

# Opportunities for Greater Cooperation Among CSE Subsidiary Bodies

A request for information exchange and alignment toward common goals in achieving sustainable energy production and consumption

**Raymond C. PILCHER**  
**Chair, GoE CMM and**  
**Raven Ridge Resources**

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**UNECE**

# Areas of common interest

The subsidiary bodies of the Committee on Sustainable Energy share common interests and overlapping experience and expertise:

- Energy security
- Worker safety
- Environmental protection
- Resource assessment, evaluation, exploration and extraction
- Market development and access
- Enhancement of standard of living
- Nexus integration

# Subsidiary bodies could help each satisfy common goals:

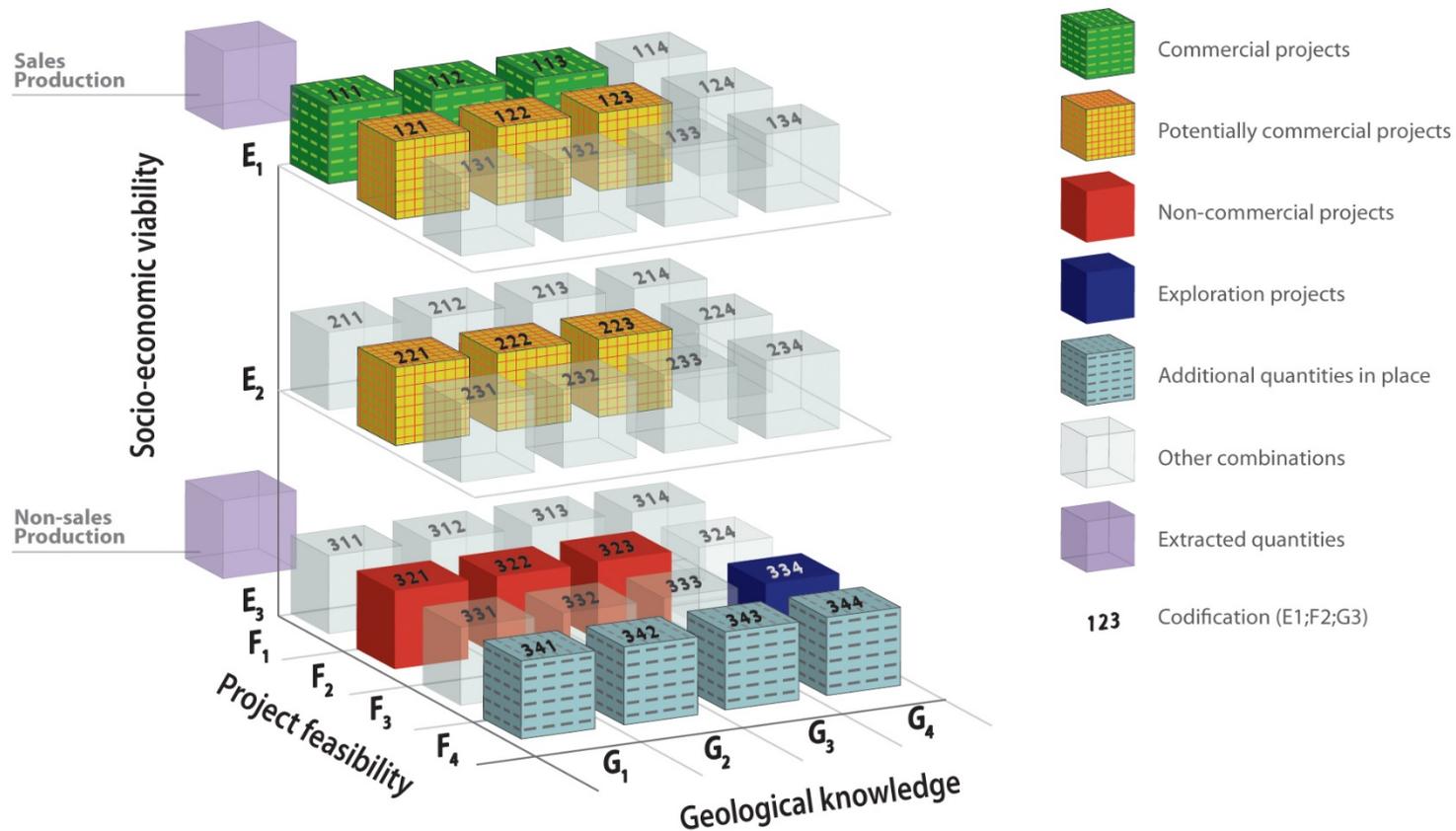
## Backstory

- *Experts Group on Resource Classification* has devised a resource classification system that incorporates the uncertainty of the desired attributes of a resource, its economic utility and implied social impacts.
- *Group of Experts on Coal Mine Methane* has developed a guidance to best practices for capture and use of methane gas which is dangerous to the coal miner and a powerful greenhouse gas.
- *Group of Experts on Cleaner Electricity Production from Fossil Fuels* has produced best practices for power generation that incorporates carbon capture and storage

## **Backstory (cont.)**

- *The Group of Experts on Energy Efficiency* developed a Structured Framework of Best Practices in Policies to Promote Energy Efficiency for Climate Change Mitigation and Sustainable Development. The policies identified in this report include exemplars of best practices in energy efficiency policies from around the globe, drawn from respected and objective policy evaluations and databases.
- *The Group of Experts on Renewable Energy* produced the UNECE Renewable Energy Status Report which covers 17 selected UNECE member countries located in the South East Europe, the Caucasus, the Russian Federation and Central Asia. The report provides a comprehensive overview of the status of renewable energy and energy efficiency markets, industry, policy and regulatory frameworks, and investment activities.
- *The Group of Experts on Gas* engages in multi-stakeholder dialogue to promote sustainable and clean production, distribution, and consumption of natural gas in the UNECE region. The Group's principal areas of work are to advise on the role of natural gas as a part of the global energy mix and the relation between natural gas and the environment.

# UNFC Resource Classification and the Socio-Economic Dimension



# A coal mine methane example:

- Many of the world's most dangerous coal mines are extracting very gassy and structurally unstable coal resources. These mines have been the location of disasters that claim miner's lives and destroy communities.
- If used, the framework classification could show that the value of these resources are diminished due to the social costs—perhaps the coal should be left unmined, but the gas is useable and valuable. Yet, at most gassy coal mines the co-located gas resource is undervalued and treated as a danger and a nuisance.
- Methane gas from the coal and surrounding strata are mostly vented to the atmosphere. Methane is conservatively 25 times more potent as a greenhouse gas than carbon dioxide.
- If the gas that is extracted from the coal prior to and during the mining process and is used or destroyed, the net environmental cost of the use of coal is lowered.

# A renewable energy example:

- The UNECE countries differ widely in the share of renewable energy in total final energy consumption. Despite the potential, renewable energy investments declined in most of the countries considered by the UNECE Renewable Energy Status Report in the last 5 years.
- One of the targets of the Sustainable Development Goal 7 on Energy is «to increase substantially the share of renewable energy in the global energy mix», i.e. aspirations are not matching reality.
- The application of UNFC-2009 to RE Resources will harmonize the way in which renewable energy potential is reported and a common comparison framework will help the assessment of renewable energy investments.
- Least-cost solutions for a clean energy future will have to go through an effective combination of renewable energy and energy efficiency.
- Synergies between renewable energy and natural gas can help the transition to a decarbonized future energy system.

# Opportunity for alignment across sectors

- The “greening” process of coal extraction and use can begin at the mine.
- If gas and coal resources are valued separately and the process of co-extraction maintains the value of the gas, the economics and environmental attributes are enhanced.
- These resources should be classified such that the enhanced in-situ value and market value are recognized e.g. the value of the booked reserves of each is increased.
- Electricity producers that become aware that there is an opportunity to purchase “greener” fuels could impact society in a number of positive ways by favoring coal that is mined more sustainably. Electric power producers and distribution companies can encourage use of the methane to produce heat and power at the mine and provide fair access to the grid.
- Synergies of natural gas and renewable energy in electric power and transportation sectors can be enhanced to achieve climate change targets. Future energy systems will allow an efficient renewable energy power integration in smart grids, including off-grid solutions in remote rural areas.

# The Nexus

- *Group of Experts on Coal Mine Methane* promotes the uses of best practices and encourages and assists coal producers to improve the environmental, social and economic aspects of mining gassy coal, but could engage with the end users of the coal by providing educational materials
- *Group of Experts on Cleaner Electricity Production from Fossil Fuels* have helped electricity producers understand the potential and value of carbon dioxide capture and storage, but could encourage power producers to view the options for sustainable practices in the fuel supply chain
- *Experts Group on Resource Classification* have shown the utility of the classification system across a wide range of resource types and could assist the *Group of Experts on Coal Mine Methane* and *Group of Experts on Cleaner Electricity Production from Fossil Fuels* in developing a document that re-maps the coal extraction through electricity production value chain in a manner consistent with the principles and practices of the UNFC.
- *Group of Experts on Renewable Energy* facilitates a better understanding of the status, progress and trends of renewable energy development, as well as the exchange of best practices and lessons learned to overcome obstacles, create a network of experts and provide information to render cross-cutting opportunities a reality.
- The resultant documents would be used to inform the Committee on Sustainable Energy, member states, and industry decision makers.
- Integration of the principles-based best practices developed by each of the subsidiary bodies can be applied across sectors — e.g. to help grapple with larger cross-sectoral issues such as methane management. Other subsidiary bodies could engage in cross-sectoral projects that share common goals.

# The Nexus (cont.)

- Transition to clean energy system has to be driven by energy efficiency and renewable energy and it should be done in an integrated way. The emerging energy system will be significantly more customer oriented and focus on providing energy services.
- As a first step, the *Group of Experts on Energy Efficiency* and the *Group of Experts on Renewable Energy* can deepen their collaboration on using renewable energy sources as a promising energy efficiency measure.
- This also calls for stronger cooperation between these two Groups and the *Group of Experts on Cleaner Electricity Production from Fossil Fuels*

# Recommendations

- Representatives of the Expert Groups should meet (virtually) to discuss and develop a common understanding of and approach to achieving sustainable development goals. The outcome should become a part of the recommendations to the upcoming Ministerial
- Work to help member states produce transparent, timely, and accurate data for assessment of energy production, transportation, consumption and emissions. This is crucial to understanding the patterns and magnitude of emissions of GHG's and efficiencies.
- The Experts Groups, with consultation of the member states, find an example “ system” where if best practices from each of the bodies were implemented, would become a model of an integrative approach to production, distribution and consumption of energy. This approach could be the basis for scenario development that would quantify the difference between business as usual and sustainable development.
- Prevail on financial sources to support the development of one such example.

# Thank you



<http://www.unece.org/energy/se/cmm.html>