Europe’s increasing need for gas supply security (infographic)

Discover key facts and figures about natural gas in Europe and how the EU wants to ensure gas supply security.

EU states could be in a better position to deal with disruptions of the gas supply thanks to a new solidarity mechanism. MEPs voted in favour of the plans on Tuesday 12 September.

Over the past decades natural gas's share of Europe's energy mix has increased, unlike that for oil and coal. It now accounts for nearly a quarter of the EU's gross inland energy consumption and is especially used for heating homes and generating electricity.

However, this figure varies widely from country to country. For instance, gas plays an important part in the Netherlands, Italy and UK than in Sweden, Estonia and Finland, whereas Malta received its first ever LNG cargo at the beginning of this year, while Cyprus only recently started exploring for gas.

The EU imports two-thirds of its natural gas, either through pipelines or by ships via LNG terminals. More than one-third of it comes from Russia, followed by Norway, Algeria and Qatar. A majority of EU countries are totally or almost totally dependent on imports for their demand of gas and supplies of some of them are dominated by one supplier, such as Russia.

Reliance on a single source or a single transportation route can pose a danger to supplies, whether because of a technical accident or political and economic disputes such as the ones between Russia and Ukraine - a transit country for Russian gas to the EU - over energy prices in 2006 and 2009 that disrupted supplies to several European countries.

Following this crisis, the EU strengthened in 2010 its rules for security of gas supply by obliging member states to ensure that gas is supplied to households and other vulnerable customers such as hospitals, even under demanding conditions such as a disruption of main gas infrastructure. In 2014, the European Commission conducted so-called gas stress tests that
showed that Europe could cope with gas supply disruptions only if member states cooperated more.

Last year it proposed to update the 2010 regulation by introducing a new solidarity mechanism that would ensure that a member state that declares an emergency level could receive gas from neighbouring countries. In April Parliament and Council negotiators reached an agreement on the text that was approved by MEPs on 12 September.

Polish EPP member Jerzy Buzek, who is responsible for steering the plans through Parliament, said: “Solidarity means that, in difficult times, we can send gas from one country to another to ensure full gas supply to households, to important social service providers like hospitals and to some gas power stations to avoid blackouts.”

In addition to helping each other, member states with the support of the EU are diversifying their supply sources and routes by building and planning new LNG terminals and pipelines. However, one of those projects, Nord Stream 2, has come under fire for increasing dependence on a single source - Russia - rather than decreasing it. This issue will be debated by MEPs in the plenary on Thursday.

Find out more
Video of the debate
Full infographic
Articles on the energy union
Briefing: new rules on security of gas supply
Main use of natural gas

- 46% Heating and cooling
- 16.4% Share of electricity produced with gas in 2015

Gas infrastructure (2017)

Gas infrastructure
Energy balance: where gas comes from and how it is used

% (2015)

Imports of natural gas
In terajoules, based on the gross calorific value (2015)