QUERIES TO IBC ON ENVIRONMENT AND CLIMATE CHANGE REGARDING COVID-19 IMPACT ON THE ENVIRONNMENT

Queries from RCOs in the ECA Region



With preliminary responses by the co-leads of the Issue-based Coalition on Environment and Climate Change

Response efforts to COVID19 have understandably focused on mitigating its socioeconomic impact, in particular on the situation of vulnerable groups in the society. At the same time, little attention has been given to the consequences of the crisis on the environment, as well as the ways in which recovery efforts can integrate (or at least include an element of) environmental sustainability and climate action. The prevailing assumption has been that COVID-19 is "good for the environment", as lockdown measures and teleworking helped reduce CO2 emissions and improve air quality in the most polluted parts of the world. However, little is known on the long-term consequences of the crisis on the environment. In addition, the climate change effects are still persisting and continue to affect agriculture and people's livelihoods which can add to the overall country's recession as a result of COVID-19. Addressing climate change mitigation and adaptation, while assessing COVID-19 impact on environment will acquire increased prominence as recovery efforts start, and questions will be asked on the extent to which countries are delivering on their climate commitments as much as they are on their social and economic pledges.

There are five questions that RCOs in the Europe and Central Asia Region are interested in:

- Has there been an "environmental impact assessment" of COVID-19, or of previous pandemics, that we can use to complement our socioeconomic and human rights impact analyses?

There is no comprehensive assessment of the impacts of the COVID-19 pandemic, or previous pandemics, on the environment so far. However, many impacts have been observed or may be anticipated:

- Environmental damage is driven by human activity. As the pandemic has limited our economic activities, consumption and movement, emissions and resource use have temporarily slowed, and the rate of environmental damage has temporarily fallen in most areas.
- The pandemic has revealed that the future of nature and human activities are closely intertwined. The reciprocal interdependence of ecological interactions and the socioeconomic dimensions calls for a new relationship between nature and human beings.
- Many countries and cities have temporarily seen most traffic stop and emissions of some pollutants reduce to a trickle. The rate of construction (and habitat destruction) has temporarily dropped in some countries in the region. Discharges of industrial wastewater have been reduced. The world is or was quieter. In most countries those changes are now being reversed.
- Despite limitations on our movement and economic activities leading to reduced emissions, CO₂ concentrations in the atmosphere have continued to rise.
- There is a considerable and worrying increased use of plastics, notably in packaging and PPE.
- As people lose their livelihoods, increased poverty will likely lead more people to turn to unsustainable harvesting of natural resources. Already, restrictions on activities to conserve

ecosystems and biodiversity have led to an increase in illegal waste-dumping, hunting and logging, for example.

- The lockdown has led to the postponement of negotiations on global environmental governance in the expected climate change and biodiversity "super year".
- Once the pandemic eases, full pressure on the environment will resume.
- There is a risk that recovery investment goes to brown industries and, due to the recession, less green finance is available.
- The pandemic poses an additional challenge and may exacerbate multi-hazard risks at the country level. Access to clean and safe water and sanitation is critical and indispensable for limiting the spread of the coronavirus.
 - As economies weaken and the effects of recession start showing on national budgets, what arguments can we use with governments to convince them that climate action is still a priority that should figure high in Cooperation Frameworks with the UN?

Policy and spending that incorporate climate targets will reduce vulnerability to future shocks and disasters, create good jobs, reduce emissions and ensure clean air (see, for example, study from Oxford University, "Will COVID-19 fiscal recovery packages accelerate or retard progress on climate change?", available at https://www.smithschool.ox.ac.uk/publications/wpapers/workingpaper20-02.pdf).

In addition, low fossil fuel prices provide an opportunity to cut subsidies – while making clear to the population how those savings will be used more equitably.

In contrast, the promotion of polluting, resource-intensive industries will preserve and increase vulnerabilities to pandemics and other disasters and increase their likelihood. In the medium-to-long-term, investment in such industries is likely to result in stranded assets. This is particularly true for economies heavily based on the export of fossil fuels, which are already experiencing losses from lower global demand, and could end up being affected by other countries' climate policies (e.g., carbon taxes on imports). Knowing that climate extremes bring heatwaves, droughts and floods that pose direct threats to infrastructure and industry, climate resilient planning is becoming very important, even for peace (e.g., https://energy.skolkovo.ru/downloads/documents/SEneC/Research/SKOLKOVO_EneC_Climate Primer_EN.pdf).

In general, the spread of viruses like COVID-19 can be linked to environmental degradation and loss of wild habitats (<u>https://www.weforum.org/agenda/2020/04/forest-loss-diseases-covid19-coronavirus-deforestation-health/</u>). The main drivers of this are deforestation and unsustainable agricultural production, which are also top drivers of climate change (though all too often climate action is limited to mitigation in the energy sector). From this perspective, climate action should also be a public health priority.

As greenhouse gases and air pollutants are in large part emitted by the same sources (e.g., either burning of fossil fuels in industry, households and transport; or agricultural practices), integrated, cross-sectoral and multi-scale mitigation strategies (local, regional, national and global levels) are needed to effectively reduce emissions and increase resilience to shocks such as pandemics.

Climate change adaptation and mitigation have many co-benefits. For instance, they can be considered as opportunities for improving inter-sectoral cooperation within the country and eventually to improve the ability of various country agencies to plan jointly and better address disasters of various types, including health-related ones. A failure to take climate change into consideration means that individual sectors will be more vulnerable especially in emergency and recovery situations.

In addition, preventing natural or technological disasters that are triggered by climate events (such as such as storms, lightning, floods or landslides) will pay off in terms of avoided damage and health and environmental impacts. Being prepared to respond adequately to disasters that are caused by climate events is equally important. Instead of heavy financial losses that lead to long-term economic impacts, damages can be contained to a minimum and the economy has a better chance of bouncing back quickly.

Water-related extremes exacerbated by climate change increase risks to water, sanitation and hygiene infrastructure, such as damaged sanitation systems or flooding of sewer pumping stations. The consequent spread of faeces and associated protozoa and viruses can cause severe health hazards and cross-contamination. Water quality will be adversely affected as a result of higher water temperatures, reduced dissolved oxygen and thus a reduced self-purifying capacity of freshwater bodies. There are further risks of water pollution and pathogenic contamination caused by flooding or by higher pollutant concentrations during drought (<u>https://en.unesco.org/news/world-water-development-report-2020-water-and-climate-change</u>)

- What policy options can we suggest to ensure that the current decrease in pollution levels is not incidental, but rather serves to keep emissions low in the long-run and trigger a move toward green and sustainable economies?

Seize the opportunity to take concrete action in the energy and agricultural sectors, which are among those most responsible for climate change globally. Recovery programmes can bring about structural changes in these sectors only if the priority areas for new investments are clearly indicated, for example, low-carbon technologies, diversification of production, efficient use of resources, waste valorisation and nature-based solutions.

In general, supporting green industries and businesses in this phase (for instance by improving access to finance or reducing fiscal pressure) could drive re-employment in these areas, effectively binding economic growth to sustainability.

On the **regulatory side**, a sustainable reduction in pollution levels can be fostered through, among other means, the implementation of multilateral environmental treaties, notably those tailored to the regional context:

- Use of the horizontal UNECE Aarhus Convention (public participation, and access to information and to justice in environmental matters) and Espoo Convention (impact assessment) to provide for informed and transparent decision making on planned economic activities.
- Implementation of UNECE Water and Industrial Accidents Conventions to reduce foreseeable and accidental water pollution.
- Setting targets under the UNECE Air Convention and its Protocols to reduce air pollution (see more below).
- Seeking to reduce environmental and disaster risks when taking development decisions at the project level, for example for new or modification of existing infrastructure (applying environmental impact assessment), and plans, for example land-use plans (applying strategic environmental assessment).

- Strengthening governance among institutions at the national and local levels, and the exchange information between state-, as well as non-state, actors, including through information-sharing with and participation of the public (Aarhus Convention)
- Strengthening transboundary cooperation, with neighbouring or riparian countries and regions (Water, Espoo, Air and Industrial Accident Conventions).

Further, in relation to **climate change and air pollution**, UNECE contributes to improving air quality through the Convention on Long-Range Transboundary Air Pollution, which sets emission targets for several key air pollutants. The 1999 Protocol to Abate Acidification, Eutrophication and Ground-level Ozone (Gothenburg Protocol) in its amended version became the first legally binding agreement containing obligations to reduce the broader spectrum of short-lived climate pollutants, notably fine particulate matter, including black carbon, and ground-level ozone precursors: nitrogen oxides and volatile organic compounds. This instrument is a prime example of integrating climate and air quality policies.

In more **practical terms**, key options to decrease pollution include investment to create jobs in geographically spread, labour-intensive green industries:

- Increasing the energy efficiency of buildings, by retrofitting existing buildings, or more efficient construction; bulk purchasing or installation programmes; insulation of buildings; change boilers, lighting and appliances with energy-efficient substitutes.
- Installation of solar panels (water-heating and electricity-generation).
- Development of electrical infrastructure to support renewable energy.
- Extension of agroforestry practices; tree-planting, including in urban areas.
- Soft infrastructure for active mobility.

Governments can also invest in the long term, for example:

- Water supply and wastewater disposal systems, including for resilience to disease.
- Installation of pollution control and emission mitigation technologies.
- Public transport infrastructure and, for example, possible national production of (electric) buses.
- Electric vehicle infrastructure and electric public sector and delivery vehicles.
- Nature-based solutions to increase resilience, especially for infrastructure.
- Installation of wind turbines.
- Open sciences allowing for a free flow of new technologies, scientific knowledge and support to start-ups.
- Technical and vocational education and training in support of sustainable development and the transition to a green economy.
 - What policy (and specific actions) could be undertaken by the governments to adapt and mitigate the climate change effects on agriculture, environment (deforestation, water and air pollution, weather-related shocks, prevention of disease transmission from animals to people etc) and what are UN instruments to support/stimulate Government's in these efforts?

Continue and step up multilateral, regional and even inter-sectoral **cooperation**. At all these levels, cooperation can increase the speed of recovery through synergies in policy and investments. For instance there is potential to exploit synergies between renewable energy development and the water, agriculture and forestry sectors (see UNECE's very new publication "Towards sustainable renewable energy investment and deployment: Trade-offs and opportunities with water resources and the environment",

http://www.unece.org/environmental-

policy/conventions/water/envwaterpublicationspub/water/envwaterpublicationspub74/2020/towardssustainable-renewable-energy-investment-and-deployment-trade-offs-and-opportunities-with-waterresources-and-the-environment/doc.html).

Promote elements which aim to strengthen communities' resilience, through scientific solutions and increased scientific cooperation (<u>https://en.unesco.org/covid19/sciencesresponse</u>).

Invest in **science, technology and innovation**. It is imperative now, more than ever, to strengthen or build cooperation between scientists, decision- and policymakers, private practitioners, industries, health professionals, and civil society for a multi-dimensional approach to tackling the pandemic. This calls for open access to scientific knowledge and know-how, data sharing and evidence-based policy and decision making.

Actions in **water management and water-related sectors** such as agriculture including irrigation, energy, ecosystems, human settlements, health (e.g., water-related diseases) and navigation include these:

- Establish national-level coordination mechanisms, while developing and implementing SDGs, CCAs, UNSDCFs, Nationally Determined Contributions (NDCs), National Adaptation Plans (NAPs) and disaster risk reduction (DRR) plans.
- Promote and improve transboundary cooperation between countries and with river basin organizations.
- Mainstream water and transboundary cooperation into climate change mitigation and adaptation policies, strategies and projects and into policies and strategies of water-related sectors, for example, agriculture, energy, health, industry and ecosystems.
- Water security: promote inclusive water policies and sustainable management of water resources towards ensuring access to clean and safe water and sanitation for all.
- Include water adaptation in new or updated NDCs in 2020 and exploit co-benefits, such as emissions reduction through wastewater treatment (via biogas), or increasing energy and water efficiency.
- Improve coherence of climate change adaptation and disaster risk reduction policies and actions.
- Translate policies and strategies into practice through traditional and innovative actions, including nature-based solutions.
- Attract funding from multiple sources (e.g., international, national and private).
- Disaster risk reduction strategies: hard (structural) and soft (policy instruments) approaches. Hard measures include enhanced water storage, climate-proof infrastructure and crop resilience improvements through the introduction of flood- and drought-resistant crop varieties. Soft measures include flood and drought insurance, forecasting and early warning systems, land-use planning, and capacity building (education and awareness).
- Conservation agriculture allows soils to retain more water, carbon and nutrients, with additional
 ecological benefits. The biomass and soils of properly managed forests, wetlands and grasslands
 provide mitigation opportunities through carbon sequestration, with significant additional
 benefits in terms of nutrient cycling and biodiversity.

In the area of **water management**, the following instruments are available:

• The Convention on the Protection and Use of Transboundary Watercourses and International Lakes (Water Convention) is a unique global legal and intergovernmental platform for climate change adaptation, including flood and drought management, in transboundary basins. The

Convention has a dedicated Task Force on Water and Climate (meeting scheduled on 23 October 2020) as well as a Task Force on the Water-Food-Energy-Ecosystems Nexus (meets on 23-24 October 2020, see <u>http://www.unece.org/env/water/nexus.html</u>).

- The Protocol on Water and Health supports increasing resilience to climate change in the water, sanitation and health sectors.
- The UN World Water Development Report 2020 "Water and Climate Change" (<u>https://en.unesco.org/news/world-water-development-report-2020-water-and-climate-change).</u>
- More information and guidance materials are available on developing climate change adaptation strategies (<u>http://www.unece.org/index.php?id=11658</u>), reducing disaster risk under climate change (<u>http://www.unece.org/index.php?id=50093</u>), financing climate change adaptation, collection of best practices and lessons learnt in transboundary climate change adaptation (<u>https://www.unece.org/env/water/water climate activ.html</u>).

To tackle **climate-related risks** that could trigger catastrophes caused by natural or technological hazards:

- Increase knowledge of such risks.
- Update risk assessments accordingly.
- Share this knowledge among government authorities, in industry, among populations and with neighbouring countries or regions.
- Modern communication methods such as social media and mobile phone services provide significant opportunities to help improve communication and early warning effectiveness. For example, drought and flood monitoring systems are also an important component of risk reduction.

The UNECE Industrial Accidents Convention supports Government's management of technological hazards and efforts to reduce accident risks, including those triggered by natural hazards (so-called NATECH events).

Promote **ecological reconstruction**. Science and research have to drive change and prepare for the postcrisis. Protected sites are powerful tools to remedy at least part of the misunderstanding between humankind and nature through the integrated approach of valorising nature via conservation, restoration, biodiversity preservation, transmission and sustainable development. Protected areas are places to test and demonstrate the sustainable management at local level.

Improve **community resilience** notably during the social-economic recovery. UNESCO biosphere reserves act as models to foster the resilience of communities and notably opportunities for youth, as well as women by <u>establishing and demonstrating innovative approaches</u>. In addition, quality economies in biosphere reserves are expected to play a role in post COVID-19 economic recovery. Biosphere reserves are well placed to support local livelihood diversification, green businesses and social enterprise, responsible tourism and quality economies.