# Climate Security Challenges for NATO

*12th meeting of the Brussels Dialogue on Climate Diplomacy*

**Thursday, 17 September 2020 - NATO-HQ**

**"Energy Transition and the Defence Sector"**

**Dr. Radostina Primova**, Senior Analyst, Economic Program, Center for the Study of Democracy, Sofia

New threats – cybersecurity, nuclear revival, geoengineering solutions for the 1,5-degree, gas pipeline politics and the military implications

The degradation of natural environment and exacerbating competition over natural resources along with the population growth are perceived as the key peace and security challenges of 21st century. The awareness about the increasing role of ecosystems in the new security paradigm would imply also going beyond the traditionally perceived concepts of security and military response and factoring in the environmental aspects in crisis management and resilience building.

Being part of the broader climate crisis, the COVID crisis has once again underscored the importance of incorporating environmental factors, including the increasing deforestation, wildlife intervention, the aggravation of the global agri-food system, as a trigger for a spiral of public health, resource, economic, political crisis and social tension. Navigating through these waves of crisis requires an expanded horizon on the interlinks between different sectoral activities and innovative solutions taking into account the different dimensions of security.

Although most Member States have committed to the long-term carbon neutrality goal by 2050, they are divided on the specific policy measures and pathways on how to achieve this deep decarbonizations of our economies. We have seen it recently currently with negotiations on the European Climate Law where there is a lot of backlash from some Eastern European countries and in particular there is currently a revival of the discussion on the use of nuclear energy as part of their 2050 decarbonizations strategies. Many Central and Eastern European countries are seeing nuclear energy as a climate mitigation strategy and a way to basically fulfil their climate targets, in particular when defining the milestones, looking at the 2050 national low carbon decarbonization strategies. This trend has major economic, sustainability, energy security and safety implications for the European continent. These nuclear projects could lock CEE countries in burdensome dependencies and undermine EU sustainability and climate policies. This is an additional dimension that I think needs to be discussed within the policy debates on reaching the 2050 carbon neutrality goal.

The geostrategic and military implications of North Stream and South Stream gas pipelines and their inconsistency with EU climate objectives for 2030 leading to lock-in expensive and unsustainable fossil fuel infrastructure. EU Member States sharing different perceptions and visions about how these gas projects could fulfil EU climate targets and how they will impact European energy security.

The energy transition will be also impacted by the digital transformation and its impact on critical electricity infrastructure. There is a digital transformation underway in E&E critical infrastructure that

creates vulnerabilities. As a result of the variable RES supply, there are more opportunities to disrupt the electricity system. For instance, electric utilities in Eastern Europe alone have reported a 400 percent increase in cyber-attacks since the start of the COVID-19 pandemic. The consequences of such attacks could result in financial losses and even have an impact on human lives.

The other issue is related to geoengineering. The IPCC report already includes negative emissions technologies in its scenarios and solutions for reaching the 1.5-degree objective. Part of the experts claim that only nature-based solutions will not be enough. The second question is how do you address this issue of false solutions within the climate security context? Geoengineering like solar irradiation, but also carbon capture and storage and BECCS could have actually not only serious environmental, social and human rights impacts but also very serious planetary and security implications in the future depending on who controls these kinds of technologies. Geoengineering, the large-scale manipulation of the Earth's natural systems and the climate, is being offered as a solution to limiting global warming and suppressing the impacts of climate change. Geoengineering means large-scale interventions in our global ecosystems, with potentially catastrophic consequences for humans and biodiversity.

The term refers to a group of technologies that reply on computer-simulated interventions and aim at removing greenhouse gases from the atmosphere or cooling the Earth by interfering with its radiation balance. Another example of such intervention is ocean fertilization.

If deployed at large scale, these technologies could bring massive risks and result in climate and social injustice within and between states, the violation of human rights in some cases and lead to security risks. Therefore, these risks need to be regulated better at EU and international level.

The concentration of oil and gas production, as well as the mineral resources used in renewable energy technology in the hands of few authoritarian states such as Russia and China would significantly increase energy security risks and could undermine the viability of the energy transition. The COVID crisis has also underscored how these countries are willing to use any vulnerability to undermine the viability of our societies and has created a new urgency to protect democratic values, the rule of law, as well European and US environmental standards from adverse external influence.

There is a need for a European Energy and Climate Security Index including a metrics with key indicators for measuring the security implications of EU energy and climate policies. The index should reflect the long-term EU decarbonization strategy and the EU carbon neutrality target. The index should also respond to the need for monitoring European energy security and climate trends in order to grasp the impact of changes in individual countries' policies and make them consistent on European level.