A European Energy Union based on coal would be dead on arrival, writes Professor Michael Grubb, who adds that Poland has a golden opportunity to use EU climate policy to transition to other energy sources.

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With this year's political transitions in Europe, Poland is taking its rightful place as a major European power.

And next month, a European Council meeting is due to finalise a new package of climate and energy legislation, to define European goals for 2030 and its role in global negotiations. It will be an acid test, in many ways, including of Poland's proposal for an Energy Union.

Poland's stance to date has appeared to many others to be dominated by a view that is both nationalistic and outdated. While correctly stressing the importance of energy security, the Polish government has apparently convinced itself that the national interest lies in coal.

I come from the UK, a country that also once saw coal as its national fuel. Miners were probably the most powerful lobby group in the country until the 1980s. For many years, politicians sustained an industry that was fundamentally uneconomic, and ultimately harmful to the UK.

Spearheaded by Margaret Thatcher's economic revolution and privatisation of the energy industry, the UK eventually changed course. The full costs of coal subsidies and damage to health were revealed to all.

Coal mining and burning have declined sharply and the UK has gained as a result. We save money by using less energy; our air is cleaner; fewer miners risk their health in an industry that still sees 7,000 deaths a year worldwide; and our investment in low-carbon technologies puts us among the nations set to benefit as prices tumble.

Security is also about more than just energy supply. Food security, for example, is just as important. That would be stressed by a changing climate, which is an inevitable consequence of rising global CO2 emissions.

The damage from more frequent or extreme floods and droughts can be severe – as the last few years have shown. And migration into southern Europe – in which environmental stress is one factor – is already straining Europe's borders.

## Glowing opportunity for change

Poland now has a glowing opportunity to shape the energy transition, but without the economic and social upheaval experienced in the UK. For one thing,

the technologies are all more mature. Renewables are becoming far more cost-competitive. Poland does not have to make the same investments that the UK, Germany and other 'early adopters' had to make.

Above all, the European Union stands ready to help. Through free allowances under the Emission Trading Scheme and other energy-related support mechanisms, the EU is giving Poland more than €10 billion to spend on energy and climate infrastructure.

Economic arguments alone suggest that spending the money on coal is not a sensible strategy. Black coal production is inevitably declining, as it did in the UK. The economics of deep mining are too difficult.

Sustaining it with subsidies is a waste. Even after decades of environmental legislation, analysts in both the US and Europe conclude that the health and environmental damages from coal outweigh its value to their economies.

Poland is more than twice as wasteful with energy as the UK, for example – a sad legacy of the Soviet era. Spending the €10 billion on turning that around would save the country and consumers money, improve health through warmer homes and reducing air pollution, and generate jobs.

It can also increase security. Energy efficiency and renewable energy reduce gas dependence. As much of central Europe's gas comes from Russia, energy efficiency offers an easy and economic route to reduce that dependence for the bloc as a whole.

So does the establishment of a diverse energy system. France with nuclear and hydropower, Germany, Spain, the UK and Denmark with renewables: all are seeing their reliance on coal disappearing, their use of clean domestic resources expanding, and their societies becoming richer and healthier.

## The big picture

Climate policies and the transformation to low-carbon energy technologies might appear to be an expensive luxury. But that view ignores history. Climate policies in Europe currently add a few percent to average energy prices; they also help to reduce energy consumption and dependence on fossil fuels.

Historically, national energy expenditure as a percentage of GDP has been remarkably constant, across countries and over a century, at 8-10%. Energy efficiency and innovation have served to contain the bill after price rises. That can be true for Poland just as much as it has been elsewhere.

If Poland continues to ask the EU to support its coal habit, it will miss the golden opportunity of using climate policy to accelerate innovation, which has every prospect of yielding good economic returns.

However, drafts of the provisional EU agreement are not promising. They indicate that the Polish government is trying to lock itself into a coal-dependent future – which would be bad for Poland, bad for the EU and bad for the climate.

It would also be bad foreign policy. This week's UN Summit showed renewed political momentum towards a global deal, spearheaded this time by China and the US Administration. Europe is in danger of becoming a laggard; if Poland wants to be seen as a responsible European power, it can hardly start by undermining and frustrating European ambition at every step.

Above all, an Energy Union needs to embrace the European energy future, not try to drag it backwards. An Energy Union based on coal is dead on arrival. If it is based on energy efficiency, interconnectedness and a diversity of clean resources, it can be a significant force for good.

This is the vision that Mr Tusk should adopt, as he takes up the reins of the European Commission, because this, not coal, is the model that benefits both Poland and the entire EU.