COVID-19 and greening the economies of Eastern Europe, the Caucasus and Central Asia

17 February 2021

As in many countries, the economies of Eastern Europe, the Caucasus and Central Asia (EECCA) have been negatively affected by the global COVID-19 pandemic. Their governments responded by addressing the health impacts and providing relief to affected businesses and workers. Many EECCA countries have also implemented measures that will help advance environmental objectives as part of their rescue and recovery plans. Nevertheless, much more needs to be done to ensure that recovery plans accelerate a green transition, thereby building resilience against external shocks. This policy paper analyses measures related to COVID-19 in 11 EECCA countries based on their potential to advance the transition to a greener, climate-resilient and low-carbon economy. Recommendations suggest ways to ensure that governments align efforts to support economic recovery with their objectives on climate change, biodiversity and wider environmental protection.

Key messages

In the short term, policy measures taken to slow down the spread of the virus have had both negative and positive impacts on the environment in the EECCA region. Negative impacts include an increase in single-use plastic waste and reduced environmental compliance monitoring. With regards to positive effects, countries have experienced short-term improvements in air quality due to limited mobility of people and reduced activity of enterprises, leading also to reduced CO_2 emissions. However, these improvements are only temporary and will have a negligible effect on total CO_2 concentration in the atmosphere.

As governments in the region accelerate medium- and long-term national strategies to stimulate a post-pandemic economic recovery, they have an opportunity to "build back better" in the face of climate change. The analysis presented in this paper shows that several countries have already taken targeted steps to incorporate environmental objectives in COVID-19 response and recovery plans. However, these measures are often disconnected or even at odds with broader environmental objectives. At the same time, some countries in an effort to prioritise economic development have taken measures with potential negative consequences for the environment.

Based on the analysis, the following set of recommendations is proposed for consideration in the EECCA region:

- Ensure that moratoria on environmental inspections and monitoring during the lockdown that are aimed to help relieve businesses from additional administrative and financial burden, as well as fossil fuel subsidies, are well-justified, targeted and temporary and are lifted as soon as the health situation improves.
- Incorporate environmental conditions in specific support provided to the agriculture and aviation industries to incentivise firms to transition towards cleaner technologies and fuels, with performance requirements related to environmental, social and governance criteria.
- Ensure strong links between the provision of financial support, including from development partners to strengthen economic recovery measures, and incorporation of green measures by the recipients in their operations.
- Maintain, and where possible, increase commitments to fund green measures, and ensure that funding for environmental agencies and ministries returns at least to pre-pandemic levels soon after health emergencies are addressed. This is particularly relevant for schemes supporting the adoption of greener technologies which tend to demonstrate societal benefits in the medium to long term, and often beyond the remits of their initial mandate.
- Share good practices on effective greening of economic stimulus packages among the countries in the region and beyond.
- Ensure that social and economic resilience to future shocks, including impacts from climate change, is made a strategic priority.

Given the high reliance on extractive and carbon-intensive industries in the region, it is imperative that green transition is placed higher on the policy agenda to accelerate economic transformation as part of the recovery and to meet global climate goals. This, in turn, implies better aligning economic recovery measures with national environmental goals and international commitments on climate change.

Introduction

The COVID-19 pandemic is a global health, social and economic challenge. Even as many countries grapple with a second wave of infections, governments around the world have accelerated the implementation of their medium- and long-term national strategies to stimulate the post-pandemic economic recovery. In many cases, including in the region of Eastern Europe, Caucasus and Central Asia (EECCA),[1] this effort involves addressing environmental challenges for a 'green recovery'. However, governments are tempted to adopt policies or approve projects that are more attractive to investors or help address short-term budget deficits during the pandemic, even if they have potential negative impacts on the environment. This creates a challenge. Even before the COVID-19 pandemic, the impacts of climate change were becoming increasingly evident across the region and the world. The risks of climate change will certainly not disappear even if the pandemic has been overcome. Without decisive action on climate change, even greater health, social and economic crises lie in the future. Therefore, it is essential that stimulus measures and policy responses to COVID-19 align with countries' national environmental goals and international commitments on climate change (i.e. the Paris Agreement, Sustainable Development Goals) (OECD, 2020[1]).

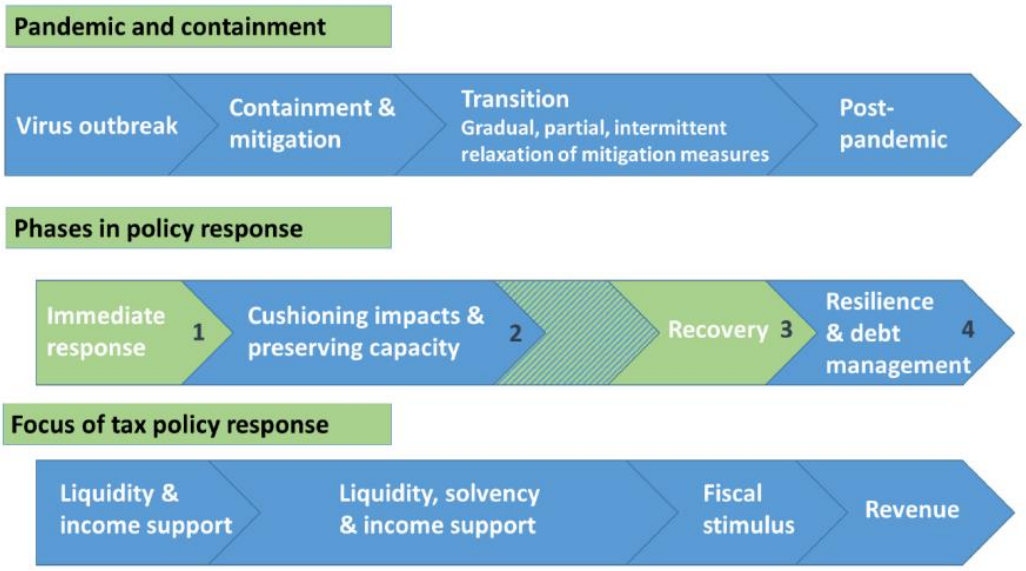
Pandemic-related economic stimulus measures can be an opportunity to invest in the structural transformations and technological innovations needed for sustainable improvements in people's lives. In addition to providing economic opportunities in the near term, such improvements are essential to enhance the overall resilience of societies. Both short-term and longer-term measures should aim to deliver both economic prosperity and wider well-being, improving productivity, enhancing resilience and decarbonising the economy. The window of opportunity to take strong action on climate is closing fast and short-term economic measures will have a significant impact on the ability to meet global goals.

Greening recovery measures can provide countries with an opportunity to "build back better", combining an emphasis on restoring economic growth and creating jobs with achieving environmental goals. One estimate suggests a green recovery could create 395 million jobs by 2030 globally (World Economic Forum, 2020[2]). The green transport sector alone could generate up to 15 million jobs, and investment in renewable energy could lead to up to 63 million jobs worldwide by 2050 (UNECE, ILO, 2020[3]; Layke and Hutchinson, 5 May 2020[4]). Investments in green infrastructure can become a central point in climate-resilient economic recovery due to its vast job creation potential. In the short term, however, a green transition will likely affect "brown" sectors negatively (e.g. those with a large environmental footprint) as new jobs may not demand the same skills or be in the same location (OECD, 2020[5]).

This policy paper provides an overview of the environmental aspects of EECCA governments' responses to COVID-19, starting from the first confirmed cases of the virus in February 2020. The analysis revealed that measures can be categorised in several ways. One way is based on a schematic that categorises policy responses, including on tax policy, by phases of the COVID-19 pandemic (Figure 1).

[1] EECCA includes the following 11 countries: Armenia, Azerbaijan, Belarus, Georgia, Kazakhstan, Kyrgyzstan, Moldova, Tajikistan, Turkmenistan, Ukraine and Uzbekistan.

Figure 1. Phases of policy response during and after the COVID-19 pandemic



Source: (OECD, 2020[6])

Phase 1 (immediate response) includes immediate health-related measures. For example, government regulations enforced the wearing of predominantly single-use surgical masks in all EECCA countries. This has led to increased medical waste and put pressure on existing, still underdeveloped, waste management infrastructure. Moreover, some governments in the region (i.e. Armenia, Azerbaijan, Georgia and Ukraine) issued recommendations to wrap the masks in plastic bags before disposal, which led to even more plastic waste. While some of these measures are justified by the health emergency, it is important that they are considered as temporary.

Phase 2 (cushioning impacts and preserving capacity) includes measures to mitigate the socio-economic consequences of the pandemic that may have positive or negative environmental impacts. Examples include providing support to micro, small and medium enterprises (MSMEs), as well as sector-specific support for agriculture and energy. Some measures may have clear positive implications on the environment, such as the "National Greening Programme for SMEs" in Moldova or "Business against COVID-19" training webinars organised in Armenia. However, some measures may have negative impacts, such as subsidising fuel prices for farmers in Georgia and Kazakhstan, prolonging the moratorium on environmental control in Kyrgyzstan and providing tax exemptions to gasoline producers in Kazakhstan.

Phase 3 (recovery) includes measures implemented specifically to ensure a green recovery. Examples include generating employment through afforestation and incorporating green elements in economic recovery packages. In addition to new measures, the COVID-19 pandemic highlighted specific needs that accelerated the development of new programmes, or placed existing ones higher on the policy agenda. These ranged from promoting green financial instruments in Kazakhstan and implementing previously adopted Action Plans that promote environmental activities in Moldova, to the development of a new industrial policy strategy focused on energy efficiency as one of the priorities for economic recovery in Uzbekistan.

Since the main objective of this analysis is to assess whether responses to the COVID-19 pandemic may have positive or negative implications on achieving environmental objectives of EECCA countries, the paper uses the following categorisation of recovery plans and measures:

- The first part of the analysis presents measures with potential positive environmental implications. This includes incorporation of green elements in national COVID-19 economic recovery plans; acceleration of pre-existing environmental policies; and green support to businesses. This part also includes a snapshot of support provided by development partners.
- The second part reviews mixed recovery measures, which include those with positive and negative implications.
- The third part of the analysis presents examples of policy developments likely to create negative consequences for the environment.

Table 1 presents the categories and shows the types of measures implemented by individual countries. However, it may be too early for definitive conclusions on whether a policy will ultimately have a positive or negative impact on the environment and on countries' progress towards greening their economies. Thus, this review aims to stimulate discussion and to support the EECCA countries in further analysis and actions to make the economic recovery as green as possible.

The information included in the review has been collected using publicly available government sources and online news articles. In addition, it reflects interviews with local experts and feedback from the members of the GREEN Action Task Force from EECCA countries, for which the OECD serves as Secretariat. As the crisis is ongoing and the health and economic situation is rapidly changing, there have been limitations on accessibility and consistency of information. Further work is thus needed to complete this inventory and assessment.

The information contained in this paper is based on the November 2020 data.

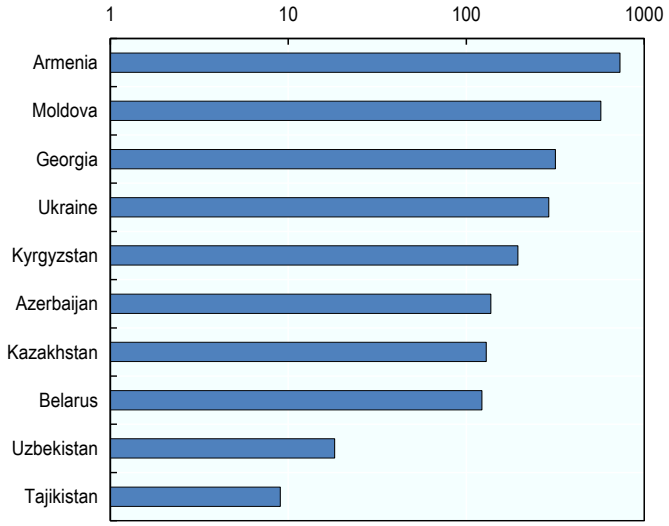
Table 1. Examples of EECCA government responses to COVID-19 with positive and potentially negative environmental implications

	Green elements in COVID-19 response and recovery plans	Acceleration of green elements of pre-existing national plans	Green support to MSMEs	Green elements in international initiatives in support of COVID-19 response	Mixed recovery measures					Recovery measures with potential negative implications
					Air quality	Energy	Agriculture	Waste management	Water, sanitation and hygiene	
Armenia	✓		✓	✓		✓		✓		✓
Azerbaijan		✓		✓	✓	✓		✓		
Belarus				✓		✓		✓		✓
Georgia			✓	✓	✓	✓	✓	✓		
Kazakhstan	✓	✓	✓	✓		✓	✓	✓		✓
Kyrgyzstan	✓	✓		✓	✓			✓		✓
Moldova	✓	✓	✓	✓		✓				
Tajikistan	✓			✓		✓				
Turkmenistan				✓						
Ukraine				✓	✓			✓	✓	✓
Uzbekistan		✓		✓			✓		✓	

Background

The COVID-19 crisis, which began in late 2019, was declared a pandemic by the World Health Organization (WHO) on 12 March 2020. It inflicted enormous damages on people's health, livelihoods and well-being globally. The first confirmed cases of the virus in the Eastern Partnership (EaP) countries were reported in late February 2020 and in Central Asia in mid-March (OECD, 2020[7]; OECD, 2020[8]). The most affected countries in the region have been Armenia, Moldova, Georgia and Ukraine with more than 200 deaths per million people (Figure 2).[2]

Figure 2. Total confirmed COVID-19 deaths per million inhabitants as of 30 November 2020 (log scale)



Note: No data available for Turkmenistan
Source: Dataset is sourced from the European Centre for Disease Prevention and Control and maintained by Our World in Data, https://ourworldindata.org/coronavirus-source-data.

The consequences of the pandemic, as well as related restrictions introduced by national and local governments, have put health care systems under strain; disrupted trade; and slowed down production, consumption and investment. They have triggered the most severe economic and jobs crisis in recent years (Annex 1.A).

Early data make clear that the economic and social costs of the pandemic are large. They will be felt in years to come, with severe but heterogeneous impacts on different countries and regions (OECD, 2020[7]; OECD, 2020[8]).[3]

[2] Challenges in attributing the cause of death to COVID-19 versus pneumonia may have under- or overestimated the reported number of deaths in the region.

[3] Annex 1.A presents a brief overview of socio-economic consequences of the COVID-19 pandemic in the EECCA region.

Short-term impact of the economic slowdown on the environment: The case of air quality

The widespread lockdown measures have had both positive and negative short-term impacts on the environment.

One of the negative impacts results from the large increase in single-use plastic and plastic waste. Global sales of disposable face masks alone were expected to increase from USD 800 million in 2019 to USD 166 billion in 2020 (UNCTAD, 2020[9]). Estimates show that increased consumption of single-use plastic will roll back global efforts to reduce plastic waste by one to three years. This includes the use of plastic items such as masks, gloves, hand sanitiser bottles and food packaging as well as improper disposal practices.

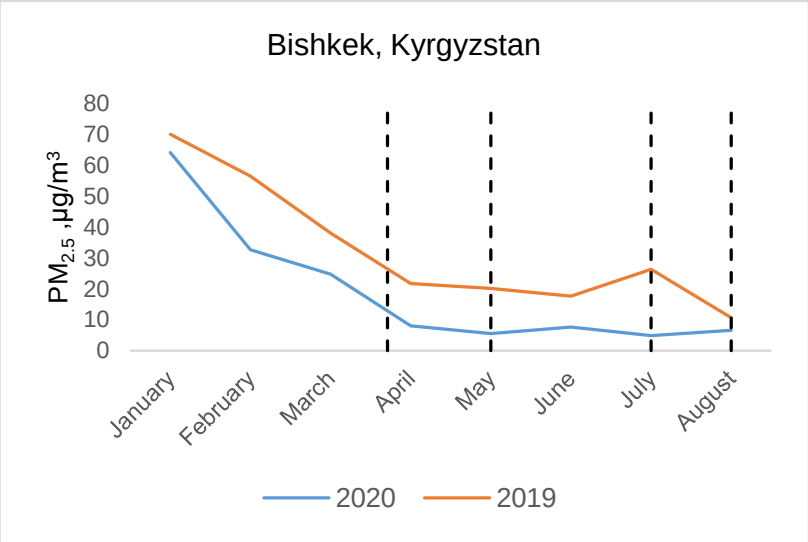
COVID-related measures have also negatively affected the tourism industry, which might diminish incentives and reduce funding for managing national parks and protected areas. For example, the budget for Georgia's Agency of Protected Areas in 2020 decreased from more than EUR 7 million to approximately EUR 4 million. To support countries' protected areas during the pandemic, the Caucasus Nature Fund[4] provided EUR 1.2 million and EUR 500 000 grants to Georgia and Armenia, respectively (Caucasus Nature Fund, 2020[10]; Government of the Republic of Armenia, 2020[11]).

At the same time, the lockdowns have had positive impacts in terms of short-term improvements in air quality due to restrictions on mobility (including transport of goods and people) and reduced activity of enterprises. One study analysed the impact of lockdown in Georgia on air pollution in Tbilisi compared to the same period in 2017-19. Over 17-27 April 2020, when the movement of automobiles was banned, ambient levels of fine particulate matter ($PM_{2.5}$), coarse particulate matter (PM_{10}), nitrous oxide (NO_2) and carbon monoxide (CO) all decreased, although the levels of ground-level ozone (O_3) increased (Amiranashvili, Kirkitadze and Kekenadze, 2020[12]). The Armenian Environmental Monitoring Information Centre reported a decline in NO_2 emissions between 1-16 April 2020 compared to 1-16 March of the same year, which corresponds to the timing of the lockdown.[5] Major cities in Central Asia experienced similar trends (Figure 3, Figure 4, Figure 5).

[4] Caucasus Nature Fund is a trust fund that provides funding support for nature conservation in Armenia, Azerbaijan and Georgia.

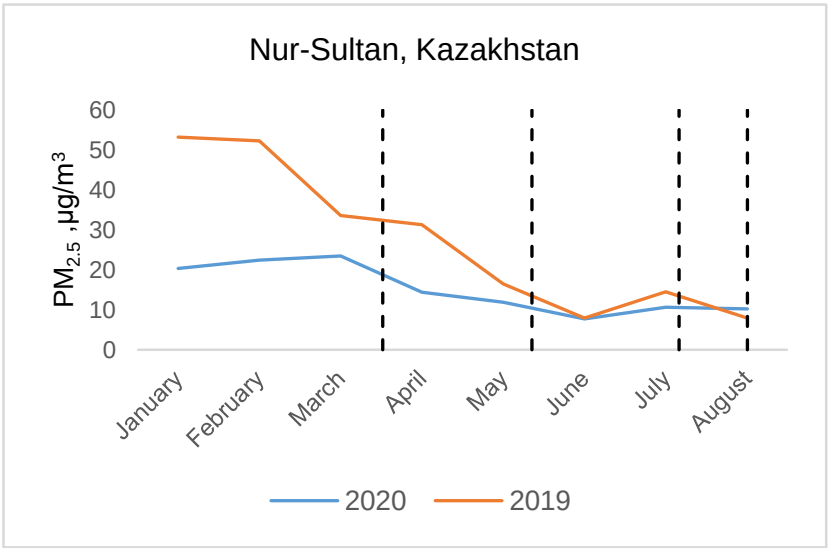
[5] For more information, see http://arka.am/en/news/society/armenia_reports_drop_in_nitrogen_dioxide_emissions/.

Figure 3. PM2.5 levels in selected major cities in Central Asia during the months of lockdown in 2020 compared to the same period in 2019 (Bishkek, Kyrgyzstan)



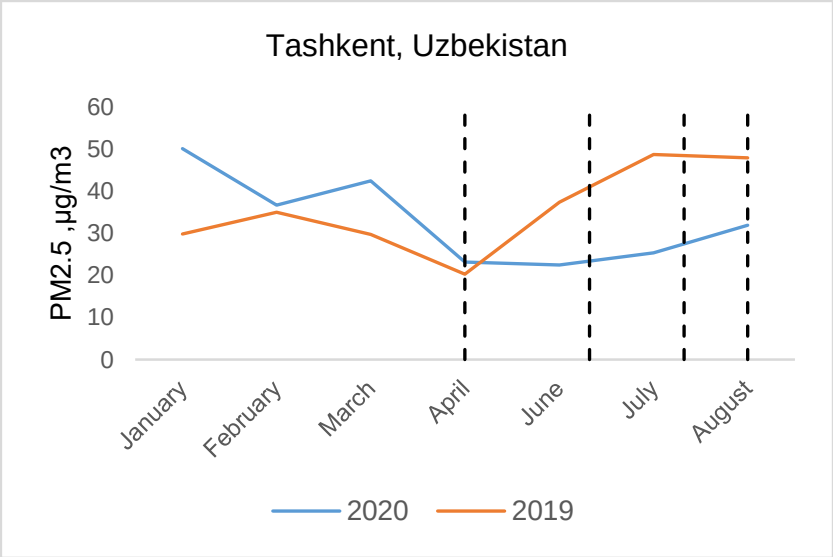
Note: Dotted lines represent the periods with quarantine restrictions in the cities.
Source: AirNow US Department of State, www.airnow.gov/international/us-embassies-and-consulates/.

Figure 4. PM2.5 levels in selected major cities in Central Asia during the months of lockdown in 2020 compared to the same period in 2019 (Nur-Sultan, Kazakhstan)



Note: Dotted lines represent the periods with quarantine restrictions in the cities.
Source: AirNow US Department of State, www.airnow.gov/international/us-embassies-and-consulates/.

Figure 5. PM2.5 levels in selected major cities in Central Asia during the months of lockdown in 2020 compared to the same period in 2019 (Tashkent, Uzbekistan)



Note: Dotted lines represent the periods with quarantine restrictions in the cities.
Source: AirNow US Department of State, www.airnow.gov/international/us-embassies-and-consulates/.

Despite short-term improvements in key indicators and anecdotal evidence of improved air quality in major cities, this positive environmental outcome is likely to be temporary. In terms of climate change, it will have a negligible effect on total CO_2 concentration in the atmosphere. Indeed, daily global emissions of CO_2 reduced up to 17% due to quarantine restrictions but by June 2020 the levels were already just 5% below 2019 levels (World Economic Forum, 2020[13]). Preliminary estimates of the World Meteorological Organization (WMO) indicate an annual global emission reduction between 4.2-7.5% in 2020. This reduction is expected to slow the rise of atmospheric CO_2 levels by 0.08-0.23 parts per million (ppm) per year. However, the concentration is still rising and the slowing falls within the 1 ppm natural variability caused by annual fluctuations in the carbon cycle and changes in carbon sinks (WMO, 2020[14]).

Reductions in global daily emissions were mainly driven by the 40% decrease in transport CO_2 emissions. On the other hand, the power and industry sectors contributed less to the decline with a decrease of 22% and 17%, respectively (PIK, 2020[15]). These findings are supported by a study that assessed the changes in air quality in Almaty, Kazakhstan (Kerimray et al., 2020[16]). The study showed that concentrations of $PM_{2.5}$ fell by an average of 21% between 19 March and 14 April 2020 compared to the same period in 2018 and 2019. However, they still exceeded the daily limits of the WHO air quality guideline on 18 of the 27 days assessed. At the same time, concentrations of probable carcinogens such as benzene and toluene were two to three times higher than averages recorded over the same period between 2015 and 2019 (Kerimray et al., 2020[16]).[6] Since traffic decreased dramatically during the lockdown, these findings point to coal-fired energy production in urban areas that did not cease operations during this period. An analysis of air quality in Almaty by the Ministry of Ecology, Geology and Natural Resources of Kazakhstan during the lockdown further illustrates this point (Skiban, 2020[17]). It showed that 52% of pollution originates from transport emissions and 48% from two coal-fired combined heat and power plants “CHP-2” and “CHP-3”.

[6] Increased concentrations of benzene and toluene could be attributed to the no-precipitation conditions during the sampling days in 2020 compared to previous years.

This was surprising as an earlier ministry evaluation did not find large emissions from power plants and had attributed air pollution mostly to traffic-related sources (Skiban, 2020[17]).

Existing and planned green measures of the post COVID-19 government recovery plans in the EECCA region

The outbreak of COVID-19 has forced governments to mobilise resources and channel efforts to safeguard public health and support the economy. As part of these efforts, most EECCA countries have implemented measures that promote greening their economies:

- "greening" COVID-19 responses (Armenia, Kazakhstan, Kyrgyzstan, Moldova, Tajikistan)
- creating green jobs (Armenia, Azerbaijan, Kazakhstan)
- accelerating environmental plans (Azerbaijan, Kazakhstan, Kyrgyzstan, Moldova, Uzbekistan)
- providing green support to MSMEs (Armenia, Georgia, Kazakhstan, Moldova)
- promoting alternative means of transport (Azerbaijan, Georgia, Ukraine)
- supporting green recovery of the agriculture industry (Georgia)
- increasing fines for pollution with medical waste (Georgia)
- incorporating water-related measures in COVID-19 responses (Ukraine, Uzbekistan).

At the same time, some countries have adopted measures that may limit progress towards a green economy:

- rolling back or freezing adoption of environmental regulations (Belarus, Kazakhstan, Ukraine)
- increasing fossil fuel production in economic stimulus programmes (Ukraine)
- providing unconditional tax exemptions to energy-intensive industries (Kazakhstan)
- imposing a prolonged moratorium on ecological control (Kyrgyzstan)
- redirecting financing from planned green investments (Armenia, Ukraine).

The next sections present an overview of existing and planned measures of the post-pandemic government recovery plans that may impact the environment in the EECCA region. A list of all identified measures is available separately.

COVID-19 response and recovery plans

This section presents measures that the EECCA countries applied to "green" COVID-19 economic responses and recovery plans.

Armenia adopted 22 actions to address the economic and social impact of the COVID-19 pandemic. One action, for example, aimed to generate employment through afforestation activities (Government of the Republic of Armenia, 2020[18]). In exchange for planting seedlings of local willow trees along rivers and fencing off the planted areas, workers earned up to AMD 10 000 per day (approximately USD 19).[7] The programme was estimated to create at least 1 000 seasonal jobs. As of 1 June 2020, more than 2 million

[7] Average monthly wage in 2020 in Armenia is AMD 187 224 (approximately USD 360) (Statistical Committee of the Republic of Armenia, 2020[69]).

seedlings had been planted.[8] Given the successful outcome of the project, the German Ministry for Economic Development and Co-operation (BMZ) has supported the second phase.

Armenia and **Tajikistan** are incorporating green measures in their COVID-19 recovery packages with support of the NDC Partnership.[9] As part of its COVID-19 response, the NDC Partnership launched an Economic Advisory Initiative in July 2020. This will provide advisers to 32 country members – including Armenia and Tajikistan from the EECCA region – that have requested support to integrate Nationally Determined Contributions (NDCs) into the recovery packages (NDC Partnership, 2020[19]). In this regard, a local Senior Economic Adviser will be posted to Armenia's Ministry of Economy for 12 months to support the greening of the country's economic recovery packages (NDC Partnership, 2020[20]). The adviser will aim to ensure alignment with the country's sustainable development and climate change goals; identify low-carbon and/or climate-resilient projects for investment; support responsible ministries on the revision of NDCs; and consider the economic drawbacks and other relevant repercussions of the pandemic.

In **Kazakhstan**, the Ministry of National Economy together with relevant state bodies developed a draft National Action Plan to implement the environmental priorities outlined in the Presidential Address to the Nation "Kazakhstan in a new reality: Time for action" delivered on 1 September 2020 (Government of the Republic of Kazakhstan, 2020[21]). It includes eight measures in the "Ecology and protection of biodiversity" section and involves sustainable development of the mineral resource base; water management; fisheries and national parks; improvements of environmental policy; and "green growth" and decarbonisation measures. Additionally, Kazakhstan is revising its pre-existing Strategic Development Plan 2025 to incorporate COVID-19 socio-economic responses. The plan promotes increasing renewable energy supply, improving water efficiency and reducing greenhouse gas (GHG) emissions.

Kazakhstan's anti-crisis 2020-21 Employment Roadmap programme envisages creation of 6 700 social, communal and infrastructure projects. These, in turn, will generate 255 000 jobs and lay the foundation for 100 000 permanent jobs (Government of the Republic of Kazakhstan, 2020[22]). As of 27 October 2020, more than 202 000 workers have already been employed with an average monthly wage of KZT 130 000 (approximately USD 310).[10]

As part of adapting its economic programme to the changes caused by the pandemic, **Kyrgyzstan** developed its third economic recovery package, which includes several instruments to promote the production of ecologically friendly products (Government of the Kyrgyz Republic, 2020[23]).

The Ministry of Economy and Infrastructure of **Moldova** began developing an action plan to address the consequences of the pandemic. It has three components: (1) reducing the impact on the business environment; (2) promoting economic recovery; and (3) building economic resilience. It is planned that all three components will integrate environmental objectives.

[8] For more information, see https://newsarmenia.am/news/armenia/pochti-2-mln-sazhentsev-ivy-posazheno-v-armenii-v-ramkakh-antikrizisnoy-programmy-pravitelstva/.

[9] NDC Partnership is a coalition of 110 countries and 40 institutions to drive climate action, while enhancing sustainable development.

[10] Average monthly wage in the second quarter of 2020 in Kazakhstan was KZT 212 035 (approximately USD 504) (Bureau of National Statistics of the Republic of Kazakhstan, 2020[70]).

Acceleration/strengthening of green elements of pre-existing national plans

Although countries face socio-economic challenges from the COVID-19 crisis, they are continuing – or in some cases accelerating – the implementation of pre-existing policies and measures aimed at greening the economies.

In **Azerbaijan,** to support employment generation during the pandemic, the number of paid public jobs increased from 38 000 to 90 000. The jobs usually involve disinfection activities and rendering social services to vulnerable groups but also include developing urban green space.[11]

Azerbaijan also continues its pre-existing efforts in greening the economy. The country has published the "In-depth Review of the Energy Efficiency Policy of the Republic of Azerbaijan" and is currently working on a draft of the "National Energy Efficiency Action Plan" under the EU4Energy initiative to enhance the energy sector by promoting energy efficiency and the use of renewable energy sources.

In **Kazakhstan**, the pandemic highlighted the importance of developing domestic securities markets. Specifically, it identified the potential role of Astana International Financial Centre (AIFC) in the country's recovery and sustainable economic development through green finance opportunities.[12] One of AIFC's priorities includes supporting green projects through green bonds and green financial tools. In this regard, on 11 August 2020, AIFC announced issuance of the first green bonds in the amount of KZT 200 million (USD 478 469) on the Astana International Exchange (AIFC, 2020[24]). The bonds, issued by the JSC "Damu" Entrepreneurship Development Fund in co-operation with the United Nations Development Programme, aimed to stimulate investment in renewable energy projects implemented by SMEs. This achievement could further support the green recovery of SMEs in the aftermath of the pandemic.

Highlighting its vulnerability to external shocks, **Kyrgyzstan** is pushing the transition to innovative and less capital-intensive activities through an initiative called Intellectual Economy, which aims to shift the country to a more knowledge-based and diversified economy. The key premise of this initiative is to reduce dependency of the economy on migrant remittances and revenues from the polluting and energy-intensive mining sector.

In June 2020, despite the pandemic-related crisis, **Moldova** approved the National Development Strategy "Moldova 2030". The priority of the strategy is to improve water and soil quality, minimise discharge of hazardous substances into the environment and reduce the share of untreated wastewater. In addition, Moldova plans to create a National Commission on Climate Change and continues efforts in implementing the Action Plan for 2020-23. This includes activities in the fields of waste management, air quality and biodiversity conservation.

Uzbekistan identified eight key areas for economic recovery from the COVID-19 crisis, including strengthening industrial competitiveness (Official Website of the President of Uzbekistan, 2020[25]). In this regard, the President of Uzbekistan has instructed development of a strategy for industrial policy that includes increasing energy efficiency. This agenda was previously included in the Strategy of Uzbekistan for transition to a green economy for 2019-30.[13]

[11] For more information, see https://haqqin.az/news/179021.

[12] For more information, see https://astanatimes.com/2020/07/tokayev-plans-to-rely-heavily-on-aifc-role-in-kazakhstans-economic-recovery/ and www.euractiv.com/section/central-europe/news/nur-sultans-financial-hub-to-be-at-heart-of-kazakhstans-recovery-and-greening/.

[13] For more information, see https://lex.uz/docs/4539506.

Green support to micro, small and medium enterprises

Given the particularly negative impact of the COVID-19 crisis on MSMEs, countries in the region such as Armenia, Azerbaijan and Belarus are designing and/or revising their national strategies for private sector development. It is crucial that these plans are in line with GHG reduction targets in their NDCs and long-term climate commitments under the Paris Agreement. They should also provide appropriate incentives to businesses by supporting their sustainable operations and development. Several countries have already incorporated green aspects in the support provided to SMEs (Box 1).

Box 1. Examples of green aspects in support provided to SMEs as part of COVID-19 response

Armenia's Ministry of Economy together with the EBRD's Business Support Office and Investment Support Centre organised "Business against COVID-19" coaching webinars. Several of these webinars targeted the agricultural sector and focused on plant cultivation and protection, opportunities for agricultural development and hydroponic plant growing (an alternative to soil-based methods, which increases water efficiency).

Georgia has taken several measures to support MSMEs. It expanded the "Produce in Georgia" programme and increased the grant amount of the "Micro and Small Business Grants Programme". The latter programme emphasises green, innovative and eco-friendly businesses and provides aid to farmers to support ecologically clean domestic production.

Kazakhstan will introduce a new financial stimulus for SMEs through the Green Finance & Tech Accelerator to support the post-pandemic "greener" economic recovery focused on energy efficiency and renewable energy. The pilot project, carried out in the coal-dependent Pavlodar region, is supported by international organisations and international financial institutions.

Moldova launched the National Greening Programme for SMEs on 3 June 2020. The programme provides methodological and financial support to businesses by improving knowledge and skills related to the efficient use of resources, providing economic incentives to encourage SMEs to pursue green actions, and advising on international standards implementation and eco-labelling certification.

Source: (EBRD, 2020[26]; EU Neighbours East, 2020[27]; United Nations Kazakhstan, 2020[28]; ODIMM, 2020[29])

Green elements in international initiatives in support of a response to COVID-19

International development partners have played an important role in supporting EECCA countries to confront the consequences of the pandemic. Despite quarantine restrictions, many projects launched prior to the pandemic continued their operation as planned. In addition, new initiatives emerged to target "green" responses to COVID-19 (Box 2).

Box 2. Examples of green support provided by international organisations, institutions and nongovernmental organisations

The United Nations Development Programme (UNDP) is providing support for COVID-19 response measures, including elements with potentially positive environmental implications, to the following countries:

- **Kazakhstan:** providing equipment for treatment of infectious waste and containers for safe waste collection
- **Kyrgyzstan:** launching an "Early economic recovery – Recovering together" initiative, which provides support to businesses and guarantees preservation of jobs in the green economy, sustainable agriculture or new growth sectors (supported by the Government of Japan)
- **Moldova:** giving grants for female-headed households, women entrepreneurs and rural communities to implement environment-friendly practices (supported by the Government of Sweden)
- **Tajikistan:** introducing a sustainable drinking water supply system in Laboba village within the Water, Sanitation and Hygiene project
- **Uzbekistan:** improving awareness of COVID-19 in environmentally vulnerable areas in the Aral Sea region.

The World Bank is providing the following support to promote a green recovery and accelerate a green transition in the region:

- revising forestry projects in **Belarus** to increase employment
- increasing financing to support poor, rural communities with climate-smart agricultural activities in **Kyrgyzstan**
- integrating climate and green growth policy reforms into development policy lending in **Uzbekistan**
- supporting development of a regional One Health initiative in Central Asia to reduce risks of zoonotic diseases.

In **Armenia**, EU4Business has provided additional support during the pandemic by working with banks such as Credit Agricole and Ameriabank to provide special credit terms and grants for small and medium-sized enterprises, particularly those involved in green technology.

In **Georgia**, the European Union and UNDP launched a GEL 9 million (USD 2.7 million) grant programme to boost rural entrepreneurship, create jobs, improve management of natural resources and promote climate action in the aftermath of the pandemic.

In **Tajikistan**, the World Food Programme (WFP) launched Cash for Work projects to support 15 000 vulnerable people affected by the socio-economic shocks caused by the COVID-19 pandemic. The projects provide participants with cash assistance for three months in exchange for their work on rehabilitating irrigation canals, drinking water supply systems and forestry areas in the targeted communities.

In **Ukraine**, the Resource Efficient and Cleaner Production Centre (RECP) carried out a survey to understand how COVID-19 affected manufacturing enterprises and the support they needed to restore operations and improve economic and environmental performance. Additionally, the United Nations

Office for the Co-ordination of Humanitarian Affairs (UN OCHA) has revised the Ukraine Humanitarian Response Plan to incorporate responses to COVID-19 with a focus on clean water and sanitation.

The EU4Environment Programme readjusted its activities in light of the COVID-19 impacts on the economies of the region. The programme, implemented in the **Eastern Partnership countries of the European Union,** is supported by the OECD, the United Nations Economic Commission for Europe, the United Nations Environment Programme and the United Nations Industrial Development Organization. It includes support for developing green economy strategic plans; applying strategic environmental assessments and environmental impact assessments of policies and projects; raising awareness of the green economy; greening SMEs; or identifying mechanisms for greening the public and private finance.

The European Union and EBRD are joining forces to provide more financial support to the municipal, infrastructure and industrial sectors affected by the economic crisis caused by the coronavirus pandemic in **Eastern Europe and the Caucasus**. The loans will be used for sustainable investments in green city infrastructure, greener logistics chains, energy efficiency and green technology transfers in industrial processes, commercial operations and buildings.

Climate Action Network of Eastern Europe, Caucasus and Central Asia addressed governments of **Kazakhstan, Kyrgyzstan, Tajikistan and Uzbekistan** in their "Green recovery and climate action in Central Asia" to propose measures for green recovery from the COVID-19 crisis.

Source: UNDP sources: (UNDP Kazakhstan, 2020[30]; Government of the Kyrgyz Republic, 2020[31]; UNDP in Europe and Central Asia, 2020[32]; UNDP Tajikistan, 2020[33]; UNDP Uzbekistan, 2020[34]); The remaining information in the box has been compiled based on consultations and the following sources: (Raffi, 2020[35]; Delegation of the European Union to Georgia, 2020[36]; UN WFP, 2020[37]; RECP Centre, 2020[38]; UN OCHA, 2020[39]; EBRD, 2020[40]; CAN Central Asia, 2020[41])

UN country teams in Armenia, Azerbaijan, Kazakhstan, Moldova, Tajikistan and Turkmenistan have used a five-pillar framework for the socio-economic response to COVID-19. This aims to align their support with the national COVID-19 response and long-term development plans.[14] These plans include a focus on ensuring that environmental considerations are integrated into the COVID-19 response (Box 3).

Box 3. Green elements in the United Nations' COVID-19 socio-economic response and recovery plan

The UN's COVID-19 recovery plan for **Armenia** involves environmental considerations in each pillar, including development of tools for economic valuation of the impact of pollution on human health, biodiversity and infrastructure, environmentally friendly social services, green urban recovery and climate-sensitive recovery of migrant households.

In **Azerbaijan**, the UN plan is currently in the preparation phase and will include strategies in areas such as health, employment, education, agriculture and food security, gender and social protection.

The UN plan for **Kazakhstan** includes recommendations on fiscal stimulus packages with redirection of public resources to resource efficiency, low-carbon development, health and education, as well as

[14] The United Nations' framework for the socio-economic response to COVID-19 include five pillars: (1) health first; (2) protecting people; (3) economic response & recovery; (4) macroeconomic response and multilateral collaboration; and (5) social cohesion and community resilience.

provisions for sustainable housing and urban development and innovative financing of smart sustainable cities.

In **Moldova**, the plan includes provisions for supporting green resilient recovery through green investments, improved environmental standards and green fiscal stimulus packages. It also has a specific focus on improvement of air quality through instalment of air quality monitors, taxation measures restricting the use of old vehicles and promotion of alternative means of public transport.

In **Tajikistan**, the UN Integrated Socio-economic Response Framework is anchored to the COVID-19 Country Preparedness and Response Plan and the Ministry of Economic Development & Trade Economic Plan. It includes provisions for support for green economic recovery, as well as improved medical waste management and sanitation.

In **Turkmenistan**, the Immediate Socio-Economic Response Plan to Acute Infectious Disease Pandemic includes provisions for maintaining "green" practices in agriculture and supporting climate-resilient livestock practices.

Source: (United Nations in Armenia, 2020[42]; United Nations Kazakhstan, 2020[28]; United Nations in Moldova, 2020[43]; United Nations in Tajikistan, 2020[44]; United Nations Turkmenistan, 2020[45])

Mixed recovery measures

Air quality

The possible link between exposure to air pollution and the risk of developing a respiratory disease, such as COVID-19, provides additional impulse for countries to reduce air pollution (Box 4). Some countries in the region are already taking steps towards these goals:

- **Azerbaijan** plans to import 300 environmentally-friendly buses that run on compressed natural gas or have hybrid engines to replace old vehicles that contribute to high levels of air pollution in the capital.[15]
- In light of the pandemic, **Kyrgyzstan** pledged to revise the items of the Action Plan of Comprehensive Measures to Improve the Environmental Situation in selected regions in 2020-23 with the focus on reducing air pollution.[16]
- In **Georgia**, the mayor of Tbilisi proposed a ban on car travel for two days a week after the end of the national lockdown to prolong its positive environmental effects. To promote alternative transport, City Hall also installed electric scooters and announced its plans to buy bicycles for rental by residents.[17]
- In **Ukraine**, the number of cyclists in the capital increased by 2.5 times during the lockdown. To extend this effect after the lockdown's end, city authorities will continue developing Kyiv's cycling

[15] For more information, see https://az.sputniknews.ru/economy/20190618/420798363/baku-avtobusy-obnovlenie.html.

[16] For more information, see https://elgezit.kg/2020/08/06/v-pravitelstve-obsudili-plan-meropriyatij-po-uluchsheniyu-ekologicheskoj-situatsii-v-bishkeke/.

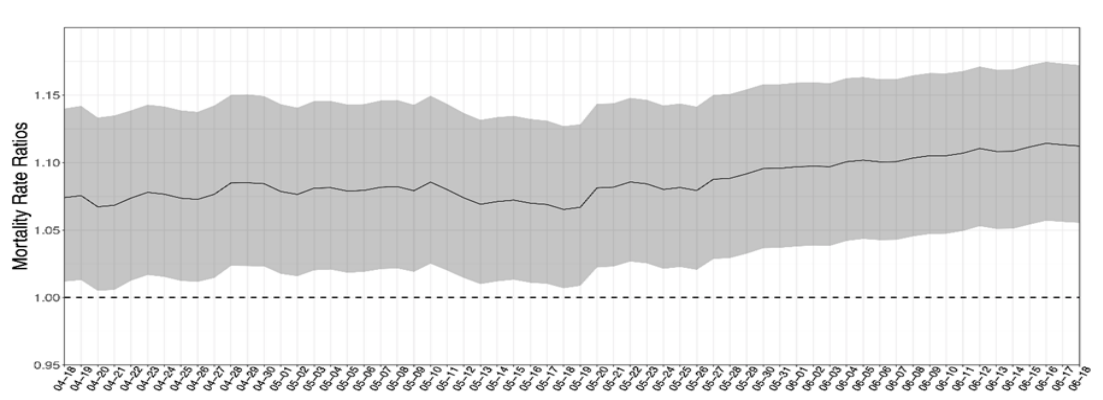
[17] For more information, see https://sputnik-georgia.ru/Tbilisi/20200428/248349732/Kaladze-sobiraetsya-peresadit-tbilistsev-na-velosipedy.html.

infrastructure. This will involve increasing the number of bicycle lanes and expanding the "Nextbike" bicycle rental network.[18]

Box 4. Possible relationship between COVID-19 mortality and air quality

There is emerging evidence of a potentially positive correlation between poor air quality and COVID-19 mortality. A number of correlational studies, such as (Zhu et al., 2020[46]) in the People's Republic of China, show a statistically significant positive relationship between increased air pollution and COVID-19 infection rates. Another recent study in Italy shows that daily new cases are positively correlated with particulate matter levels and the Air Quality Index (Zoran et al., 2020[47]). Specifically, fine particulate matter ($PM_{2.5}$) – tiny suspended particles with a diameter of no more than 2.5 microgrammes – has been linked to respiratory morbidity and mortality. High levels of $PM_{2.5}$ are often caused by vehicle exhaust, power plant and industrial emissions. A Harvard study (Wu et al., 2020[48]) has shown that an increase of 1 microgramme per cubic metre ($\mu g/m^3$) in the long-term average $PM_{2.5}$ is associated with an 11% increase in the COVID-19 death rate in the United States on a county level (Figure 6).[19] Similar results were published in a study of 355 municipalities in the Netherlands. It found that a municipality with 1 $\mu g/m^3$ more $PM_{2.5}$ concentrations will have 9.4 more COVID-19 cases, 3 more hospital admissions and 2.3 more deaths (Cole, Ozgen and Strobl, 2020[49]). While more research is needed to better establish causality, this relationship provides countries with an additional impetus to continue pursuing their environmental objectives and improve air quality.

Figure 6. COVID-19 mortality rate ratios per 1 µg/m3 increase in PM2.5 and 95% confidence interval using daily cumulative COVID-19 death counts from 18 April to 18 June 2020 in the United States



Source: (Wu et al., 2020[48])

[18] For more information, see https://kyivcity.gov.ua/news/vitaliy_klichko_kiv_prodovzhuye_rozvivati_veloinfrastrukturu/.

[19] The model adjusts for 20 potential confounders, including population size, age distribution, population density, time since the beginning of the outbreak, time since the state's issuance of stay-at-home orders, hospital beds, number of individuals tested, weather and socioeconomic and behavioural variables such as obesity and smoking.

Energy

Most recovery measures in the energy sector focus on household budget support, where governments and utilities have made commitments to reduce financial hardship on the population during the crisis. Support measures include payment moratoria, additional assistance with bills or pledges not to disconnect customers in arrears (Box 5). Such considerations are crucial to alleviate the socio-economic hardship caused by COVID-19. However, they could better reflect the environmental objectives in addition to being well-targeted, means-tested and time-bound. Finally, they should be phased out once people's livelihoods and the economy are back on a stronger footing.

Box 5. COVID-19 response and recovery measures in the energy sector in the EECCA region

Armenia: One measure to address the social consequences of COVID-19 included helping people pay utility bills (electricity, gas and water) in February 2020.

Azerbaijan: The Government Support Programme "100 kWh of Preferential Light Limit for the Population" provided support to residential users of electricity for April-May 2020. The preferential (discounted) limit on the use of electricity by the population increased from 300 to 400 kW/h.

Belarus: The Belarusian government postponed the introduction of the tariff for heat supply and gas supply in the presence of individual gas heating devices for the population outside of the labour force. This measure, planned for 1 May 2020, has been postponed by one year to accommodate the financial difficulties of the population as a result of the pandemic.

Georgia: To alleviate the impacts of the COVID-19 pandemic, the state budget financed utility bills for households with low electricity and gas consumption (March, April, and May 2020). According to the Georgian National Energy and Water Supply Regulatory Commission, the total estimate for this measure amounted to GEL 150 million (USD 45 million). This initiative has been extended to cover the period November 2020 through February 2021 for those who had reduced income during the pandemic.

Kazakhstan: In April and May 2020, the government helped more than 1.6 million people to pay their utility bills. As part of recovery, Kazakhstan has also provided exemptions to producers of gasoline (excluding aviation) and diesel fuel from the payment of excise taxes until 31 December 2020.[20]

Moldova: No specific direct support measures have been envisaged for the energy sector. However, a regulation banning the disconnection of customers in case of late payment for communal services, including for electricity and heat, has been introduced.

Tajikistan: Until the end of 2020, to reduce production costs of enterprises and prevent increased prices for domestic products, paid services to the population and inflation, the government postponed consideration of an increase in tariffs for services such as electricity, water, irrigation, communications and utilities.

Source: (OECD, forthcoming[50]; ILO, 2020[51])

[20] For more information, see https://nangs.org/news/world/kazahstan-do-kontsa-2020g-osvobozhdaet-proizvoditeley-benzina-i-diztopliva-na-eksport-ot-uplaty-aktsizov.

Agriculture

Support to the agriculture sector has been reinforced in light of the pandemic to ensure food security, operation of regional trade and value chains, and livelihoods of farmers, smallholders and fishers. Some of the measures include discounted price for diesel fuel in **Georgia** and **Kazakhstan** and a 50% reduction in tax rates for the use of water resources for irrigation of agricultural land in **Uzbekistan** (April, May and June 2020). Although these measures are justified given the circumstances caused by the COVID-19 pandemic, they can be better aligned with environmental considerations. The "Plant the Future" programme, launched as part of the economic recovery of the agriculture industry in **Georgia**, is an example of good alignment. It provided co-financing for purchasing and installation of irrigation system for perennial crops during the pandemic.[21] Such crops do not have to be reseeded or replanted every year and thus protect soil from erosion and improve soil structure.

Waste management

With the rise in use of disposable personal protective equipment during the pandemic, countries worldwide have been facing health and environmental trade-offs. To minimise the risk of spreading infection, countries such as **Armenia**, **Azerbaijan**, **Georgia** and **Ukraine** have issued statements recommending that citizens wrap used face masks in one or even two plastic bags. Increased use of single-use plastic bags puts an additional strain on the environment, as well as on countries that already operate at reduced waste management capacities.

At the same time, some EECCA countries are also taking steps to manage additional waste generated during the pandemic:

- **Azerbaijan** included measures to improve solid waste management in the Action Plan designed to mitigate the negative consequences of COVID-19.[22]
- Large cities in **Kazakhstan** and the City of Osh in **Kyrgyzstan** installed dedicated disposal containers for medical waste in public places. However, these initiatives were small-scale and did not reach rural regions.[23]

[21] For more information, see https://mepa.gov.ge/Ge/Files/ViewFile/35345.

[22] The Action Plan was adopted pursuant to the Decree of the President of the Republic of Azerbaijan dated 19 March 2020 "On a number of measures to reduce the negative impact of the coronavirus (COVID-19) pandemic and, consequently, sharp fluctuations in world energy and stock markets on the economy of the Republic of Azerbaijan, macroeconomic stability, employment and entrepreneurship." The Action Plan covers three areas: a) support to economic growth and entrepreneurship; b) support to employment and social welfare; c) macroeconomic and financial stability.

[23] For more information, see https://ru.sputnik.kz/society/20200722/14547014/pererabotka-ispolzovannye-maski-perchatki-kazakhstan.html, and https://24.kg/obschestvo/162124_vgorodeosh_poyavilis_konteyneryi_dlya_meditsinskih_othodov_otlecheniya_COVID-19/.

- The Ministry of Environmental Protection and Natural Resources of **Ukraine**[24] and a nongovernmental organisation (NGO) in **Belarus**[25] issued recommendations to use multi-use face masks to reduce the ecological footprint.
- **Georgia** has significantly increased fines for pollution with hazardous (medical) waste – by 25 times for individuals and by 10 times for legal entities.[26]

Water, sanitation and hygiene

Some countries have also started to incorporate water-related issues in their post-pandemic recovery plans. In its state programme, **Ukraine** includes "Water supply, sewerage, waste management" in the list of priority economic activities.[27]

In its "Budget for Citizens – 2020", **Uzbekistan** allocates additional funds (UZS 10 trillion or USD 940 million) from the Anti-Crisis Fund to implement measures to mitigate the negative economic impact of the pandemic (UNDP Uzbekistan, 2020[30]). This includes construction and reconstruction of water supply and sewerage facilities, as well as irrigation and amelioration objects (approximately UZS 1 trillion or USD 94 million).

Policy developments with potentially negative effects on the environment

The review of economic recovery packages revealed some potentially "anti-environmental" measures. For example, in May 2020 Ukraine adopted the Economic Stimulus Programme to overcome the effects of the pandemic. While it mentions promoting eco-friendly modernisations through optimising the environmental tax and access to international funding, links to other "green" policies are limited (Cabinet of Ministers of Ukraine, 2020[31]). Moreover, the Programme includes a number of measures aimed at supporting the energy sector and calls to prevent setting overly ambitious targets for CO_2 emissions reduction. Several environmental NGOs have addressed the government to revise and "green" the programme. They request to exclude such a provision, which is not aligned with Ukraine's climate goals under the Paris Agreement.[28]

Lockdown measures have put many activities, including those related to environmental protection, on hold. Although most activities are scheduled to resume after the lifting of restrictions, economic development sometimes has taken priority. For instance, the legislative process leading to adoption of a new

[24] For more information, see https://coronavirus.tsn.ua/ru/poderzhat-3-sutok-v-pakete-v-minzaschity-okruzhayuschey-sredy-rasskazali-kak-vybrasyvat-maski-i-perchatki-1579147.html.

[25] For more information, see the page of the Centre for Environmental Solutions https://ecoidea.by/ru/article/4416.

[26] Fines for hazardous (medical) waste for individuals increased from USD 162 to USD 1 600 and from USD 325 to USD 3 250 for legal entities. For construction waste, fines for individuals increased from USD 65 to USD 1 600 and from USD 485 to USD 4 850 for legal entities. For more information, see https://polpred.com/news/?cnt=47&sector=13.

[27] State Programme of Economic Stimulation to Overcome the Negative Consequences of Restrictive Measures to Prevent the Occurrence and Spread of Acute Respiratory Disease COVID-19 Caused by SARS-CoV-2 Coronavirus for 2020-2022 (of 27 May 2020 № 534). For more information, see https://www.kmu.gov.ua/npas/pro-zatverdzhennya-derzhavnoyi-programi-stimulyuvannya-ekonomiki-534-270520?fbclid=IwAR105_-5sR5UCYKqYEWQ2s4yLHzf-kxL-po9ah8wZLVC7r9K9IezbV0sVhk.

[28] For more information, see https://ua.boell.org/index.php/uk/2020/06/09/poziciya-fondu-schodo-programi-stimulyuvannya-ekonomiki-dlya-podolannya-naslidkiv, https://ucn.org.ua/?p=6819 and https://ecoaction.org.ua/wp-content/uploads/2020/06/comentari-do-programy-podolannia-covid19.pdf.

Environmental Code and a Low-Carbon Development Strategy in Kazakhstan was suspended due to resistance from some economic stakeholders.[29] However, in his annual address to the nation on 1 September 2020, President Tokayev of Kazakhstan asked parliament to consider and adopt the document by the end of 2020. More recently, at the last meeting of the Foreign Investors Council, the President underlined the importance of environmental protection and development of the low-carbon economy. At the same time, he referred, among others, to adoption of best available techniques and use of the polluter pays principle for large companies' emissions. Both of these principles have laid a foundation for the draft of the new Environmental Code. The Majilis (lower chamber of parliament) recently adopted the code, and sent it to the Senate for approval.[30] In Ukraine, public hearings related to the Law "On Environmental Impact Assessment", scheduled to take place during the quarantine, were cancelled and not rescheduled (Verkhovna Rada of Ukraine, 2020[32]). In Belarus, the pandemic froze the development of legislation on the right to use reusable packaging containers.[31]

Several countries have also implemented temporary moratoria on environmental inspection during the lockdown (e.g. Kyrgyzstan, Moldova, Ukraine). In most cases, these measures were justified for a short period for sanitary reasons and to help relieve businesses from additional administrative and financial burden during the crisis. However, in some countries environmental inspection activities have been suspended for a much longer period. Kyrgyzstan, for example, extended the moratorium until 1 January 2022 (Ministry of Economy of the Kyrgyz Republic, 2020[33]).

Restrictions on movement have also hindered scientists from conducting field studies on the river basins and wildlife. For example, in Kazakhstan, scientists were unable to conduct the traditional April count of critically endangered saiga antelopes.[32] This "count" is important as Kazakhstan is planning to build a "Centre-West" highway that will pass through the most important habitats and migration paths of saiga antelopes. Thus, uninterrupted activities of some scientists prove to be crucial in providing evidence to policy makers and advocating for preservation of habitats. In this sense, countries may explore creating special status for certain types of environmental professionals as essential workers. These activities would continue uninterrupted while strictly observing all necessary physical distancing and other precautions.

Due to the urgent need for finances in the health care sector, some budget has been reallocated from environmental awareness initiatives. In Armenia, 60 billboards intended to inform the population on water resources, air pollution reduction, forest conservation and the fight against plastics have been reassigned to posters aimed at combatting COVID-19 (Ministry of Environment of the Republic of Armenia, 2020[34]). On 13 April 2020, Ukraine passed the law "On Amendments to the Law of Ukraine on the State Budget of Ukraine for 2020" which considerably revised the budget for 2020, creating a special fund to fight the virus. As a result, part of the budget for energy-efficiency and environmental measures was reduced, while expenditures under the Coal Industry Restructuring Programme were nearly doubled to repay wage arrears to employees of state-owned coal companies[33]. One project affected by the budget revision was the Energy Efficiency Fund, which had begun to help reduce energy costs, improve living conditions and

[29] For more information, see https://kursiv.kz/news/kursiv-guide/2020-05/pandemiya-postavila-ekologicheskuyu-diplomatiyu-v-tupik-khotya-krizis.

[30] For more information, see https://astanatimes.com/2020/11/tokayev-addresses-foreign-investors-council-focuses-on-it-pharmaceutical-industry-oil-and-gas/.

[31] For more information, see www.ecoidea.by/ru/article/4484.

[32] For more information, see www.acbk.kz/article/default/view?id=469.

[33] For more information, see https://www.kmu.gov.ua/en/news/uryadom-vzhito-zahodiv-dlya-rozrahunku-iz-pracivnikami-derzhavnih-vugledobuvnih-pidpriyemstv

reduce GHG emissions in 2018. The Fund's budget of UAH 1.6 billion (USD 57 million) has been fully redirected to the COVID-19 response fund.[34] Another affected project was the reissuance of the Red and Green Books of Ukraine, which contain the list of threatened species.[35] This project has been postponed until 2021 – if the financing is reinstated. Funds set out for the purchase of air quality monitoring equipment in Ukraine have also been redirected towards the fight against the virus.[36] On 23 April 2020, the Verkhovna Rada Committee for Environmental Policy and Environmental Management raised concerns about the need to return the funds for environmental protection back to the budget.

Some reallocations are justified, considering budget constraints. However, redirection of finances from environmental projects and budgets has put additional pressure on already underfinanced institutions responsible for green and sustainable development. Once health emergencies are addressed, environmental measures and institutions will need adequate support to implement national environmental commitments. Linking COVID-19 awareness-raising campaigns with such issues as access to clean water or safe waste disposal could also offer "win-win" solutions.

Conclusions and recommendations

The analysis in this paper has provided different examples of measures taken in the EECCA region to respond to public health, social and economic consequences of the virus that might have positive or negative implications on the environment.

The paper clearly shows that several countries have already taken targeted steps to ensure a green recovery by incorporating environmental objectives in their new medium- and long-term strategies. A number of action plans also aim to green economic recovery packages with the support of development partners. Many implemented measures can serve as an accelerator of a green transition.

However, in many cases, measures lack coherence and are contradictory to each other and to broader environmental objectives. Given the high reliance on extractive and carbon-intensive industries in the region, it is imperative that green transition is placed higher on the policy agenda to accelerate economic transformation and meet global climate goals. This, in turn, implies better aligning economic recovery measures with national environmental goals and international commitments on climate change. In such a scenario, temporary jobs can turn into permanent jobs in green economic sectors and grants to businesses are used to invest in energy efficiency and renewable energy technologies.

An analysis based on experience from OECD member countries provides a good baseline for recommendations on how to better align economic recovery measures with national and international goals on climate change, biodiversity and wider environmental protection (Box 6).

[34] For more information, see www.bbc.com/ukrainian/news-52269568.

[35] For more information, see www.unn.com.ua/ru/exclusive/1884199-cherez-covid-19-tsogo-roku-v-ukrayini-ne-perevidavatimut-chervonu-knigu.

[36] For more information, see https://focus.ua/ukraine/460547-kachestvo-vozduha-kiev-ukraina.

Box 6. Policy recommendations

OECD analysis (OECD, 2020[35]) has shown that to design short-term, sector-specific and macroeconomic policy responses to the COVID-19 emergency, governments may wish to:

- **Systematically evaluate possible unintended negative environmental impacts of new short-term fiscal and tax provisions**. While the priority is rightly on providing urgent relief to impacted businesses and individuals, a careful screening of the environmental impacts of stimulus measures would significantly add coherence to policies. This would avoid creating perverse and unintended environmental consequences that might damage future resilience and environmental health of societies.
- **Avoid rolling back existing environmental standards as part of recovery plans**. As countries implement urgent measures to tackle the health and immediate economic impact of the crisis, they should not retreat from gains in recent decades in addressing climate change, air and water pollution, biodiversity loss and other environmental challenges.
- **Make sector-specific financial support measures conditional on environmental improvements where possible**. Financial support measures such as preferential loans, loan guarantees and tax abatements could be directed towards stronger environmental commitments and performance in pollution-intensive sectors that may be particularly affected by the crisis.
- **Ensure that measures will enhance levels of environmental health to strengthen resilience of societies**. A cleaner environment will have a positive impact on human health; for example, less air pollution will improve the health of vulnerable segments of urban populations and can make them more resilient to health risks.
- **Communicate clearly the benefits of improving the overall environmental health of societies**. Underscoring the benefits to well-being and prosperity from more resilient societies can strengthen public support for measures aimed at enhancing environmental health.

Source: (OECD, 2020[35])

While these recommendations are largely targeted at OECD member countries, they are equally relevant and applicable to the EECCA region. Their implementation can help ensure that economic recovery is aligned with broader environmental objectives set within national strategies for sustainable development, green growth and low-emission development. Such strategies should aim to accelerate structural transformation, create green jobs and transition from reliance on hydrocarbons and other commodities. A focus on the transition to low-emission and resource-efficient economies will be a central component of such a process. For example, the investment plans associated with recovery will be critical in setting the environmental pathway for the next few decades, and crucial for global efforts to avoid climate change.

In addition to the general recommendations presented above, the following list proposes more specific actions for consideration in the EECCA region:

- Ensure that moratoria on environmental inspections and monitoring during the lockdown that are aimed to help relieve businesses from additional administrative and financial burden, as well as fossil fuel subsidies, are well-justified, targeted and temporary and are lifted as soon as the health situation improves.

- Incorporate environmental conditions in specific support provided to the agriculture and aviation industries to incentivise firms to transition towards cleaner technologies and fuels, with performance requirements related to environmental, social and governance criteria.
- Ensure strong links between the provision of financial support, including from development partners to strengthen economic recovery measures, and incorporation of green measures by the recipients in their operations.
- Maintain, and where possible, increase commitments to fund green measures, and ensure that funding for environmental agencies and ministries returns at least to pre-pandemic levels soon after health emergencies are addressed. This is particularly relevant for schemes the adoption and stimulation of greener technologies. These tend to demonstrate societal benefits in the medium to long term, and often beyond the remits of their initial mandate.
- Share good practices on effective greening of economic stimulus packages among the countries in the region and beyond.
- Ensure that social and economic resilience to future shocks, including impacts from climate change, is made a strategic priority.

As the COVID-19 emergency evolves, the effects of governments' stimulus packages are in constant need to be assessed with respect to the long-term environmental impacts. Systematic evaluation of the proposed measures is therefore crucial. This should be an important element of the country decision making and international co-operation processes.

References

AIFC (2020), "Damu Fund has listed the first green bonds on AIX", News Release, 11 August, Astana International Financial Centre, Nur-Sultan city, https://aifc.kz/press-relizy/damu-fund-has-listed-the-first-green-bonds-on-aix/. [24]

Amiranashvili, A., D. Kirkitadze and E. Kekenadze (2020), "Pandemic of Coronavirus COVID-19 and air pollution in Tbilisi in spring 2020", *Journal of the Georgian Geophysical Society*, Vol. 23/1, pp. 57-72, https://openjournals.ge/index.php/GGS/article/view/2654. [12]

Cabinet of Ministers of Ukraine (2020), *Economic Stimulus Program to Overcome the Consequences of COVID-19 Epidemic*, https://www.kmu.gov.ua/storage/app/sites/1/18%20-%20Department/Prezentacii/Programa%20Ekonomichne%20stymyluvannia/analitichni-materiali-do-programi-stimulyuvannya-1.pdf. [31]

Caucasus Nature Fund (2020), "Emergency Funding to Georgia's Agency of Protected Areas", News, 29 June, Caucasus Nature Fund, Frankfurt am Main, https://www.caucasus-naturefund.org/emergency-funding-to-georgias-agency-of-protected-areas/. [10]

EBRD (2020), *Business Support Office*, webpage, https://www.eventbrite.co.uk/o/30138664120?fbclid=IwAR2dz1SKpLtL5lCjvpofqgKmofIiNlhHGwRO57WqGFBVD26DnH8QIIEmy1U (accessed on September 20 2020). [26]

EU Neighbours East (2020), *How can green investments benefit small business in Georgia*, 4 June, EU Neighbours East, https://www.euneighbours.eu/en/east/stay-informed/cards/how-can-green-investments-benefit-small-business-georgia. [27]

Government of the Kyrgyz Republic (2020), *Премьер-министр Кубатбек Боронов обозначил 11 главных приоритетов работы Правительства [PM Kubatbek Boronov outlined 11 main priorities of the Government]*, Official News, 18 June, Government of the Kyrgyz Republic, https://www.gov.kg/ru/post/s/premer-ministr-kubatbek-boronov-okmttn-ishindegi-11-artykchylykty-belgiledi. [23]

Government of the Republic of Armenia (2020), "Caucasus Nature Fund provides Armenia with new grant", Official News, 10 July, Government of the Republic of Armenia, https://www.gov.am/en/news/item/9814/. [11]

Government of the Republic of Armenia (2020), "Programs to Address the Social Impact of COVID-19", webpage, https://www.gov.am/en/covid-19-cragrer./ (accessed on 10 September 2020). [18]

Government of the Republic of Kazakhstan (2020), *Draft National Action Plan for implementation of President's Address includes 10 key areas*, Official News, 9 September, Official Information Source of the Prime Minister of the Republic of Kazakhstan, http://primeminister.kz/en/news/proekt-obshchenacionalnogo-plana-meropriyatiy-po-realizacii-poslaniya-prezidenta-vklyuchaet-10-klyuchevyh-napravleniy-98432. [21]

Government of the Republic of Kazakhstan (2020), *В рамках Дорожной карты занятости в смежных отраслях будет создано порядка 100 тыс. рабочих мест — МТСЗН [100 thousand jobs will be created in the framework of the Employment Roadmap]*, Official News, 27 October, Official Information Source of the Prime Minister of the Republic of Kazakhstan, http://government.kz/ru/news/v-ramkah-dorozhnoy-karty-zanyatosti-v-smezhnyh-otraslyah-budet-sozdano-poryadka-100-tys-rabochih-mest-mtszn-2792735. [22]

Kerimray, A. et al. (2020), "Assessing air quality changes in large cities during COVID-19 lockdowns: The impacts of traffic-free urban conditions in Almaty, Kazakhstan", *Science of The Total Environment*, Vol. 730, https://doi.org/10.1016/j.scitotenv.2020.139179. [16]

Layke, J. and N. Hutchinson (5 May 2020), "3 Reasons to Invest in Renewable Energy Now", World Resources Institute blog, https://www.wri.org/blog/2020/05/coronavirus-renewable-energy-stimulus-packages. [4]

Ministry of Economy of the Kyrgyz Republic (2020), "What measures were taken to help businesses during the pandemic", 24 July 2020, News, Ministry of the Economy of the Kyrgyz Republic, http://mineconom.gov.kg/ru/post/6470. [33]

Ministry of Environment of the Republic of Armenia (2020), *Awareness Campaign*, http://www.env.am/en/post/4552. [34]

NDC Partnership (2020), *Fact Sheet*, NDC Partnership, Washington, DC, https://ndcpartnership.org/sites/default/files/about-us/NDC%20Partnership%20Fact%20Sheet.pdf. [19]

NDC Partnership (2020), *Summary of Government Request as of 10 June 2020*, NDC Partnership, Washington, DC, https://ndcpartnership.org/sites/default/files/EconomicAdvisorRequests_Summaries_10June.pdf. [20]

ODIMM (2020), *Greening Program of Small and Medium Enterprises*, Organization for Small and [29]

Medium Enterprises Sector Development, Chişinău, https://odimm.md/en/ecoimm.

OECD (2020), *Building back better: A sustainable, resilient recovery after COVID-19*, 5 June, OECD, Paris, http://www.oecd.org/coronavirus/policy-responses/building-back-better-a-sustainable-resilient-recovery-after-covid-19-52b869f5/. [5]

OECD (2020), "COVID-19 Crisis Response in Central Asia", *OECD Policy Responses to Coronavirus (COVID-19)*, https://www.oecd.org/coronavirus/policy-responses/covid-19-crisis-response-in-central-asia-5305f172/ (accessed on 22 September 2020). [8]

OECD (2020), "COVID-19 Crisis Response in Eastern Partner countries", *OECD Policy Responses to Coronavirus (COVID-19)*, http://www.oecd.org/coronavirus/policy-responses/covid-19-crisis-response-in-eu-eastern-partner-countries-7759afa3/ (accessed on 22 September 2020). [7]

OECD (2020), *From containment to recovery: Environmental responses to the COVID-19 pandemic*, (webpage), http://www.oecd.org/coronavirus/policy-responses/from-containment-to-recovery-environmental-responses-to-the-covid-19-pandemic-92c49c5c/ (accessed on 30 September 2020). [35]

OECD (2020), "Making the Green Recovery Work for Jobs, Income and Growth", *OECD Policy Responses to Coronavirus (COVID-19)*, http://www.oecd.org/coronavirus/policy-responses/making-the-green-recovery-work-for-jobs-income-and-growth-a505f3e7/#section-d1e492 (accessed on 15 September 2020). [1]

OECD (2020), *Tax and Fiscal Policy in Response to the Coronavirus Crisis: Strengthening Confidence and Resilience*. [6]

OECD (2018), *Good Jobs for All in a Changing World of Work: The OECD Jobs Strategy*, OECD Publishing, Paris, https://dx.doi.org/10.1787/9789264308817-en. [37]

OECD (2014), "The crisis and its aftermath: A stress test for societies and for social policies", in *Society at a Glance 2014: OECD Social Indicators*, OECD Publishing, Paris, https://dx.doi.org/10.1787/soc_glance-2014-5-en. [38]

OECD (2010), *OECD Employment Outlook 2010: Moving beyond the Jobs Crisis*, OECD Publishing, Paris, https://dx.doi.org/10.1787/empl_outlook-2010-en. [36]

Official Website of the President of Uzbekistan (2020), *Securing economic stability in Uzbekistan: key pillars*, https://president.uz/en/lists/view/3639 (accessed on 15 November 2020). [25]

PIK (2020), "Biggest carbon dioxide drop: Real-time data show COVID-19's massive impact on global emissions", News Release, 14 October, Potsdam Institute for Climate Impact Research, Potsdam, Germany, https://www.pik-potsdam.de/en/news/latest-news/biggest-co2-drop-in-history-real-time-data-show-covid-192019s-massive-impact-on-global-emissions. [15]

Skiban, O. (2020), *Названы основные источники загрязнения воздуха Алматы [Main sources of air pollution in Almaty have been identified]*, 10 June, Zakon.kz, https://www.zakon.kz/5026910-glava-minekologii-ob-almaty-ekologiya.html. [17]

UNCTAD (2020), "Growing plastic pollution in wake of COVID-19: How trade policy can help", News, 27 July, United Nations Conference on Trade and Development, [9]

https://unctad.org/news/growing-plastic-pollution-wake-covid-19-how-trade-policy-can-help.

UNDP Uzbekistan (2020), *Бюджет для граждан 2020: противодействие COVID-19 [Budget for Citizens - 2020: fight against COVID-19]*, UNDP Uzbekistan, https://obdadminka.openbudget.uz//uploads/1/beb0bVrD25UVOIwUUTVaF0ODSjxn4tfy.pdf. [30]

UNECE, ILO (2020), *Jobs in Green and Healthy Transport: Making the Green Shift*, United Nations Economic Commission for Europe, International Labour Organization, https://thepep.unece.org/sites/default/files/2020-05/THEPEP%20-%20Green%20jobs%20in%20transport.pdf. [3]

United Nations Kazakhstan (2020), *Covid-19 Socio-Economic Response & Recovery Plan*, United Nations Kazakhstan, https://reliefweb.int/sites/reliefweb.int/files/resources/KAZ_Socioeconomic-Response-Plan_2020.pdf. [28]

Verkhovna Rada of Ukraine (2020), *On Amendments to Article 17 of the Law of Ukraine "On Environmental Impact Assessment" to prevent the occurence and spread of COVID-19*, Verkhovna Rada of Ukraine, https://zakon.rada.gov.ua/laws/show/733-IX#Text. [32]

WMO (2020), "Carbon dioxide levels continue at record levels, despite COVID-19 lockdown", Press Release, 23 November, World Meteorological Organization, https://public.wmo.int/en/media/press-release/carbon-dioxide-levels-continue-record-levels-despite-covid-19-lockdown. [14]

World Economic Forum (2020), "Despite lockdown, greenhouse gases have risen to record highs, UN says", 14 September, World Economic Forum, https://www.weforum.org/agenda/2020/09/greenhouse-gases-record-covid19-lockdown-united-nations. [13]

World Economic Forum (2020), *The Future of Nature and Business*, World Economic Forum, http://www3.weforum.org/docs/WEF_The_Future_Of_Nature_And_Business_2020.pdf. [2]

Annex 1.A. An overview of socio-economic consequences of COVID-19 in the EECCA region

The initial containment measures brought in by most governments to slow the spread of the virus and limit the death toll focused on closing down business activity in many sectors. After initial measures that supported health care systems and people's incomes, government actions have increasingly turned to economic support and measures to minimise the economic downturn by preserving jobs and keeping markets and the whole economy functioning.

All countries in the region have imposed containment measures to different degrees. These included restricting the movement of people and mass gatherings, shifting education to distance learning platforms and encouraging working from home to stop the spread of the virus. Due to quarantine measures and slower international trade, the International Monetary Fund put growth projections for all EECCA countries for 2020 by at least four percentage points, and in 8 of 11 countries in the region. Consequently, gross domestic product (GDP) was expected to contract in 2020 (Table 2). Estimates show that Kyrgyzstan was expected to experience the steepest decline (-12% of GDP) followed by Ukraine (-7.2%), Georgia (-5%), and Armenia and Moldova (-4.5%). The negative projections in several countries may also be attributed to increased geopolitical risks in the region (Eurasian Development Bank, 2020[58]).

Reliance on fossil fuel rents has put many economies, especially Azerbaijan, Kazakhstan, Turkmenistan and Uzbekistan, at additional risk due to the fall in commodity prices. Countries that are heavily reliant on remittances have also been affected by lockdown measures and travel bans, as well as an increase in unemployment in migrant-receiving countries.[37]

Annex Table 1.A.1. GDP growth in 2019 and forecasts for 2020 and 2021

	GDP growth 2019	GDP growth forecast 2020 (estimates as of October 2019)	GDP growth forecast 2020 (estimates as of October 2020)	GDP growth forecast 2021 (estimates as of October 2020)
Armenia	**+7.6%**	**+4.8%**	**-4.5%**	+3.5%
Azerbaijan	+2.2%	+2.1%	**-4.0%**	+2.0%
Belarus	+1.2%	+0.3%	-3.0%	+2.2%
Georgia	**+5.1%**	**+4.8%**	**-5.0%**	**+5.0%**
Kazakhstan	**+4.5%**	+3.9%	-2.7%	+3.0%
Kyrgyzstan	**+4.5%**	+3.4%	**-12.0%**	**+9.8%**
Moldova	+3.6%	+3.8%	**-4.5%**	**+4.1%**
Tajikistan	**+7.5%**	**+4.5%**	+1.0%	**+6.0%**
Turkmenistan	**+6.3%**	**+6.0%**	+1.8%	**+4.6%**
Ukraine	+3.2%	+3.0%	**-7.2%**	+3.0%
Uzbekistan	**+5.6%**	**+6.0%**	+0.7%	**+5.0%**

Source: (IMF, 2020[59]; IMF, 2019[60]).

[37] Remittances account for around 30% of GDP in Kyrgyzstan and Tajikistan and 10% of GDP in Armenia, Georgia, Moldova and Ukraine (OECD, 2020[8]; OECD, 2020[7]).

Even though economic growth is expected to resume in 2021, the literature suggests that pandemics are usually associated with subsequent low returns to assets and weak investment opportunities (Jordà, Singh and Taylor, 2020[61]). Growth rates may not return to the pre-pandemic trajectories as evidenced by previous global trends in the aftermath of an exogenous shock (OECD, 2020[8]). Given the uncertainty around the forecast, the importance of appropriate policy making will be critical in the near to medium term.

Lockdown measures have had a particularly negative impact on MSMEs due to the fall in demand for services other than food retail and pharmaceuticals. The tourism and transportation industries were particularly impacted. The contribution of travel and tourism industry to GDP in the region ranges from 4.5% in Uzbekistan to 7% in Azerbaijan, 8% in Kyrgyzstan, 12% in Armenia and 26% in Georgia (WTTC, 2019[62]).[38] This makes countries in the top range particularly vulnerable to the impacts of lockdowns. For example, tourism revenues in Georgia in January-July 2020 amounted to USD 468 million, which is less than a quarter of the volume generated in the same period of 2019 (National Bank of Georgia, 2020[63]). Consequently, loss of income and lower consumer confidence further decreased spending and consumption (OECD, 2020[64]). This effect is even more pronounced in informal economic activities, which are prevalent in the region.[39]

Contact

Krzysztof MICHALAK (✉ krzysztof.michalak@oecd.org)

Julia ASHIKBAYEVA (✉ julia.ashikbayeva@oecd.org)

[38] Turkmenistan is not included in this ranking due to lack of data.

[39] The International Labour Organization estimates that percentage share of employment engaged in informal activities is 32% in Eastern Europe and 43% in Central Asia and the Caucasus. At the country level, the share of workers employed in the informal sector in Central Asia reaches as high as 49% in Kyrgyzstan and 75% in Tajikistan (ILO, 2018[71]). In Eastern Europe and the Caucasus, the size of informal employment ranges from 30% of GDP in Belarus to 50% of GDP in Georgia (OECD, 2020[7]).