

UNECE Workshop on Methane in the Context of the Transition of the Coal Sector

Expected impact of the EU Methane Strategy on the coal industry in Europe

Hotel QUBUS 27 September 2021, Kraków, Poland Brian Ricketts Secretary General

EURACOAL: 25 members and observers from 14 countries

- DEBRIV Deutsche Braunkohlen-Industrie-Verein (DEU)
- ZSDNP Czech Confederation of Coal and Oil Producers (CZE)
- PPC Public Power Corporation (GRC)
- PGG Polska Grupa Górnicza S.A. (POL)
- PPWB Confederation of Polish Lignite Producers (POL)
- GIPH Górnicza Izba Przemysłowo-Handlowa (POL)
- PATROMIN Asociaţia Patronală Minieră din Romania (ROU)
- BAZ Borsod-Abaúj-Zemplén County Government (HUN)
- MMI Mini Maritza Istok (BGR) observer
- GIG Central Mining Research Institute (POL)
- CPERI/CERTH Chemical Process and Energy Resources Institute (GRC)
- BSN Branchenverband Steinkohle und Nachbergbau (DEU)

- DTEK (UKR)
- Donetsksteel (UKR)
- Lubelski Węgiel "Bogdanka" S.A. (POL)
- Premogovnik Velenje, d.o.o. (SVN)
- HBP Hornonitrianske bane Prievidza, a.s. (SVK)
- EPS Electric Power Industry of Serbia (SRB)
- TKI Turkish Coal Enterprises (TUR) observer
- RMU "Banovići" d.d. (BIH)
- KOMAG Institute of Mining Technology (POL)
- IMG-PAN Strata Mechanics Research Institute (POL)
- Geocontrol S.A. (ESP)
- Subterra Ingeniería S.L. (ESP)
- DMT GmbH & Co. KG (DEU)





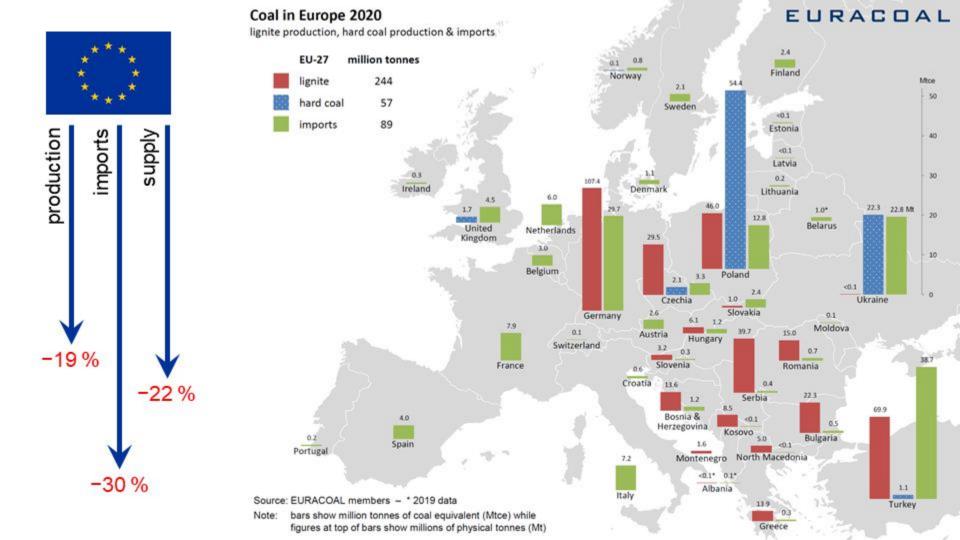




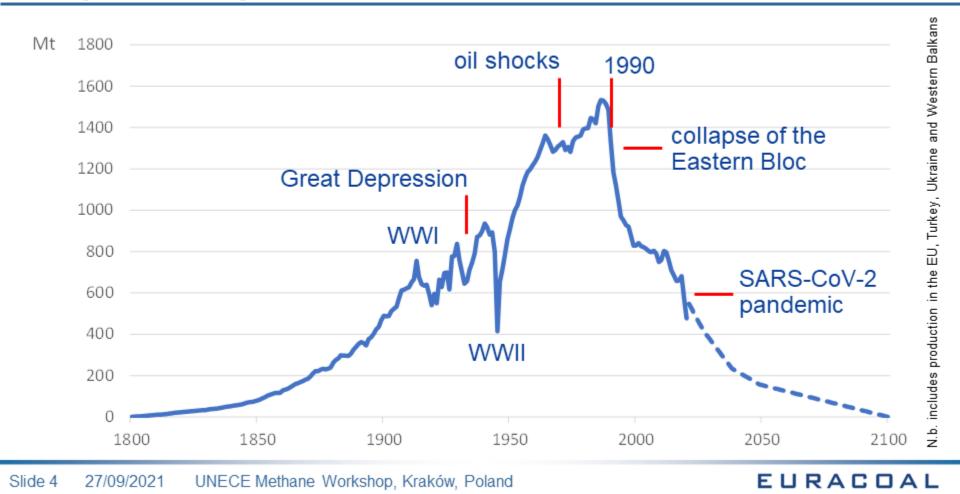




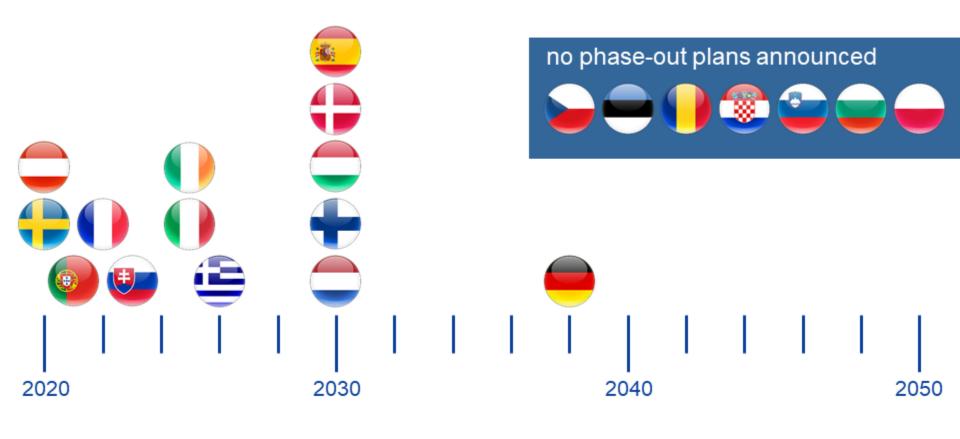




European coal production 1800-2020 and forecast to 2100

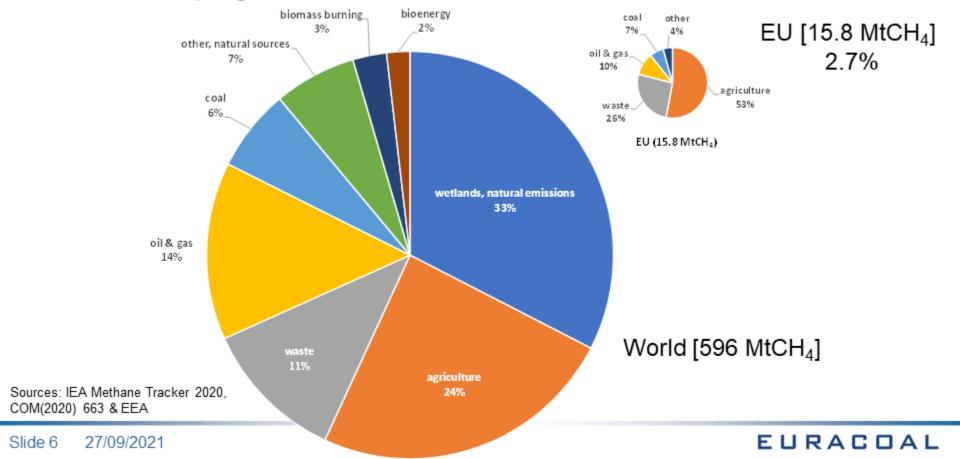


Coal, peat & oil shale phase-out plans in EU Member States



Total global methane emissions, 2012/2019

& EU anthropogenic methane emissions, 2018



Global Methane Pledge announced 17 September 2021 at the Major Economies Forum on Climate and Energy



"Leaders from Argentina, Australia, Bangladesh, the European Commission, the European Council, Indonesia, Italy, Japan, Korea, Mexico, and the United Kingdom as well as the UN Secretary-General ... underscored the collective urgency of taking action to meet the global climate crisis. President Biden also announced, with the EU, a Global Methane Pledge that aims to cut global methane pollution by at least 30 percent from 2020 levels by 2030 through collective action. President Biden asked Special Presidential Envoy for Climate John Kerry to chair a ministerial session immediately following with China, Germany, India, and Russia."

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EU Methane Strategy COM(2020) 663, 14 October 2020

- Focuses on fugitive emissions from oil and gas production, supply infrastructure and end use
- EURACOAL responded with a Position Paper:
 - Opencast mines emit little or no thermal methane.
 - Emissions from underground coal mines are now a fraction of past emissions.
 - Use of coal mine methane (CMM) is supported by EEG in Germany.
 - Promote CMM + ventilation air methane (VAM) use across the EU.
 - Pay attention to abandoned mine methane (AMM).
- European Commission will propose legislation in autumn 2021.
- EU is supporting new UNEP International Methane Emissions Observatory.

Need to allow State aid for methane emission reduction projects and offer relief from the EU ETS for heat and power projects using CMM.

State aid guidelines on climate, energy & environment

2014/C 200/01 – currently under revision

ANNEX 3

List (1) of eligible sectors (2) under Section 3.7.2

NACE code	Description
510	Mining of hard coal
<u>620</u>	In so far as it applies to "the extraction of coal mine methane"
<u>3821</u>	Disposal of non-hazardous waste by combustion or incineration or other methods, with or without the resulting production of electricity or steam, compost, substitute fuels, biogas, ashes or other by-products for further use etc.
<u>3900</u>	Other specialised pollution-control activities

EU ETS Directive 2003/87/EC – currently under revision

CATEGORIES OF ACTIVITIES TO WHICH THIS DIRECTIVE APPLIES

- Installations or parts of installations used for research, development and testing of new products and processes and installations exclusively
 using biomass or coal mine methane collected at operating or abandoned coal mines and used in installations for heating/cooling and/or the
 production of electricity are not covered by this Directive.
- The thresholds values given below generally refer to production capacities or outputs. Where several activities falling under the same category are carried out in the same installation, the capacities of such activities are added together.
- 3. When the total rated thermal input of an installation is calculated in order to decide upon its inclusion in the EU ETS, the rated thermal inputs of all technical units which are part of it, in which fuels are combusted within the installation, are added together. These units could include all types of boilers, burners, turbines, heaters, furnaces, incinerators, calciners, kilns, ovens, dryers, engines, fuel cells, chemical looping combustion units, flares, and thermal or catalytic post-combustion units. Units with a rated thermal input under 3 MW and units which use exclusively biomass or coal mine methane collected at operating or abandoned coal mines and used in installations for heating/cooling and/or the production of electricity shall not be taken into account for the purposes of this calculation. 'Units using exclusively biomass' includes units which use fossil fuels only during start-up or shut-down of the unit.

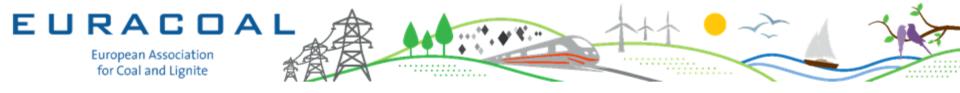
Activities	Greenhouse gases
Energy activities	
Combustion installations with a rated thermal input exceeding 20 MW (except hazardous or municipal waste installations or installations using coal mine methane collected at operating or abandoned coal mines for heating/cooling and/or the production of electricity)	Carbon dioxide Other specialised pollution-control activities

Coal methane – definitions

Table 1 – Coal methane – definitions	
СВМ	Coalbed methane is recovered from virgin (unmined) coalbeds by drilling wells from the surface, sometimes prior to underground mining
СММ	Coal mine methane is methane gas which is captured by drilling drainage boreholes underground before or during mining operations. Typically, 30% of coal mine methane can be drained and is often used for heat and power generation.
VAM	Ventilation air methane is the methane desorbed from coal seams or released from voids during mining, not captured by drainage but diluted with fresh air for safety reasons before venting the mixed gas to atmosphere via mine roadways and exhaust shafts. Typically, 70% of mine methane leaves an underground mine in the ventilation air.
AMM	Abandoned mine methane is the methane gas remaining (and in some instances newly generated by microbes) in closed coal mines. Methane held in voids, coal seams and other gas-bearing strata that have been disturbed or intercepted by mining operations can escape to atmosphere, but quantities vary from mine to mine. AMM emissions change with atmospheric pressure and will eventually stop when mines flood.
SMM	Surface mine methane is the methane released during opencast or open-pit mining. Emissions from surface lignite mines in Europe are reported to be low and marginal, at the limits of detection, because little or no thermal methane is present from the coalification process in these shallow, geologically young seams.



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Thank you!

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