## Track III Matchmaking and Investor Confidence

## Session Transition of the Energy Sector; Modernising Infrastructure

The session was focused on transition of the energy sector, addressing in particular problems and opportunities deriving from the urgent need to modernize and upgrade the existing infrastructure.

It was moderated by Raymond Pilcher, the Chair of the UNECE Group of Experts on Coal Mine Methane, and it featured the following panellists: Mr. Mykhailo Bno-Airiian, the Deputy Chief Executive Officer at Ukrenergo, Mr. Phil Grainger, the Climate Change Manager at IPIECA, Ms. Stefanie Held, the Project Manager of the Pathways to Sustainable Energy Project at UNECE, Mr. Stephan Singer, the Senior Advisor on Global Energy Policies at the Climate Action Network International, Mr. Stefan Stückrad, the Scientific Managing Director at the Kopernikus ENavi Coordination Office, and Mr. Heiko Thomas, a Research Associate at the Institute for Advanced Sustainability Studies of Potsdam.

At the outset of the session it was argued that undertaking energy transition requires taking into consideration many relevant SDGs and not only the SDG7. The problem was told to be too complex to be addressed with a narrow focus. In this context, the social and the development aspects of the modernisation process were highlighted. The flexible and case specific solutions were said to be necessary as "one size fit all" approach was broadly recognized as unable to bring the expected results.

The future of CCS was discussed, as was the issue of not only integrating the renewables into the grid, but also of preparing the latter for their domination. In the former case it was observed that under the current circumstances no technology can be authoritatively rejected. In the latter case, in turn, the call was made for international cooperation necessary for balancing the renewables in the grid. While addressing that matter, it was observed that in the periods of high energy production as much as 30 % of energy is being curtailed.

The digitalization of the sector was highlighted and the enormous change resulting from that fact was discussed. Due to the rise of smart technologies the modern electricity market was described as being shaped by the demand rather than by the supply side, as opposed to what tended to be the case up until recently. Furthermore, the shift in need for "soft" rather than "hard" skills and technicians was observed and the importance of adjusting the education system accordingly was highlighted.

The above-mentioned change and progress notwithstanding, it was also remarked that any plans for the future of energy cannot be exclusively forward-looking. The necessity of looking back and addressing the problems of the outdated legacy industry infrastructure was underlined. A great potential that lies in transformation of large industrial complexes was emphasized. It was argued that modernization of energy sector neither can be avoided, particularly in light of the states'

voluntarily made environmental pledges, nor can it be further delayed as the energy infrastructure in many cases is either at the very end of its life-cycle, or is simply technologically outdated thus rendering given industrial complexes not competitive. Consequently, the idea of modernisation of the fossil fuel based industrial sites by reorienting them towards modern technologies and more efficient use of available resources was put forward and advocated for as a necessary component of the energy transition.

Integration of both, forward- and backward-looking approaches was recommended, as was also flexibility of any modernization strategy. It was stressed that any adopted policy needs to allow for modifications deriving from the lessons learned throughout the process.

"No one left behind" approach was advocated, in particular in relation to the social component of the modernization. The necessity of consulting the transition strategies with trade unions and communities was raised.

The problem of climate change in general, and air pollution in particular was discussed. The political will of properly addressing these problems was said to be lacking in many societies. It was observed that despite the fact that people do recognize global warming as an issue, they tend not to prioritize that matter, thus refocusing political attention of the leaders elsewhere.