



**Global Methane Initiative and the UN Economic Commission for Europe
Co-Sponsor International Workshops on Best Practices for Recovery
and Use of Coal Mine Methane in Turkey and Ukraine**

Turkey and Ukraine are important coal producers. With in-country reserves, coal is central to both countries' near-term and long-term energy strategies. Each of them has vast experience in coal mining; however, they still face multiple challenges associated with methane gas released from mining activity, also known as coal mine methane (CMM). Methane-related accidents and emergencies have caused economic and human losses in both countries.

Effective capture of CMM improves mine safety and provides a ready source of energy that can be used in a range of applications. Recovery and use of CMM in Turkey and Ukraine are, however, subject to a range of barriers – predominantly regulatory – that inhibit development of domestic CMM projects. Whilst there is substantial awareness of methane-related risks among the mining industry and government officials, as well as a high level of technical expertise, the problems tend to lie in incomplete regulation and implementation of the existing rules.

Removing methane from underground coal workings is necessary for safety reasons but venting it to the atmosphere causes significant harm to the environment. As methane is a much more potent greenhouse gas than carbon dioxide, its capture and use constitute one of the most effective near-term options to minimize the carbon footprint of the coal mining sector and promises significant improvements in local/regional air quality. Furthermore, if managed properly, CMM also offers considerable economic opportunities. CMM drainage and use projects enhance the productivity of the mines, provide for localized energy production, and can lead to positive cash flows for the mine, serving as a catalyst for investment. The Global Methane Initiative (GMI) has identified over 200 CMM projects worldwide, with the largest scale projects capable of producing 100 MW of power and reducing carbon emissions by 2.7 million tonnes CO₂ equivalent (MtCO₂e) per year or delivering natural gas sales of over 300 million m³ per year resulting in greater than 4.5 MtCO₂e per year.

In order to enhance capacity in effective CMM management of the Turkish and Ukrainian mine operators, UNECE, with the support of the GMI, delivered two technical workshops on Best Practices in Coal Mine Methane Capture and Utilization in Ankara and Dnipro. The main objectives of the events were to disseminate and encourage implementation of best practices in CMM drainage and use, and to promote policies that facilitate development of CMM projects.

The workshop in Ankara on 10 June was organized by UNECE in cooperation with the Turkish Ministry of Energy and Natural Resources and Turkish Coal Enterprises (TKI). It featured 24 technical presentations addressing issues such as: regulations and enforcement; mining safety; degassing, explosion prevention, and risk assessment; ventilation; methane drainage and pre-mine drainage; and project development and financing.

The Vice-Chair of the UNECE Group of Experts on CMM, Mr. Clark Talkington, observed that “the workshop in Ankara presented an excellent opportunity for initial engagement with the Turkish coal

industry and government officials. The participation of senior officials from the Ministry and Turkish coal companies demonstrated the importance of and commitment to the issue of CMM recovery and use for safer mining, greenhouse gas mitigation, and energy recovery.”

The event in Ukraine was held at the Technical University of Dnipro from 12 to 14 June. It was organized as part of the Third International Coal Conference “Ukrainian Coal Mining Industry in Times of Decarbonisation” by UNECE in cooperation with the Ukrainian Ministry of Energy and Coal Industry, the Academy of Science of Ukraine, and DTEK.

“The coal industry has always been an important part of the Ukrainian economy, and over the last decade the country has made great strides in improving mine safety”, said Mr. Talkington. “The workshop in Dnipro, an important coal mining region,” he continued, “provided a forum for Ukrainian and international experts to discuss principles for good practice and to lay the groundwork for more detailed workshops in the future.”

Both events were well attended by representatives of the Turkish and Ukrainian authorities and companies, as well as by engineers, academicians, and other professionals operating in the fields of coal mining and CMM in these countries. The workshops provided a much-needed platform for exchange of information between local and international experts.

All presentations delivered at the workshops are available at <http://www.unece.org/index.php?id=51712>.