

#### International conference:

#### Coal in the period of energy transformation

August 29, 2017; Katowice

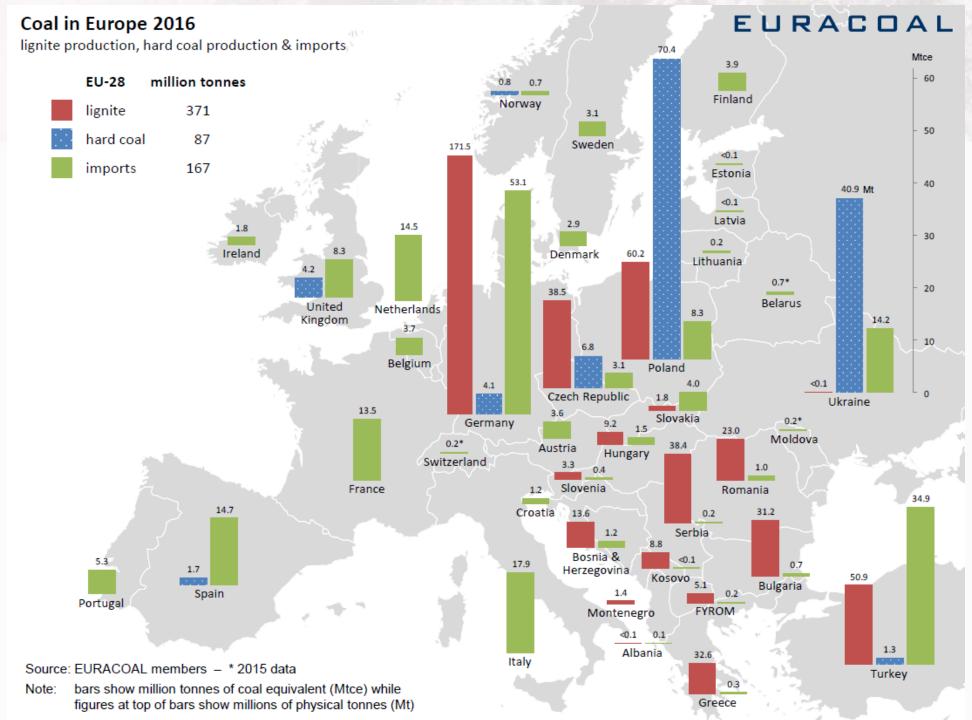


# Global Trends in Coal Production and Consumption: winds of change

Brian Ricketts Secretary General

# EURACOAL

European Association for Coal and Lignite

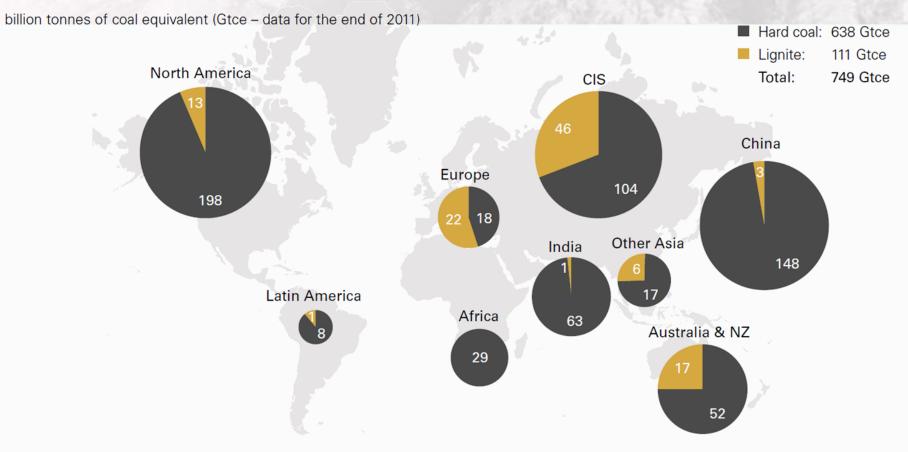






### Global hard coal & lignite reserves



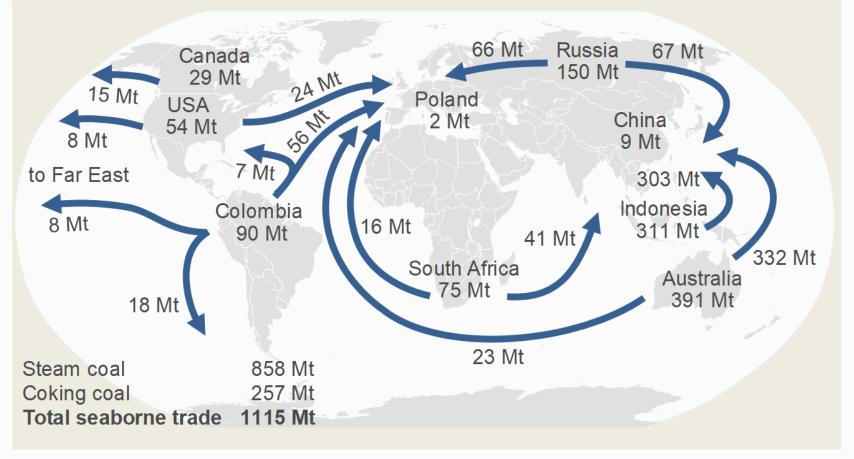


Sources: BGR and EURACOAL

88% of the EU's conventional energy reserves are in the form of coal and lignite (and 95% of our resources).

# International seaborne coal trade, 2016 TARGI KATOWICE (million tonnes)





Source: VDKi

Estimated total global hard coal production in 2016: 6.7 billion tonnes



#### C TARGI KATOWICE

# **Current EU policy challenges for coal**



Climate & Ene	ergv Clean Air Programme for Europe			ETS Directive
	lational Emission Ceilings Directive	Ambient Air Quality Directive	Industrial Emission Directive (LCP BR	
				- Covironmontal
Strategic Envir	onmental AI	R QUALITY LEGISLATION		Environmental bility Directive
Assessment Di Environmental Assessment Di	Impact		7 <sup>th</sup>	Environmental on Programme
LAND, WATER & WASTE LEGISLATION				
	Habitats Directive	Water Framework Directive	Mining Waste Directive	
20-20-20 & 2030 targets	S	Groundwater Directive		Renewables Directive



# PM Donald Tusk on Energy Union

FT, 22 April 2014

# Europe should unite to break Moscow's grip on gas

#### **Donald Tusk**

Regardless of how the stand-off over Ukraine develops, one lesson is clear: excessive dependence on Russian energy makes Europe weak. And Russia does not sell its resources cheap – at least, not to everyone.

This, of course, is basic economics. A dominant supplier has the power to raise prices and reduce supply. The way to correct this market distortion is simple. Europe should confront Russia's monopolistic position with a single European body charged with buying its gas.

Once this has been achieved, Europe should undertake the lengthier task of breaking up the Russian gas monopoly and restoring free market competition. True, this will require Europe's governments to take a unified position. But such feats of co-ordination have been achieved before.

The EU is creating a banking union, a Europe-wide underpinning for its financial institutions. The bloc's 28 members jointly buy uranium for their nuclear power plants through the EU's atomic

energy agency, Euratom. They should take the same approach with Russia's gas.

I therefore propose an energy union. It will return the European project to its roots. Herman Van Rompuy, president of the European Council, has likened today's energy challenge to the problems faced 60 years ago – problems that spawned the European Coal and Steel Community.

Whether in coal, steel, uranium, credit or gas, the principal idea of the EU has always been to bring Europe together, deepening our security and establishing fair rules where the free market is lacking. An energy union, too, would be based on solidarity and common economic interests. It would be founded on six principles.

First, Europe should develop a mechanism for jointly negotiating energy contracts with Russia. It would be created in stages. Initially, bilateral agreements would be stripped of any secret and market-distorting clauses; then, a template contract would be created for all new gas contracts; finally, the European Commission would be required to take a role in all new negotiations.

Second, mechanisms guaranteeing solidarity among member states should be strengthened in case energy supplies are again cut off, as they were in the cold winter of 2009 when Russia's previous dispute with Ukraine stopped gas flowing to a number of EU nations. Europe must be safe in the knowledge that its gas supply is assured, its storage

#### Whether it is coal, steel, credit or gas, the EU is always about deepening our security and establishing fair rules

facilities are sufficient and its gas networks are uninterrupted.

Third, the EU should support the building of adequate energy infrastructure. Today, at least 10 EU member states depend on a single supplier – Gazprom – for more than half of their consumption. Some are wholly dependent on Russia's state-controlled gas giant. In countries where the security of supply is weakest, storage capacity

and gas links should be built with the help of the EU. Such projects should enjoy the highest permitted level of co-financing from Brussels -75 per cent.

Fourth, Europe should make full use of the fossil fuels available, including coal and shale gas. In the EU's eastern states, Poland among them, coal is synonymous with energy security. No nation should be forced to extract minerals but none should be prevented from doing so – as long as it is done in a sustainable way. We need to fight for a cleaner planet but we must have safe access to energy resources and jobs to finance it.

Fifth, we should reach out to our partners outside Europe. The global gas market is a recent creation. In the years of the Coal and Steel Community, gas could not be transported by ship; today, thanks to technological progress, we have the tools necessary to create a single European market. Signing agreements with emerging suppliers could transform the situation on the European energy market. One possibility is the US, where shale production has taken off in recent years. Another is Australia, a rising

star of liquefied natural gas exports.

In 2005 the EU, together with 8 of its eastern neighbours, created an Energy Community to extend the European gas market eastward. This should be strengthened. We need to boost the energy security not only of the EU but of Europe as a whole.

Poland has been at the forefront of such solutions. Our country was the first to invite the European Commission to take part in its gas negotiations with Russia. And, in the past seven years, Poland has invested more than £2bn on improving its gas storage capacity, building a gas terminal, connecting its gas network to those of Germany and the Czech Republic, and investing in renewable sources of electricity generation.

The seed of the EU was planted by a simple vision: common control over – and a common stake in – steel production and coal mining. It is time to strengthen the community in the field of energy. Now that new technologies allow it, and old challenges demand it, we can hardly afford not to.

The writer is prime minister of Poland



GÓRNICZA IZBA PRZEMYSŁOWO HANDLOWA



# "EU's commitment to a clean energy transition is irreversible and non-negotiable." p.5 COM(2016) 110 on Energy Union



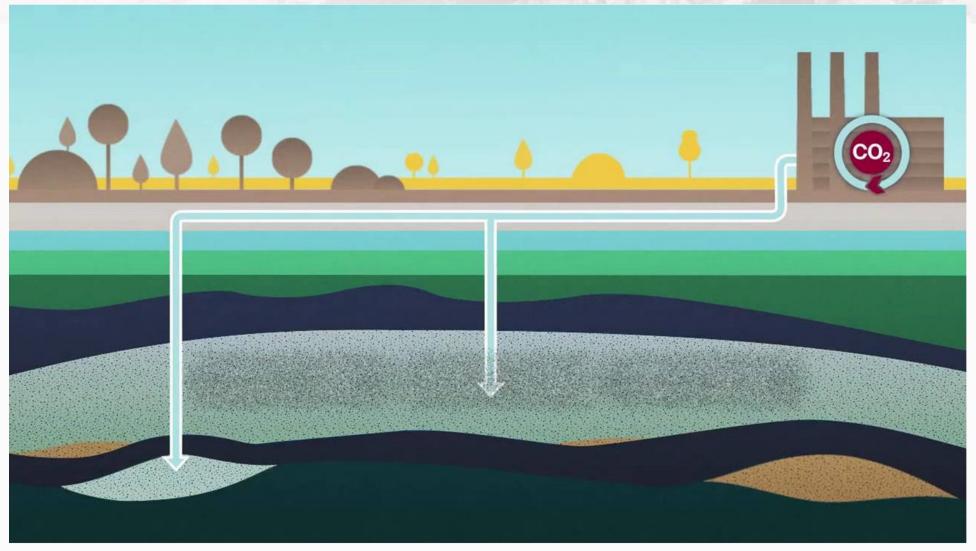
Vice President for Energy Union, Maroš Šefčovič and Commissioner for Climate and Energy, Miguel Arias Cañete





# Carbon capture and storage







# CCS is not enough.



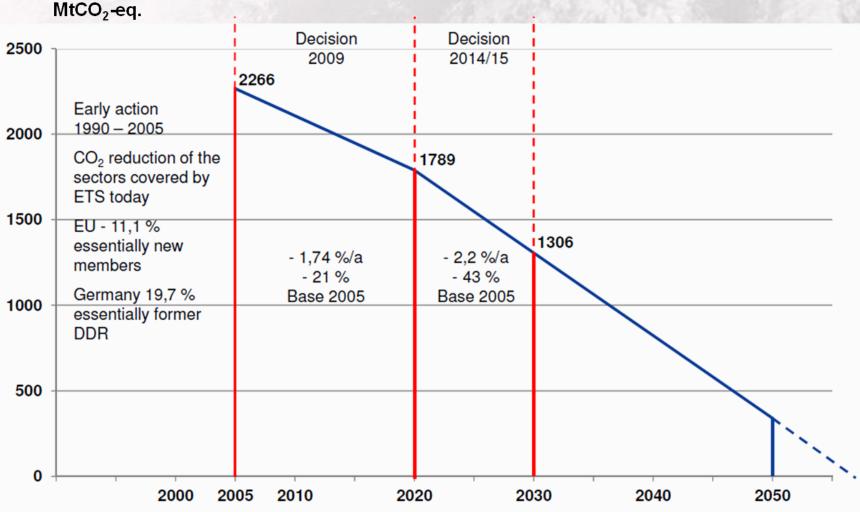
We have to have a narrative that fits with today's political vision.

We need to appear to be disappearing, while gaining some respect for the role of coal during the "energy transition".



## EU Emission Trading Scheme = zero CO<sub>2</sub> in 2058



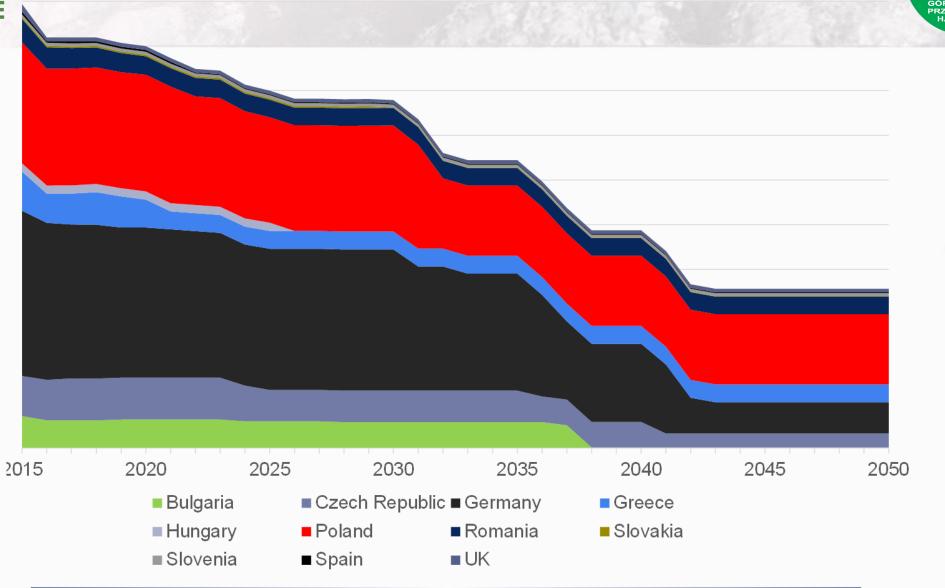


EU ETS is the key instrument designed for the long term.



### Future EU coal production profile

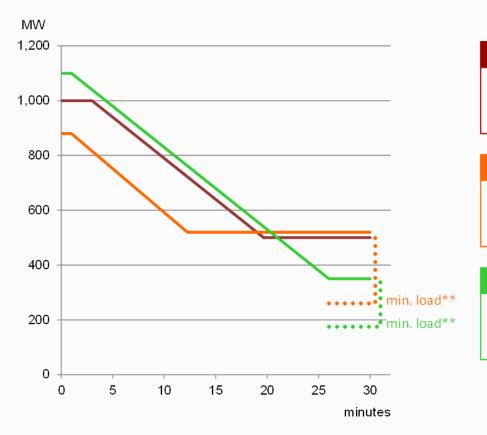






#### Flexibility is needed to balance renewables





#### BoA 1 to 3

Maximum load ~ 1,000 MW Minimum load ~ 500 MW Maximum ramp rate +/- 30 MW/min

#### Gas-fired CCGT at Lingen

Maximum load ~ 2 × 400 MW
Minimum load ~ 520\* / 260\*\* MW
Maximum ramp rate +/- 32 MW/min

#### BoAplus

 Maximum load
 " 2 × 550 MW

 Minimum load
 " 350\* / 175\*\* MW

 Maximum ramp rate
 +/- 30 MW/min

\* 2 boilers operating \*\* 1 boiler operating

Coal-fired power plants match the flexibility of gas-fired power plants.

#### TARGI KATOWICE

# New coal-fired power plants in the Netherlands



- Uniper Maasvlakte 3 (Rotterdam) 1 100 MW
- Engie Maasvlakte (Rotterdam) 800 MW
- RWE-Essent Eemshaven (Groningen) 1 600 MW









#### International conference:

#### Coal in the period of energy transformation

August 29, 2017; Katowice





Brian RICKETTS, Secretary-General European Association for Coal and Lignite AISBL 168 avenue de Tervueren, boîte 11 BE-1150 Brussels, Belgium

> <u>ricketts@euracoal.org</u> <u>www.euracoal.eu</u>