UNECE Group of Experts Coal Mine Methane and Just Transition Task Force on Just Transition

Seventh Meeting, 31 July 2024, 14:00 - 15:30 (Geneva time)

Summary

Item 1. Adoption of the agenda

The Chair of the Task Force, Ms. Bobbie Foot, opened the session.

Meeting participants introduced themselves as there had been new members.

- Bobbie Foot, Chair of the Task Force on Just Transition, based in Brisbane, Australia, works for BHP in the coal division in Queensland
- Chiara Giamberardini, Secretary of the Group of Experts on Coal Mine Methane and Just Transition, Economic Affairs Officer, UNECE Sustainable Energy Division
- Jennifer Rietbergen, Northern Ireland, freelance consultant working on issues around just transition.
- Cristina Martinez, International Labor Organization in Europe and Central Asia, coordinates the work on enterprise development, green jobs and just transition (based in Moscow)
- Michal Drabik, Economic Affairs Officer, UNECE Sustainable Energy Division
- Ray Pilcher, Chair of the Group of Experts on Coal Mine Methane and Just Transition, based in western Colorado
- Jan Bondaruk from Poland, works at the Central Mining Institute a Polish national research institute
- Javier Cañas Andreu, based in Valencia, works all over Europe, mainly central Eastern Europe on just transition topics, especially with Poland.
- Madina Junussova, research fellow at the University of Central Asia and based in Kyrgyzstan, works on the impact of decarbonization on the mining regions and towns.
- Mateusz Rzeszowski, Katowice Special Economic Zone (KSSE), leader among Polish special economic zones, established by the Polish Council of Ministers in 1996 to support and advance restructuring processes, as well as to generate employment in the region.
- Munira Raji, based in Plymouth, England. Sustainable scientist at the University of Plymouth, most of her work is around sustainable energy and minerals and climate change adaptations and mitigation.
- Maxim Titov, based in Moscow, works for Eurasian Fund for stabilization and Development, internation financial institution, responsible for energy projects in Central Asia and Armenia.
 Used to work for think thank called Energy politics and Energy Transition in Eurasia and published a book on Russian Coal in the Era of climate change.
- Gift Richard Maloya, Director at The Initiative for Climate Action and Development (ICAD), Malawi
- Roshni Menon, Senior Program Officer, New York University's Center on International Cooperation, Pathfinders for Peaceful, Just and Inclusive Societies' Grand Challenge for Inequality and Exclusion.

The draft agenda was adopted without any changes.

Item 2. Update on progress in implementation of the work plan

A. Mapping just transition

B. Guiding principles and good practices in just transition

The Chair of the Task Force, Ms. Bobbie Foot addressed the progress of the work plan, noting that it had been several months since the last meeting. She reminded everyone about the shared folders and encouraged contributions. Specific thanks were given to Jennifer and David for their efforts in collating information. She urged participants to review and add relevant literature, case studies, or frameworks to the shared folder, mentioning a template available to assist with this task. She emphasized the need to keep the momentum going in the implementation of the work plan and appreciated the voluntary contributions from everyone. She suggested that if each member reviewed one paper, substantial progress could be made. She invited any member having technical issues with accessing the folder to reach out to Chiara who could assist. She finally suggested returning to more regular meetings for better progress tracking.

Item 3. Presentation of the concept of coal as a multi-resource platform as contained in the paper 'Coal in 21st Century; Meeting SDGs and Managing Investor Expectations'

Mr. Raymond Pilcher, Chair, UNECE Group of Experts on Coal Mine Methane and Just Transition

Bobbie invited Ray Pilcher, the Chair of the Group of Experts on Coal Mine Methane and Just Transition to deliver his presentation on alternative uses of coal in the 21st century. Ray was appreciated for joining early from Colorado to share his insights.

Ray discussed the evolving role of coal mining in the context of energy transition, highlighting the closure of many coal mines in Western regions while noting ongoing metallurgical coal mining. He emphasized that coal's value extends beyond energy production, suggesting that closed mines can be repurposed to preserve jobs and investments by leveraging unrecognized resources like rare earth elements (REEs) found in acid mine drainage and tailings.

Key points included:

- The uneven global transition away from coal, influenced by economic and social factors.
- The potential of coal mines to retain value by utilizing their deposits for high-value materials and processes beyond traditional uses.
- The discovery of significant rare earth elements in acid mine drainage, as evidenced by a project in West Virginia.
- The possibility of extracting valuable materials from coal mine tailings and abandoned mines, which could be worth billions, as indicated by findings in Wyoming.
- The need for a shift in perspective to view coal deposits as multi-asset resource platforms, where sophisticated mineral processing could yield materials for various industries, including medical, military, and automotive sectors.
- The proposal of small industrial clusters around coal mines to refine and manufacture these high-value products, utilizing available resources like methane and hydrogen.
- The recognition by UNECE of the importance of creating a just and equitable future, acknowledging the socioeconomic challenges faced by communities reliant on coal mining.

He concluded by stressing the importance of further research and analysis of coal deposits and mine waste to unlock their full potential, as well as addressing the environmental challenges associated with abandoned mines. He encouraged ongoing investment and exploration to better understand and capitalize on these opportunities.

Summary of Q&A Session:

During the Q&A, Bobbie Foot encouraged attendees to think about the multifaceted aspects of using financials to fund the closure or transition of coal mines, including impact on jobs.

<u>Examples of Transitioning Coal Mines</u>: Ray Pilcher mentioned pilot plants in West Virginia and detailed exploration work in Wyoming by the company Ramaco. The Wyoming project involves re-exploring deposits and tailings, with substantial bonding for reclamation set at a billion dollars. Wyoming has mixed reactions to reopening the mine, highlighting the need for careful consideration of alternative land uses and the impact on local communities.

<u>Global Interest and Research</u>: He noted that China and India are also conducting significant research on extracting rare earth elements from coal and related beneficiation plants. This indicates a growing global interest in these processes, especially in regions transitioning away from coal mining.

<u>Business Models and Applications</u>: He outlined potential business models for these projects, focusing on developing rare earth element deposits or using them for reclamation purposes. Future work includes publishing more research and discussing these topics at the Committee on Sustainable Energy's annual meeting.

<u>Parallel Mining and Production</u>: A participant asked about the potential for these processes to occur alongside active coal production. Ray confirmed that adding circuits to existing beneficiation plants is feasible and could be integrated into normal mining operations, though environmental and economic balances are necessary.

<u>Feasibility and Financial Assessment</u>: A participant inquired about assessing resources and financial feasibility. Ray explained the processes used, including atomic absorption for determining element concentrations. He emphasized the importance of detailed exploration and modelling, noting that the cost of moving material is significant.

<u>Potential Case Studies</u>: A participant noted the Wyoming example as a potential case study to inspire other countries. Ray agreed and suggested inexpensive initial testing to evaluate deposits, especially in regions like Poland.

Closing Remarks

Ray Pilcher and Bobbie Foot expressed appreciation for the opportunity to discuss these topics. Ray will share an updated paper on the subject for the group's library, inviting further questions and continued conversation.

Item 4. Update on preparations for Sustainable Energy Week that will focus on just transition for resilient energy systems

Ms. Chiara Giamberardini, Secretary, UNECE Group of Experts on Coal Mine Methane and Just Transition

Bobbie invited the Secretary of UNECE Group of Experts on Coal Mine Methane and Just Transition to provide an update on preparations for the upcoming Sustainable Energy Week in Geneva.

UNECE Sustainable Energy Week will take place in Geneva from 16 to 20 September 2024. This week includes meetings of three expert groups on cleaner electricity systems, renewable energy, and energy efficiency. From September 18-20, the 33rd session of the Committee on Sustainable Energy will focus on the theme of "just transition for resilient energy systems."

The session aims to discuss the integration of just transition principles across all areas of sustainable energy, not just coal mining. Ray Pilcher, Chair of the Group of Experts on Coal Mine Methane and Just Transition, will present a paper discussing how to embrace the concept of just transition across all the work of the 6 groups of experts on sustainable energy. The discussions will also include input from various member states and organizations to share their experiences and strategies regarding energy transitions.

The goal is to establish a unified understanding and approach to just transitions, ensuring energy systems remain resilient and sustainable while addressing social and economic impacts. The sessions will encourage collaboration among different groups of experts to explore pathways for achieving these goals and ensure that the transition from coal and other energy sources is equitable and sustainable.

Item 5. Any other business

10. There were no points raised under AOB. The Chair and the Secretariat thanked participants for their time and involvement in the call and closed the meeting.

Participants:

Task Force Chair: Bobbie Foot

Task Force Members: Cristina Martinez, Gift Richard Maloya, Jan Bondaruk, Javier Cañas Andreu, Jennifer Rietbergen, Madina Junussova, Mateusz Rzeszowski, Maxim Titov, Michal

Drabik, Munira Raji, Ray Pilcher, Roshni Menon

Secretariat: Chiara Giamberardini
