

SUSTAINABLE ENERGY WEEK 2023

BUILDING RESILIENT ENERGY SYSTEMS

11-15 SEPTEMBER 2023 | PALAIS DES NATIONS | GENEVA



Agenda Item 9 – [32nd Session of the Committee of Sustainable Energy](#)

Future work of the Committee on Sustainable Energy

15 September 2023, 11h30 – 12h30 CEST (Geneva time)

Objective: Present to the Committee of Sustainable Energy a new concept of coal, in which the latter is not a fuel but a multi-purpose resource, and thus significantly broadens the range of opportunities for just transition strategies

Context: The commitment to keep global warming to well below two degrees Celsius compared to pre-industrial levels requires decarbonization in all economic sectors and the reduction of emissions of all potent greenhouse gases. In practice, this means modernization of the energy sector with a focus on the phasing down of coal and finding innovative solutions for industries that rely on it and constitute its “ecosystem”, e.g., steel, or cement.

While it can be expected that decarbonization efforts will create new opportunities and employment across all economic sectors, it will surely have also disruptive effects on high-carbon fuels production regions and energy-intensive industries. Such systemic change will have an enormous impact on those social strata, the wellbeing of which has been over the last decades associated with the existence and prosperity of legacy industries. Therefore, the social effects of the transition need to be estimated well in advance, at the planning phase, so that the proper protection mechanisms are developed and the relevant policies preparing the population to the new reality are put in place.

There is increasing evidence, and recognition, that clean energy transitions require new technologies to serve the energy needs of growing and advancing economies. While coal as a fuel may be at varying stages of decline globally, its value as a critical resource for the emerging needs of clean energy economies is in its very early stages of development. Coal should not be simply burnt for energy production. To the contrary, its true value lies in its potential to be refined and utilized for high value resources, such as graphene, carbon nanotubes, lithium, Rare Earth Elements, cobalt, and manganese, as well as other materials.

Recognizing coal’s hidden potential gives an opportunity to preserve coal extraction and thus save jobs, and avoid the majority of the negative environmental impacts caused by the current end use of coal. Furthermore, a new approach to coal extraction and use will create new jobs in industries essential to development of a green economy. As a result of exploiting this unrealized potential, transition of the coal regions will expose communities to less cultural and social shocks. New opportunities for modernization of coalmining will be created by re-orienting the coal mining ecosystem towards development of innovative hi-tech industries organized in clusters around existing but redesigned coal mines that provide new enterprises with valuable feedstock.

In addition, the proposed approach offers new options for financing the transition. It is because by removing the risk of having certain coal assets stranded, it gives financial institutions an opportunity to preserve them, thus freeing significant resources for investments needed in infrastructural projects, which not only depend on the feedstock provided by coal companies, but make the business case for coal mines continued existence as a crucial element of the new green economy.

Opening the session and introduction of the concept:

- Opening Statement by Raymond Pilcher, the Chair of the Group of Experts on Coal Mine Methane and Just Transition

- Introduction of the concept of coal as a multi-purpose platform by David Jermain, Senior Fellow, Institute for Global Sustainability, Boston University (Video)

Roundtable: Coal in the 21st Century: From Fuel to Multi-Resource Platform

Moderator:

Raymond Pilcher, Chair of the Group of Experts on Coal Mine Methane and Just Transition

Panellists:

Bobbie Foot, Head of Health, Safety and Environment, BHP Mitsubishi Alliance; Chair, Task Force on Just Transition (Video)

Jan Bondaruk, Deputy Director for Environmental Engineering, Polish Central Mining Institute

David Jermain, Senior Fellow, Institute for Global Sustainability, Boston University (Video)

Artan Leskoviku, Director, National Agency of Natural Resources (AKBN), Albania

Dario Liguti, Director, SED, UNECE

Cristina Martinez, Senior Specialist, Enterprise Development and Green Jobs, ILO

Other speakers:

Emma Tulley, SED, UNECE

Issues to be addressed:

- What products can be produced from coal?
 - How do those products fit the needs of the green economy?
- What are the social and cultural problems related to just transition?
 - What social protection mechanisms need to be developed to ensure that transition is just?
 - What are the social and cultural benefits of preserving coal mining?
 - How many old jobs could be preserved and how many new ones could be created?
- How would coal-centered clusters be designed and what would be needed to build them?
 - What are the expected costs, who would cover them, and how do they compare to the transition based on a complete coal phase-out?
 - What new financial solutions does this approach offer?
 - How long would it take to build such clusters, vs. the time needed for a 100% coal free transformation?
- Where would energy for powering such clusters come from?
 - Could coal mine methane be used for hydrogen production?
 - What are the opportunities for repurposing the post-mining land to host clean energy production?
 - What are the pros and cons of developing energy storage facilities in abandoned coal mines?
- The environmental aspect of the proposed transition.
 - Compare the full value chain environmental impact of obtaining the products in question from locally available coal with the environmental impact of alternatives (what are they?)
 - What about methane related to coal extraction?
- Where could pilot projects be developed?
 - Kazakhstan, Poland, Ukraine, North America?
- What can UNECE do to help its member States ensure a just transition?
 - Mapping just transition
 - Complexity of the problem
 - Current work
 - Youth engagement
 - Preparation of the theoretical framework
 - Extrabudgetary projects / cooperation with partners

Discussion & Next steps

Interventions by member States and the wider multi-stakeholder community