UN Sustainable Development Goal No. 7: Does coal have a role in providing affordable and clean energy?

UNECE Perspective

European Energy Forum

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Michal Drabik, UNECE Secretariat
➢ Set up in 1947 by ECOSOC
➢ Brings together 56 countries located in the European Union; non-EU Western, Eastern, and South-East Europe; Commonwealth of Independent States (CIS) and North America
➢ However, all interested United Nations member States may participate in the work of UNECE
➢ In addition, over 70 international professional organizations and other non-governmental organizations take part in UNECE activities
➢ Produce 40% of the world’s energy, consume 45%.
➢ Home to important energy industries.
➢ Produce nearly 50% of the global economic output.
➢ Dominant in the world’s financial infrastructure.
➢ Fossil fuels are 60% of primary fuel in the UNECE region.
➢ UNECE region accounts for half of global emissions.
➢ The region is diverse: comprised of high and low income countries, countries that are energy rich and energy poor and countries that are in economic transition.
➢ Its major aim is to promote pan-European economic integration

➢ It provides a platform for dialogue on economic and sectoral issues

➢ It facilitates greater economic integration and cooperation among its member countries and promotes sustainable development and economic prosperity through:
  ▪ policy dialogue
  ▪ negotiation of international legal instruments
  ▪ development of regulations and norms
  ▪ exchange and application of best practices as well as economic and technical expertise
  ▪ technical cooperation for countries with economies in transition
Committee on Sustainable Energy

- Develops normative instruments (best practices, standards) that facilitate cooperation and enable needed investments.
- Provides countries with a platform for a dialogue.
- Leads and oversees SED’s work on implementation of the UN Sustainable Development Goals.
Committee on Sustainable Energy

➢ Has six subsidiary bodies (Groups of Experts on):
  ▪ Energy Efficiency
  ▪ Renewable Energy
  ▪ Resource Classification
  ▪ Cleaner Electricity Production from Fossil Fuels
  ▪ Natural Gas
  ▪ Coal Mine Methane
17 SDGs, agreed by UN GA in 2015, are the principal framework for the UNECE’s work in sustainable energy.
➢ SDG 7 is about providing sustainable energy to the world.

➢ All 17 goals, depend on energy.

➢ UNECE focuses on ‘energy for sustainable development’ because energy is a golden thread that underpins all SDGs.
➢ Targets:

▪ (7.1) By 2030, ensure universal access to affordable, reliable and modern energy services
▪ (7.2) By 2030, increase substantially the share of renewable energy in the global energy mix
▪ (7.3) By 2030, double the global rate of improvement in energy efficiency
Targets:

- (7A) By 2030, enhance international cooperation to facilitate access to clean energy research and technology, including renewable energy, energy efficiency and advanced and cleaner fossil-fuel technology, and promote investment in energy infrastructure and clean energy technology.
Discourse on energy and climate change is usually based on emotions rather than the truth.

There is a need for open and honest discussion on energy that is based on facts.
➢ Fossil fuels today: 80% of primary energy and key to energy access.
➢ In 2050, even under a 2 degree scenario, fossil energy will represent 40% of the energy mix.
➢ We are headed for a 4 degree climate change scenario.
➢ SDG7: is not about “clean energy”, but about “sustainable, reliable, modern, accessible, and affordable” energy.
➢ There are 17 SDGs, not just SDG13.
➢ Without fossil fuels, SDGs will not be achieved.
➢ Certain options for improving the performance of the energy system are arbitrarily excluded.
➢ We don’t have the luxury to reject any solution.
➢ Low emissions are better than high ones.
➢ Access to financing for R&D is necessary in both: renewable energy and clean fossil fuels technologies.
➢ Reduction of the carbon footprint of the coal industry does not need to happen by its closure.
➢ There are: HELE technologies, CCUS, CMM.
UNECE Group of Experts on CEP drafted *Principles for Financing Clean Fossil Fuel Projects in the Context of the 2030 Agenda for Sustainable Development.*

- **Conditions:**
  - If deployment of HELE technology with CCUS replaces investments that would otherwise take place in non-HELE fossil or biomass technology;
  - If development of new carbon-neutral fossil technology is conceived as a way of accelerating the uptake of low- or no-carbon technology;
  - If investment in HELE technology with CCUS enhances total energy system efficiency in a carbon neutral way and provides needed access to modern and sustainable energy services to support quality of life;
  - If deployment of HELE technology with CCUS is pursued in parallel with a full value chain emissions programme that yields net negative GHG emissions (e.g., management of methane emissions from coal resources or reducing natural gas venting or flaring); and
  - If advancing HELE technology contributes to further development of net carbon neutral or carbon negative solutions (e.g. CCUS).
Capture and use of CMM is among the most effective near-term options to minimize the carbon footprint of the mining sector.

It mitigates climate change, but also:

- enhances mine safety and productivity;
- localizes energy production;
- improves local/regional air quality;
- serves as a catalyst for investment.
➢ Best Practice Guidance for Effective Methane Drainage and Use in Coal Mines
  ➢ First edition: 2010;

➢ In 2011, ECOSOC invited UN Member States, International Organizations, and the Regional Commissions to take measures to ensure the application of BPG in countries worldwide.
The document presents recommended principles on CMM capture and use in a clear and succinct way, providing decision-makers with a base of understanding from which to direct policy and commercial decisions.

It does not replace or supersede laws and regulations.

The guidance is principle based and can be adapted to varying mining conditions.

Provides industry with a standard set of recommended principles and best practices for methane recovery and utilisation.

Intended audience: mine operators, regulators, government officials and technical professionals.
Group of Experts on Coal Mine Methane
International Centres of Excellence on CMM

➢ Operate under the auspices of UNECE and in partnership with local specialized entities;
➢ Members and their institutions and companies are repositories of knowledge;
➢ Promote best practices developed by the Group;
➢ Facilitate international communication and cooperation in the field of CMM;
➢ Identify emerging good practices.
Coal does not serve only as a fuel for energy production. Problem of emissions persists throughout the whole coal-mining life cycle.
Group of Experts on Coal Mine Methane
Abandoned Mine Methane (AMM)

➢ There is huge potential for GHG reduction in proper AMM management.

➢ In many countries problem of mine closure is gradually more challenging.

➢ Methane emissions increase for a short period immediately after mine closure and then decrease and persist on a relatively stable level for many years.

➢ Proper mine closure is necessary for efficient use of AMM.

➢ The GoE on CMM works on the document identifying best practices for effective AMM capture and use.
Joint project of all Groups of Experts operating under the umbrella of the UNECE Committee on Sustainable Energy.

A tool for assisting UNECE member States in delivering on effective transition to low-carbon energy and green economy.

Centered on “legacy” industrial regions and complexes in many parts of the world.

In conversations with government and private sector.
Modernization cannot be avoided or delayed.

It is in states’ best interest to undertake the process in the most efficient and cost-effective manner.

Objective to explore a great potential that lies in transformation of large industrial complexes.

The initial stage: a plan for modernization of fossil fuel based industrial sites by reorienting them towards modern technologies and more efficient use of available resources.

The subsequent stage: a robust and flexible business model for efficient industrial site’s transition, replicable in other industrial sites in like countries or regions.
Does coal have a role in providing affordable and clean energy?

➢ Yes

  ▪ Under certain conditions:
    • Necessity of a broad approach (not only as a fuel; full coal mining life cycle).
    • As a fuel - in a short- and mid-term perspective of a transition period towards renewables.
    • Only clean coal technologies.
    • Only in parallel with a full value chain emissions programme.

➢ Rational approach is necessary.

➢ UNECE is the only UN body that talks openly about fossil fuels.
Mr. Branko Milicevic
  ➢ Economic Affairs Officer, UNECE
  ➢ Secretary of the GoE on CEP
  ➢ Tel: +41 (0) 22 917 3158
  ➢ Email: branko.milicevic@unece.org
  ➢ [http://www.unece.org/energy/se/cep.html](http://www.unece.org/energy/se/cep.html)

Mr. Michal Drabik
  ➢ Economic Affairs Officer, UNECE
  ➢ Secretary of the GoE on CMM
  ➢ Tel: +41 (0) 22 917 3966
  ➢ Email: michal.drabik@unece.org
  ➢ [http://www.unece.org/energy/se/cmm.html](http://www.unece.org/energy/se/cmm.html)
Committee on Sustainable Energy
➢ 27th Session: 26-27 September 2018, Geneva, Switzerland

Group of Experts on Coal Mine Methane
➢ 13th Annual session: 24-25 September 2018, Geneva, Switzerland

Group of Experts on Cleaner Electricity Production
➢ 14th Annual session: 28 September 2018, Geneva, Switzerland

International forum on Energy for Sustainable Development
➢ 9th Forum: 12-15 November 2018, Kiev, Ukraine
Thank you!

Sustainable Energy Division
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