZEB) • Address gaps in national legislation implementing the EPBD Directive • Energy Efficient Buildings Roadmap for Armenia • Energy Investment Risk assessment profile (2018) as well as a Monitoring report (2021) • Guidance on Energy Audits		

Country	Armenia	**Sector**	LULUCF
Title	Assessment of Land Use, Land Use Change and Forestry Sector Potential in Achieving Climate Change Mitigation Objectives in Armenia	**Author**	ONF International, CITEPA
		Date	Oct 2021
Objective	provide recommendations in setting long-term targets of the greenhouse gas emissions/removals for the national strategies in the LULUCF sector		
Approach	Analysis of nearly 30 possible mitigation actions to enhance carbon sink capacity through: • Afforestation/Reforestation; • Restoration of degraded forests; • Sustainable forest management; • Regulating the harvesting of wood energy; • Optimization of grasslands management; • Plantation of perennial crops;		

	• Development of agroforestry and hedgerows.
Main results/policy recommendations	In this study, it appears that afforestation is by far the most capable action to reduce greenhouse gas emissions in Armenia. Restoration actions can also show large benefits in forests and grasslands when ambitious assumptions are considered: • LULUCF sector is a cost-effective mitigation opportunity and a competitive solution compared to other industrial sectors such as transportation or construction • Establish land monitoring systems • Put in place an appropriate legislative and institutional framework providing adequate financial status and sufficient incentives to achieve the objectives

Country	Armenia	**Sector**	Transport
Title	Reform of Yerevan Transport System in the context of low-carbon development policy	**Author**	Vazgen Harutyunyan
		Date	May, 2020
Objective	calculate the volume of emissions from the transport sector of Yerevan, and to submit medium-term and long-term policies aimed at reducing emissions from the transport sector		
Approach	Description of the current transportation system in Yerevan, identification of problems (e.g. dissatisfaction with public transport), description of problem solving actions. Calculation of transport emissions based on IPCC 2006 emission factors and fuel consumption for 2017 and 2020 for Armenia and Yerevan (based on share of total registered vehicles in Yerevan) . Calculation of costs considering a new route network and modernisation of bus fleet.		
Main results/policy recommendations	The study reveals that citizens of Yerevan are largely dissatisfied with public transport in Yerevan. The emission calculations show that transport emissions in Yerevan increased significantly during 2017 and 2020. • public transport reform (medium term), including: new route network, upgrading bus fleet, separate roadway zone for public transport, introduction of unified ticket system, etc. • traffic management systems (medium term), including: smart and remote controlled traffic lights, increasing feeds for paid parking, bypass roads, smart transport management systems, etc. • Proper management of the transport system (long-term) • Reducing the use of vehicles for personal use (long-term) • Stricter legal regulations aimed at emissions reduction (long-term) • Widespread use of electric vehicles (long-term)		

Country	Armenia	**Sector**	Agriculture
Title	Study on Mitigation Opportunities and Mainstreaming in the Agriculture	**Author**	"EV Consulting" CJSC & "International Center for Agribusiness Research and Education" (ICARE) Foundation
		Date	July 2021

Objective	assess the mitigation potential of Agriculture sector in Armenia for elaboration of the Long-Term Low Emission Development Strategy focusing on the key sources of greenhouse gas emissions and to develop recommendations on policies and measures for mainstreaming climate change mitigation practices.
Approach	This Study focuses on the GHG emissions from the key sources in the agriculture sector (enteric fermentation, manure management, fertilizer application to crops) and analysed in a scenario the impact of a range of policies and measures.
Main results/policy recommendations	Through a set of measures targeting CH4 emission from enteric fermentation and manure management, the increase in GHG emissions projected until 2030 can be substantially limited. Measures targeting fertiliser use and application will further contribute a reduction of N2O emissions, impacts could not be quantified. The wide range of policy recommendations are presented along four areas: policy and legal, institutional (e.g. , capacity building and technical/technological.

4.2 Azerbaijan

Country	Azerbaijan	**Sector**	Agriculture
Title	Analysis of problems in the agricultural sector in Azerbaijan related to climate change and preparation of proposals	**Author**	Environmental Research Centre
		Date	January, 2022
Objective	identify adaptation and mitigation opportunities, needed changes in the institutional and regulatory framework, monitoring and coordination mechanism on agriculture sector of the Azerbaijan Republic		
Approach	• Analysis of the situation on climate change in the agricultural sector in the country • Preparation of proposals on adaptation and mitigation plans of the agricultural sector • Identification of gaps based on the current state of water use • Development of new management technics and use schemes for the integration of climate change into water use • Development of climate scenarios taking into account possible future changes (with maps and other graphical data) • Development of proposals on rules for climate change in the agricultural sector		
Main results/policy recommendations	Identified mitigation opportunities: • pasture management to meet increasing meat demands • grazing management, incl. Importance of pastures for cabon sequestration • crop rotation, management of tillage and residues, fertiliser management, agro-forestry systems • increase agricultural energy efficiency and shift to non-fossil fuel sources • use of cover crops to avoid bare soils • Improving manure storage practices in industrialized livestock systems (incl. use of biogas) • reduction of food loss Identified adaptation opportunities: • water management		

	• transboundary water governance • Prevention of water loss during transportation • using water sparingly • Cultivation of drought plants • Creating food reserves and ensure Food security

Country	Azerbaijan	**Sector**	Gender
Title	Mainstreaming Gender Aspect into Climate Change Policies and Strategies	**Author**	Turan Naghiyeva, local expert
		Date	Nov. 2020
Objective	provide an overview of the gender situation in Azerbaijan with a particular focus on the developing recommendations on mainstreaming gender aspect into climate-related policies and strategies of the country. (Analysis of gender disaggregated data, Report on the Impact of Climate Change Related Risks on Gender)		
Approach	1. review and analysis of gender-specific key historical data, gender disaggregated data, data on discrimination and violence against women, data on access to and control of resources which impacts livelihoods. 2. review and analyse climate change related risks, including women's health and livelihood, as well as needs and priorities. 3. develop recommendations for Azerbaijan considering the gender aspect.		
Main results/policy recommendations	Recommendations: • recognition of women as key stakeholders within climate change policies • Ensuring equal opportunities for women in expressing the needs, concerns, and ideas. • Prioritize building the capacity of women's groups and institutions on climate change issues • increase key stakeholders' capacity and awareness from ministries, municipalities, businesses, NGOs and academia • Ensure gender parity • Introduce gender disaggregated data • use gender-sensitive language • Prioritize the refurbishment and investment in support infrastructure, schools, healthcare centers, retirement houses or NGO buildings serving to family needs to ensure that women are spared from unpaid care work and can equally participate in the social life and labor market. • strengthen education and technical skills of women		

Country	Azerbaijan	**Sector**	Energy, Gender
Title	Gender and climate change integration into the energy policy	**Author**	Notem LLC
		Date	December 2021
Objective	guide policy makers and/or members of the working group, who are in charge of drafting either sectoral level strategic document or national level development strategies while accounting for gender and climate change related issues.		

Approach	Overview of global energy trend, description of the current status of energy policies, and the linkage to gender. Presentation of a pathwayof integrating mainstreaming gender concept into national energy policy, following four steps: 1-Gender Assessment, 2-Gender Action Plan, 3-Implementation and Monitoring and 4-Completion and Evaluation.
Main results/policy recommendations	Presentation of a methodological approach and tools for mainstreaming clmate change issues into Azerbaijan's energy policy. Recommendations for gender mainstreaming: • data gathering and analyis to identify gender-based risks, constraints or opportunities and to understand how women and men use and access energy, services and technologies • draft gender action plan articulating what the program wants to achieve from a gender standpoint, what activities it will undertake towards this; also analyse budget from a budget perspective • carry out gender audits to identify and analyze the factors that hinder efforts to mainstream gender in energy policy. • develop gender-responsive indicators and monitoring thereof

Country	Azerbaijan	**Sector**	Energy
Title	Report on energy mainstreaming	**Author**	Parviz Garibzadeh
		Date	December 2020
Objective	analysis of opportunities, energy GHG data, donor activities in the energy sector		
Approach	Description of energy sector (electricity and heat supply, Generating capacities, production, transmission, change, challenges, and opportunities) and its policies, programs and trends, as well as climate-related risks to the energy sector; presentation of financial support programs.		
Main results/policy recommendations	Policy recommendations: • long-term strategy for the development of the energy sector as priority area • approval of the draft law on EE and the timely adoption of the NEEAP • take measure to improve implementation of energy efficiency policies • establishing a clear baseline, management data, and reference system • approving and implementing new energy tariff methodologies • raising awareness of decision-makers, civil servants, and other • implementing further reforms to support the electricity market • applying incentive mechanisms to increase efficiency of the power plants • establishing specific long-term goals for energy efficiency • developing and approving a methodology for ancillary services • promote the more widespread use of highly efficient cogeneration and/or more efficient central heating and cooling systems • developing a heat map including existing centralized heating capacity • continuing ongoing efforts to improve national energy statistics		

Country	Azerbaijan	**Sector**	Water

Title	Mainstreaming Climate Change related activities into the water sector of Azerbaijan	**Author**	Rovshan Abbasov
		Date	2020
Objective	elaborate how climate mainstreaming can be integrated in the water with a view to integrated water management and role of stakeholders in water management herein		
Approach	description of the water sector in Azerbaijan: water resources, water use, water industry, hydropwer and impacts of climate change to water sector; presentation of structural and non-structural adapation measures: description of key stakeholders and their tasks		
Main results/policy recommendations	Policy recommendations: • The climate changes issues should be included into the legal framework • to improve institutional governance in the water sector and develop adaptation strategies • water infrastructure must be rebuilt and made ready to deal with impending natural hazards. • water infrastructure needs to be upgraded to prepare for flood management • water losses in both drinking and irrigation water supply should be prevented. • water saving technologies both in irrigation and drinking water use should be implemented • both structural and non-structural updates should be made to allow the application of new irrigation methods in agriculture. • multilateral activities should be implemented to save water in large cities and settlements. • cultivation of agricultural crops with low water demand should be started • management changes to increase the efficiency of both irrigation and drinking water supply. • Action plans to ensure the transition to integrated water management • increase awareness of climate change, both at the community level and in the education sector. • hydropower potential of Hydropower plants should be used properly • Small hydropower dams should be used in mountain rivers		

4.3 Georgia

Country	Georgia	**Sector**	Agriculture
Title	Incorporation of Climate Mainstreaming Recommendations in Sector Development Political Documents - Agriculture Sector	**Author**	NGO Environment and Development
		Date	Nov. 2021
Objective	Identifying priority directions in agriculture sector by mainstreaming climate change issues and developing specific sectoral recommendations and guidelines for addressing climate change issues based on these identified and agreed priorities		
Approach	Review and analyze national policy documents, strategies, programs, development plans and legislative and regulatory framework documents; A detailed stakeholder analysis comprised an important aspect of the work on this document. The responsible structures and parties involved at		

	different stages / levels were also identified. Additionally, information was collected about individuals who are actively involved in climate change decision-making and implementation during initial interviews with stakeholders.
Main results/policy recommendations	The vulnerability of the agricultural sector to climate change is high. The importance of climate change and the need to take effective steps in this direction are highlighted in the policy documents, action plans and legislation discussed above. At the same time, however, it should be noted that strategies and specific action plans only weakly address specific ways in which to increase the resilience of the agricultural sector to climate change. This may increase the existing risks and the vulnerabilities in the sector; Policy recommendations: • clearly state the specific goals and objectives in the Agriculture and Rural Development Strategy 2021- 2027 document • Strengthen the capacity of advisory services in the agricultural sector in • Study the impacts of climate change in all areas of the agricultural sector which will provide a full picture of the existing risks involved, including risk assessment in terms of gender • Facilitate the renewal of the meteorological observation network and increase the coverage area to create a complete climate picture and improve forecasting; • Promoting the dissemination of water-saving irrigation methods (drip, rain) and fertigation; • Replacement of a fixed tariff for irrigation water with a volumetric or a mixed tariff; • Fill in the existing legislative gaps and develop mechanisms to facilitate the implementation of the regulations imposed within them.

Country	Georgia	**Sector**	Energy
Title	Incorporation of Climate Mainstreaming Recommendations in Sector Development Political Documents Energy Sector	**Author**	NGO Environment and Development
		Date	Nov. 2021
Objective	Identifying priority directions in energy sector by mainstreaming climate change issues and developing specific sectoral recommendations and guidelines for addressing climate change issues based on these identified and agreed priorities		
Approach	In order to study the energy sector, initial consultations were conducted with stakeholders in accordance with the pre-designed research methodology. As part of these consultations, priority was given to communication with energy and climate change policy-makers; in particular, the Ministry of Economy and Sustainable Development (Department of Energy Reform and International Relations) and the Ministry of Environmental Protection and Agriculture (Climate Change Division). As a result of these consultations, key policy, strategy and action plan documents were identified and a further qualitative content analysis of these documents was performed. In the next phase of the study, desk research was conducted to identify key studies and reports whose analysis was deemed appropriate in order to determine the risk profile in the energy sector and identify possible measures for climate mainstreaming. Additionally, an important component of the research was the comments and recommendations of researchers and other stakeholders in the field on the basis of which the research presented herein was refined.		

Main results/policy recommendations	As during preparation of the study the National Energy and Climate Plan was under development, the proposed policy recommendations are based on the review of 'Climate Change Strategy of Georgia, 2030', 'Georgian National Renewable Energy Action Plan' and the 'Georgian National Energy Efficiency Action Plan of Georgia, 2019-2020'. They point out to issues which should be addressed in the NECP. • Consideration of adaptation measures in the NECP; concrete measures are proposed for hydropower plants, for wind farms, for solar power plants, for electricity transmission and supply system. • Conducting and publishing research on access to groundwater and surface water resources and support equal involvement of women and men in the research. • Conducting research on access to renewable energy sources and support equal involvement of women and men in the research. • Conformation of policy documents. • Decommissioning of old and inefficient thermal power plants; Construction of a new combined cycle thermal power plant; Promoting equal involvement of women and men is desirable in both activities. • Conducting network climate resilience complex research and identifying adaptation measures that can reduce the impact of climate change on network functioning. • Calculation of greenhouse gas emission reduction forecast for energy transfer sub-sector. • Research on the possibility of the rehabilitation of hydropower plants; Rehabilitation of existing hydropower plants; Promoting equal involvement of women and men is desirable in both activities. • Implementation of energy efficiency measures in electricity distribution networks; Promoting equal involvement of women and men in energy efficiency measures. • Conducting a feasibility study on the use of local renewable energy sources for the development of heating and cooling infrastructure. Ensuring equal involvement of women and men.

Country	Georgia	**Sector**	Health
Title	Incorporation of Climate Mainstreaming Recommendations in Sector Development Political Documents Health Sector	**Author**	NGO Environment and Development
		Date	Nov. 2021
Objective	Identifying priority directions in energy sector by mainstreaming climate change issues and developing specific sectoral recommendations and guidelines for addressing climate change issues based on these identified and agreed priorities		
Approach	A review of the following documents has been performed: 'National Health Strategy', 'National Environment and Health Action Plan (NEHAP)' and 'Country's Basic Data and Directions Document (BDD)'. As a result of reviewing the documents and consulting with experts, several priority issues were identified to address the issue of climate change in the health sector and the kinds of changes to be implemented in these documents were determined. In particular, these issues include: • Reflection of the issue of climate change in the national health strategy which is under development; • Finding financial resources for climate change adaptation measures in health care and • Finding financial resources from the state budget for the implementation of measures envisaged by the NEHAP.		

Main results/policy recommendations	Policy recommendations: • Prioritization of the climate change issue in the process of developing a health sector strategy; • Improvement of the supervising of diseases and risk factors related to climate change and collecting scientific evidence on the impact of climate change on human health; • Increasing readiness for a timely response; • Increasing the qualifications and resources of medical staff • Increasing the capacity of high-level representatives of the health sector; • Creating relevant (economic) evidence for resource mobilization and investment.

4.4 Moldova

Country	Moldova	**Sector**	Energy
Title	Development of Recommendations for Mainstreaming Climate Change Issues into Energy Sector's Policies, Strategies and Programmes of the Republic of Moldova	**Author**	Ivan Filiutsich
		Date	1 November 2021- 1 February 2023
Objective	The overall objective of the report is to design and conduct a review and analysis of the national policies, legal and regulatory framework in the energy sector in order to make recommendations for the incorporation of climate change considerations into the respective sector planning processes.		
Approach	Analysis of the energy balance to identify drivers for emission trends, presentation of climate risk profile of the energy sector, overview of national legislative document related to energy and climate policies (since 2002), analysis of European policies and relevance for Moldova and assessment of alignment, identification of mitigation and adaptation barriers and gaps in Moldova, development of recommendations		
Main results/policy recommendations	Improvements to the legal framework with specific recommendations for 12 target areas of policy interventions (fossil fuel use, renewables energy efficiency, energy management, energy audits, smart metering, emission trading system public procurement, transport, taxation, financing and other). Improvement of mitigation and adaptation monitoring: • Increase the efficiency for delivering climate goals and finances at the national level through operationalization of the M&E system in support to the Coordination Mechanism • Develop an evaluation framework to capture how well climate risk management is integrated into national and sub-national development. • Evaluate country's institutional level capacities to address mid- and long- term energy sector's mitigation and adaptation issues • Operate the indicator-based system through the Climate Change Adaptation Information System components • Assess and track progress under the successive NAPs, SAPs through monitoring and measuring • Monitor the implementation of adaptation technologies and practices, as well as financing and investments		

	Strengthening Institutional and Cross-cutting Capacities • Institutional framework: improve interagency communication • Budget mainstreaming • Risk management information and technologies: knowledge management, hazard and riks mapping, evaluation • Adaptation mainstreaming: include energy sector in environmental impact assessment, set up analytical process • Climate awareness and mainstreaming: stakeholder specific • Climate knowledge and training: identify sectoral training institutions and develop training material • Spatial (urban, rural, land) planning: map vulnerable settlements, review spatial plans of municipalities, … Strengthening Role of International Organizations and International Financial Institutions in Mainstreaming Climate Change Issues into Energy Policy, Technology Transfer and Green Market Development Strengthening Municipal Planning Polices: support action at local (municipal) level, importance of Covenant of Mayors and SECAPs

Country	Moldova	**Sector**	Waste
Title	Guideline on climate change mainstreaming into waste sector policies	**Author**	Resources & Waste Advisory Group
		Date	May, 2021
Objective	The "Guideline for integrating climate changes in the waste management policy" is the support material for a series of dedicated trainings to facilitate the implementation of the Paris Climate Agreement at sectoral level in the Republic of Moldova.		
Approach	Chapter 1 refers to compiling the GHG inventories in the waste sector. It also contains a subchapter on collecting the necessary data to put together this inventory. Chapter 2 focuses on the best practices for emission reduction in the sector and addresses topics such as the GHG emission reduction potential as part of the selection criteria for the investment projects, the assessment of the GHG reduction impacts in projects and various investment scenarios in the sector. Among the solutions, the chapter presents waste management technologies that achieve GHG mitigation, circular economy strategies that also have GHG reduction potential and a subchapter dedicated to the improvement of landfill management in order to reduce GHG impacts. Chapter 3 focuses on the risks and vulnerabilities of the sector and infrastructure caused by climate change, on the adaptation potential and resilience building in the sector, as well as on enhancing the resilience of the communities by implementing certain targeted measures. Chapter 4 summarizes what the prioritizing of climate changes in the sector and the correct inventory of the GHG emissions mean. It also covers the GHG emissions reduction and adaptation to the climate change risks, with specific focus on the sectoral policies in Moldova. Chapter 5 focuses on the funding opportunities created for the mitigation of and/or adaptation to climate change, which are relevant for the waste management sector. These include those dedicated funds and funding sources such as Green Climate Fund and NAMA Facility. Chapter 6 presents examples of best practices in waste management and climate change based on the information provided in all the previous chapters.		
Main results/policy recommendations	Mitigation recommendations: • follow circular economy principles and resource efficiency hierarchy (remove, reduce, re-source, reuse, recycle, recover, return)		

	• avoid disposable of biodegradable organic material • apply oxidation layer on top of landfills • recover and flare landfill gas • use output of waste treatment technologies as secondary material (e.g. compost, biogas, etc.) • support waste prevention, reduction, repair, reuse and home-composting • adequate management of landfills (avoid surface water to enter landfill body, drainage system, soil cover, etc.) • apply suitable technologies under consideration of technological restrictions • building the appropriate infrastructure (transfer, sorting and composting stations, MBT plants • recovery of biogas from wastewater treatment Adaptation recommendations: • Implementation of a study meant to identify the risk and vulnerability of the existing and planned infrastructure for waste management to the impacts of climate change • Regulation for disposal and other relevant policies establish building and operation standards to take into consideration the results of the vulnerability study • Options for adaptation and resilience-building may include Technological changes, Development of risk management plans as part of the infrastructure operation manual, Development of risk management plans as part of the infrastructure operation manual, Increase of sensitivity in terms of good practices, Rethinking the zonal planning and the strategical location of the new infrastructures, Risk management and risk communication, Introduction of the waste sector in the critical infrastructure of the country and in the National Adaptation Strategy

4.5 Ukraine

Country	Ukraine	**Sector**	Transport (aviation and shipping)
Title	Final recommendations for the development of the use of alternative fuels in the aviation and waterborne transport of Ukraine	**Author**	NGO «Renewable Energy Agency, Tetiana Zheliezna
		Date	May, 2022
Objective	Preparation of a list of final recommendations for legislative regulation and stimulation of the production and use of alternative fuels in aviation and waterborne transport of Ukraine; Guidance on the development of policy framework for the shifting to the use of alternative fuels in aviation and waterborne transport into existing decision-making and policy processes, suggesting tools for policymakers to support the various stages of the mainstreaming process		
Approach	Definition of SAF (sustainable aviation fuels), presentation of suggested minimum share of SAFs in aviation fuel to establish national goals, and description of recommendations		

	Description of measures for the development of regulation for the waterborne transport sector
Main results/policy recommendations	Final recommendations for increasing the use of alternative fuels in aviation of Ukraine can be generalized as follows: • Setting national targets for using SAFs. • Defining «sustainable aviation fuel» term. • Introducing sustainability criteria. • No excise tax for SAFs. • Providing infrastructure for the use of alternative aviation fuels. • Additional incentives for the use of alternative aviation fuels (exemption from taxation). • Review and adoption of regulatory acts regulating or affecting the use of alternative aviation fuels. • Reforming the tax on carbon dioxide emissions. • Introduction and integration of the trading system for GHG emission quotas in Ukraine with the EU ETS. Final recommendations for increasing the use of alternative fuels in waterborne transport of Ukraine can be generalized as follows: • Setting goals for the decarbonization of waterborne transport. • Use of biomethane for waterborne transport. • Use of biodiesel (FAME) and hydrotreated vegetable oil (HVO). • Cancellation or reduction of excise tax rates on biodiesel. • Review of regulatory documents and standardization. • Provision of infrastructure and other necessary conditions for the use of liquefied natural gas (LNG) and other alternative marine fuels. • Measures to stimulate domestic processing of raw materials into biofuel. • Additional incentives for the use of alternative marine fuels (exemption from taxation). • Involvement of waterborne transport in the system of trading quotas for GHG emissions.

Country	Ukraine	**Sector**	Transport (cycling)
Title	Improve state construction norms and state standards of Ukraine for improvement safety and comfort use bicycles	**Author**	Ksenia Semenova
		Date	April, 2022
Objective	1.Overview of the state building regulations and state standards of Ukraine related to bicycle infrastructure. 2. Study of foreign government standards and best practices regarding bicycle infrastructure 3. Preparation of recommendations for changes and additions to the norms and standards of Ukraine related to bicycle infrastructure to increase the comfort and safety of bicycle use		
Approach	Consultation were held with stakeholders (e.g. consultant fir the preparation of the National Strategy for the Development of Bicycle Transport). Determination of infrastructure elements, and analysis of norms and standards. Description of obtained results from the review, Identification of internal gaps (or contradictions within in Ukraine norms) and external gaps (between Ukraine and other countries). Modelling of scenarios for the		

	design of bicycle infrastructure an on-site inspections. Based on all that results achieved during review and consultations and research, recommendations were formulated.
Main results/policy recommendations	Recommendations in the area of infrastructure: • Traffic signs • Road marking • Traffic lights • Road fences • Rural bicycle lanes • Navigation guiding system • Road surface and clothing • Bicycle storage

Country	Ukraine	**Sector**	Transport (cycling)
Title	White Paper: Micromobility	**Author**	Iryna Bondarenko, Viktoriia Yashkina
		Date	May, 2022
Objective	The paper provides a comparison of different practices for regulating the movement of micromobility vehicles and policies regarding this type of transport in different countries; presents conclusions and recommendations of policies for determining the micromobility devices.		
Approach	Review of international experience in determining the micromobility vehicles, interviews with managers of companies providing micromobility vehicles rental services in the Ukrainian cities, and surveys of users of micromobility vehicles in Ukraine.		
Main results/policy recommendations	National level: • Definition of term micromobility and parameters to allow categorization • In regulating the movement of micromobility vehicles, it is proposed to equate them to bicycles in terms of rights and responsibilities of users, thus creating clear rules that are obvious to all road users and automatically envisaging the liability for violations already established • To develop strategic documents that would envisage measures aimed at developing micromobility infrastructure, allocation of appropriate funding, holding of information campaigns on the positive effects • To develop the rules for transportation of bicycles and micromobility vehicles in public transport, both urban and interurban (primarily by rail). Increasing the inclusiveness of public transport, arrangement of special places for transportation of such vehicles. • To improve road safety, to implement in Ukraine of practices based on the Vision Zero concept • To reduce or abolish import duties on bicycles and micromobility vehicles for a certain period, to stimulate local production of such vehicles. • To continue improving the State Construction Norms and SSUs, to envisage in them the modern means of calming and regulating traffic. Local level • Establish a coherent and safe cycling infrastructure • Involve the public in decision-making and discussion of infrastructure projects and urban spaces.		

	• Develop the rules of transportation of micromobility vehicles in public transport, consider integrating bicycle and electric scooter rental services in the uniform city ticket for transport. • Restrict the entry of cars into the central part of the city; • Develop policies on electric scooter and bicycle rental • To hold information campaigns to promote sustainable modes of transport, their positive impact on the environment, health, urban economy

5 Findings from Questionnaires

A questionnaire was circulated in the EaP countries with the objective get a better understanding where mainstreaming activities are challenging and how these challenges could be addressed. In total 24 responses have been received, mainly from governmental bodies covering all EaP countries.

The figures below (see Figure 4) show the results to two questions, asking in which sectors mainstreaming activities already have been carried out and for which sectors mainstreaming is considered most important. Important and well addressed are already activities in electricity & heat production, energy efficiency, transport, agriculture, waste, forestry, health and adaptation. Considered important, but so far less addressed are industrial activities, food systems, urban planning and circular economy. Gender equality is considered less important and has also been addressed the least.

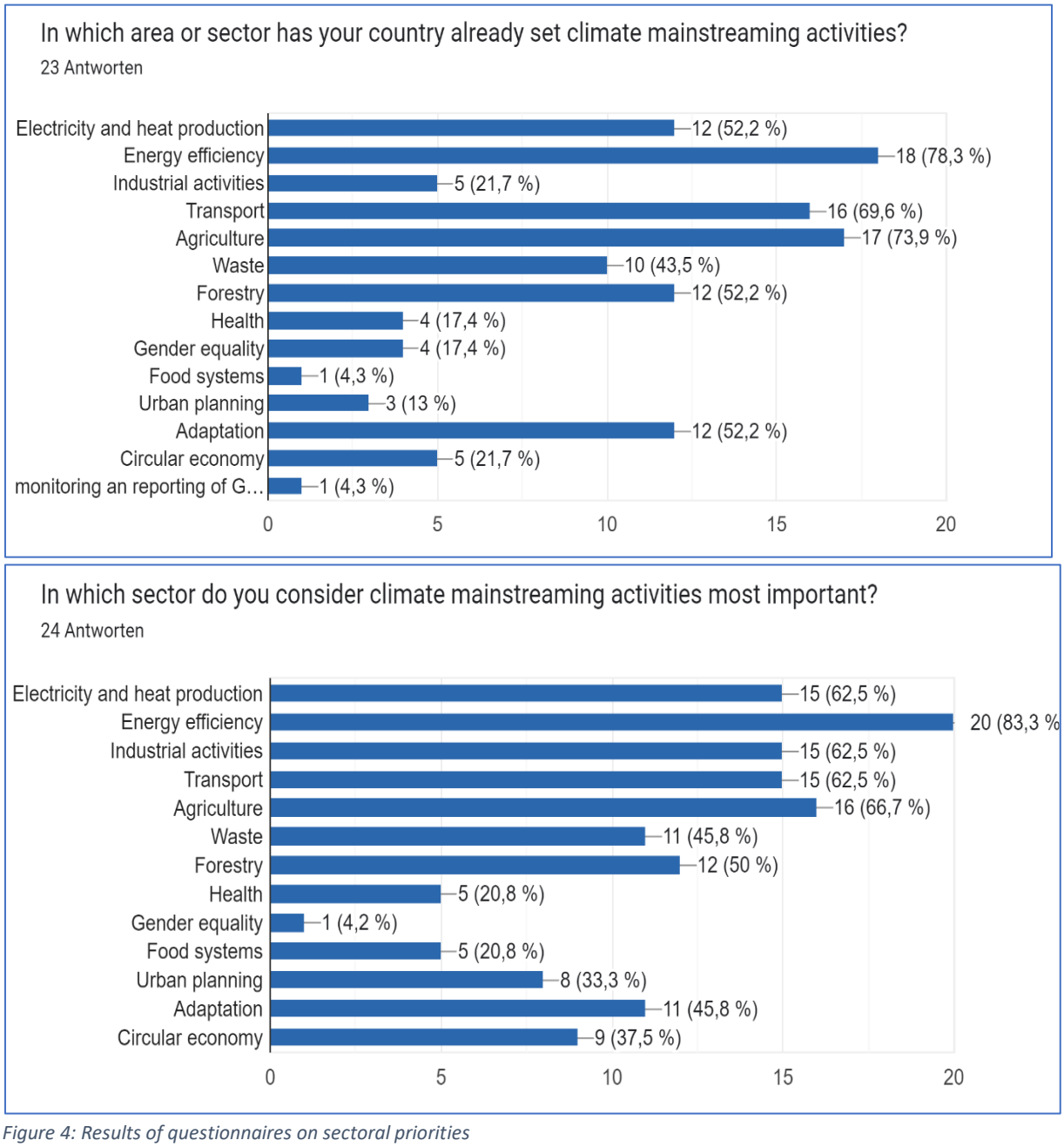

Figure 4: Results of questionnaires on sectoral priorities

Other questions referred to the challenges. 18 respondents found climate mainstreaming in general as challenging but feasible, three very difficult and one rather easy. Looking at the encountered challenges (see Figure 5) and how these could be overcome, it becomes very clear that interaction and cooperation across ministries or institutions, good management processes and capacity building to in-house experts are key.

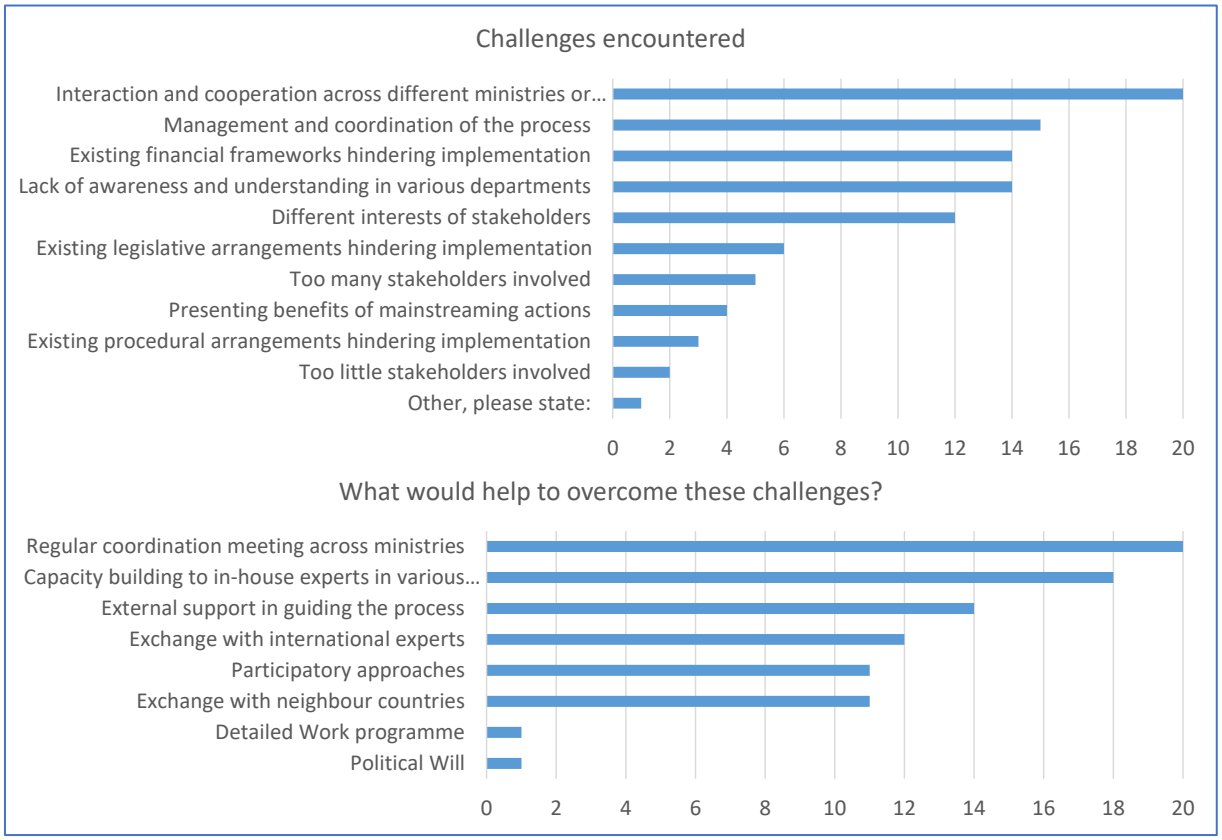

Figure 5: Results of questionnaires on challenges

6 Conclusions

Governments of EaP countries are well aware of the need for integrating climate change policies in the full policy landscape as all economic sectors are affected and must contribute to achieve a climate neutral future.

The energy sector is being the key emitting sector in all countries is targeted most. Based on the studies carried out, an important enabler is the availability of long-term planning how the energy sector needs to develop, so the legal framework can be amended to this strategic planning. Therefore it needs a strengthening of institutional and cross-cutting capacities. Incentives to extend the use of renewable energy sources and to set energy saving measures in all sectors are crucial. Also the energy infrastructure should be fit for the purpose, and not disregarded when it comes to climate adaptation measures. During the workshop, participants noted the difficulty in engaging the different stakeholders and emphasized that an obligation, such as the preparation of an integrated National Energy and Climate Plan (NECP) can have a very positive impact, as it forces the coordination and increases cooperation.

Mainstreaming in the agriculture sector has been addressed by three countries pointing out to the strong interlinkage of climate mitigation and adaptation. Increasing the resilience of the agriculture sector is fundamental for food security. Still, the sector is challenging as solutions are not as simple as in the energy sector and numerous stakeholders, such as agricultural businesses and farmers need to be taken on board. Mitigation measures range from sustainable management of pastures, water, fertiliser, manures, as well as a change in feeding practices. A general challenge is a lack of agricultural data and scientific research to plan and monitor actions.

Every policy field can contribute to mitigate climate change and is affected by the impacts of climate change. Having this understanding and the capacity in each ministry will contribute to a whole-of-government approach and enable a robust, coherent and effective planning and implementation of climate policies and measures.