

we make the move



Annual financial report 2021

Fluxys



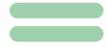
fluxys

#wemakethemove

Be fit and grow in Belgium and Europe



Be fit and grow in Belgium and Europe



Our approach

With our infrastructure we deliver continuity going forward. For as long as it is required, we provide a reliable supply of natural gas which, as a low-emission energy source, serves as a necessary buffer in the transition to a carbon-neutral society.

We optimise our operations in Belgium and Europe while growing our assets selectively in view of the low-carbon future.

Our focus in 2021



Keeping our essential services operational in complete safety during the ongoing pandemic



Striving to sell additional capacity



Rolling out our L/H conversion project in Belgium



Developing our partnership in the LNG terminal project in Stade near Hamburg



Launching initiatives to promote the use of LNG as an alternative fuel for ships and trucks



Preparing to offer the Belgian market infrastructure to transport hydrogen and CO₂ (see 'Be the transporter of the future energy carriers', p. 46)



Pandemic: shifting swiftly

For the second year in a row, the pandemic turned society upside down. In these uncertain times, Fluxys' essential services remained operational and the group's companies focused fully on playing their vital role in society and for their customers, namely ensuring safety and continuity of the energy supply.

We carefully complied with government recommendations in the various countries in which we are active in order to limit the spread of the virus. Throughout the year, with our staff we swiftly shifted gears as public health restrictions were eased or tightened.

Special efforts to sell transmission capacity

The harmonised European rules for the use of the networks mean that customers active in border-to-border transmission are concluding fewer long-term contracts. Instead, they are increasingly booking capacity on a short-term basis - often one day in advance - depending on market conditions. In this respect, 2021 was a year of remarkable volatility in capacity demand, both in terms of volumes and direction of flows. The customer-centric approach adopted by our sales teams ensured that we were able to respond quickly to market developments and achieved significant additional capacity sales.

In Belgium, efforts also continued regarding projects for new power plants. We established sales proposals for connecting power plants to the network for various project promoters and made further preparations. Which connection projects will be implemented depends on which power plants will be built.

Capacity available in all directions

The challenge for our operational teams in each country lies in keeping our infrastructure ready for flows in all directions. This showed once again in 2021, which saw changing patterns of supply to the European market. The geopolitical developments in 2022 also clearly marked that the flexible deployment of infrastructure is key to security of supply.

Towards the end of 2021, there was high demand in Germany and the Netherlands for flows from Belgium, and we were able to meet that demand flexibly thanks to both pipeline supplies from the UK and Norwegian gas fields and supplies of LNG to the terminals in Zeebrugge and Dunkirk.

Our service offer enabling the supply to Germany with gas from Italy and France via Switzerland also proved to be an important asset for security of supply in the course of the year.

Despite Brexit, the Interconnector pipeline once again confirmed its role as an important link in the supply of both the UK and continental Europe. In January and in the third quarter of the year, large quantities flowed via the pipeline from Belgium to the UK, and at the end of the year there were high flows from the UK to Belgium.



Higher levels of shipping traffic at LNG terminals

Shipping traffic at the Zeebrugge LNG terminal reached new heights in 2021. 181 ships docked at the terminal, breaking the previous record of 172 in 2020. May 2021 was the busiest month for marine traffic at the terminal, with 26 ships docking there. The LNG terminal in Dunkirk also saw an increase in traffic in 2021: a total of 62 ships moored at the facility, compared to 53 the year before.

Zeebrugge LNG terminal: additional regasification capacity fully sold

In early 2021, the LNG terminal successfully completed the open season for additional regasification capacity. The offered capacity of approximately 10.5 GWh/h was fully booked.

In light of the capacity booked, the final investment decision was taken to build the necessary additional infrastructure at the terminal. Three additional regasifiers with seawater are being built. The new facilities will significantly reduce the terminal's emissions.

Partner in the Stade LNG terminal project

Hanseatic Energy Hub (HEH) is preparing to build an LNG terminal in Stade (near Hamburg), and in 2021 Fluxys became a partner in the project. As an industrial partner, Fluxys plays an important role in the commercial, technical and operational development of the terminal and will also be responsible for operating the facility when the final investment decision for its construction is taken. The final investment decision depends, among other things, on market demand and is expected in 2023.

The Stade LNG terminal would provide important support for Germany in its approach towards a more diversified energy mix. For Fluxys, the project is an opportunity to strengthen and diversify its presence in Germany with an eye on the future. As it goes, the terminal in Stade is designed as a zero-emission facility that uses heat from neighbouring industry in the regasification process. At a later point in time, the terminal may also accommodate increasing volumes of carbon-neutral energy carriers.



Shift from low-calorific to high-calorific natural gas

Depletion of low-calorific natural gas sources

The reduction in production at the Groningen gas field (which produces low-calorific natural gas, otherwise known as L-gas) has prompted the Netherlands to gradually phase out the export of L-gas from this field to Belgium, France and Germany between 2020 and 2030.

As L-gas exports from the Netherlands decline, the networks in Belgium, France and Germany must be adapted to enable a gradual switch from L-gas to high-calorific natural gas (H-gas) from other sources and so ensure the continuity of natural gas supply.

L/H conversion in Belgium: five years ahead of schedule

Fluxys' infrastructure in Germany does not transport L-gas and does not need to be converted, whereas the infrastructure in Belgium does include an L-gas network. Belgium currently imports around 40 TWh of L-gas per year for domestic consumption, which accounts for around 20% of volumes consumed. The Belgian network also acts as a corridor for conveying L-gas to France.

Following a number of small and medium-sized projects concerning the conversion of L-gas to H-gas rolled out from 2016 to 2020, in 2021 we teamed up with distribution system operators Sibelga, Fluvius and Ores to conduct a large-scale conversion for the first time, during which over 300,000 connections were converted. Despite the limitations imposed by COVID-related measures, the conversion was completed on time. Thanks to our active cooperation with the distribution system operators, the rest of the conversion schedule has been brought forward by five years. The entire market for low-calorific natural gas will be converted by 2024 instead of 2029.

New pipeline sections for TENP I

The TENP infrastructure in Germany comprises two pipelines, TENP I and TENP II. Based on extensive inspections, the capacity available in the TENP I pipeline has been restricted since 2017 as a precautionary measure in light of the quality of the infrastructure. To provide a solution, Fluxys TENP and Open Grid Europe, as shareholders of the TENP infrastructure, took the final investment decision for new sections of pipeline in 2021 and started the permit procedures.

This also takes into account Baden-Württemberg's capacity needs given the phase-out of nuclear power and coal-fired power generation. The German regulator, the Bundesnetzagentur (BNetzA) approved the investments in the new TENP sections as part of the 2018 and 2020 Network Development Plans. Until the new pipeline sections are commissioned, the capacity available in the infrastructure will remain capped at current levels.



EUGAL fully commissioned

Fluxys holds a 16.5% stake in the Europäische Gas-Anbindungsleitung (EUGAL) in Germany. This infrastructure comprises two parallel pipelines to transport gas from the north of Germany southwards

to the Czech border and to the west of Germany. In late 2019, EUGAL commissioned the first pipeline and in April 2021 the second pipeline and a compressor station became operational.

Fluxys infrastructure: various solutions for supplies to Germany

Germany requires additional supply flows for various reasons. With regard to demand, the country needs new volumes of natural gas besides renewable sources to cope with the phasing out of both nuclear power and coal- and lignite-fired generation. The country also needs new inflows to replace the declining volumes of L-gas from the Netherlands. At the same time, Germany is looking into opportunities to expand the diversity of its supply portfolio. Fluxys' infrastructure offers solutions in various ways.

Through the German/Belgian Eynatten interconnection point in the west: as the Zeebrugge and Dunkirk LNG terminals are directly connected into the Belgian network, flows from the west into Germany offer the country the opportunity to smoothly diversify its supply portfolio with LNG.

Via the German/Swiss Wallbach interconnection point in the south: the capacity offered via the Transitgas pipeline in Switzerland allows for southbound flows from Germany towards Italy as well as northbound flows to Germany from Italy.

The NEL and EUGAL pipelines bringing supplies to the south and west: FNB Gas, the association of gas transmission operators in Germany, is studying how the pipelines can play a role in the downstream transmission from the LNG terminals that may be built in northern Germany.

The Stade LNG terminal project near Hamburg would provide important support for Germany in its approach towards a more diversified energy mix.

DESFA fully developing

Fluxys, along with the energy infrastructure companies Snam (Italy) and Enagás (Spain) and partner DAMCO (Greece), holds a 66% stake in DESFA, the owner and operator of Greece's high-pressure network and the LNG terminal in Revithoussa. Greece is strategically important from a European perspective as, with the Trans Adriatic Pipeline (TAP) and a number of other initiatives in the project phase, the country is to become a key axis for the diversification of sources and supply routes for natural gas, and may turn into an energy hub for natural gas in South-East Europe. Fluxys and its consortium partners are offering their expertise as industrial partners so that DESFA can fully develop its strategic position in the Mediterranean.

In this context, in late 2021 DESFA acquired a 20% stake in the project for a floating LNG storage and regasification facility near Alexandroupolis. The facility will strengthen source diversity for the Greek market and Greece's transit role to Bulgaria. The final investment decision for the project was taken in early 2022.

In 2021, Greece saw its demand for natural gas increase by almost 11% to around 70 TWh, with this increase mainly due to increased electricity generation from natural gas. During the annual update of its Network Development Plan, DESFA included in its investment programme additional projects in line with the National Energy and Climate Plan. The project for a pipeline spanning over 160 km in Western Macedonia is progressing well. The pipeline is a cornerstone in the response to the phase-out of lignite-fired electricity generation. In view of Greece's security of supply, DESFA is also investigating the possibilities of underground storage.

Furthermore, the new Al-Zour LNG import terminal in Kuwait, for which DESFA holds a contract to provide operation and maintenance services, was commissioned in 2021.

Successful first year for the Trans Adriatic Pipeline

Fluxys has a 19% stake in the Trans Adriatic Pipeline (TAP), which forms the western branch of the Southern Gas Corridor enabling Europe to access natural gas from Azerbaijan. By making available a new source, TAP is a vital link in that it increases both the diversification of sources and the security of natural gas supply in Europe.

Construction of the pipeline began in 2016 and commissioning took place in the last quarter of 2020. 2021 was a success as the first full year in which TAP was operational. The infrastructure has a capacity of 10 billion cubic metres per year and in 2021 the pipeline transported a total of over 8 billion cubic metres.

Supporting small-scale LNG

Fluxys is fully committed to infrastructure and services to unlock small quantities of LNG as an alternative fuel for ships, freight transport or industrial sites that have no natural gas network nearby. The advantage of small-scale LNG infrastructure and the fleet of LNG-powered ships and trucks is that no additional investments are needed to switch to carbon-neutral bio-LNG as it becomes available.

Zeebrugge

In November, the LNG terminal welcomed its 20,000th tanker truck. LNG truck loading has experienced particularly strong growth over the past three years due to the sharp increase in demand for LNG as a fuel for ships and trucks. 2021 was a record year, with the number of loading operations doubling.

Given current volumes of traffic, the existing truck loading bays are gradually approaching their maximum capacity. Moreover, there is considerable market interest in booking even more loading slots in the future. Therefore, four additional truck loading bays are being built at the terminal. They are scheduled to be commercially available in 2023.

Antwerp

At the port of Antwerp, Fluxys facilitates vessel bunkering with LNG trucks and there is also a permanent LNG bunkering point for ships to refuel. Furthermore, the group teamed up with Titan LNG to build the LNG bunkering barge Flexfueler 002. It has made LNG more widely available as an alternative marine fuel since 2021. The advantage of the bunkering barge is that ships can be bunkered with LNG wherever they load or unload.

Dunkirk

The LNG terminal in Dunkirk opened its first loading bay for LNG tanker trucks in 2020 and the jetty has been modified to accommodate small LNG bunkering vessels. The loading bay was in high demand in 2021 and the world's largest LNG bunkering vessel was loaded at the jetty to fill up the world's largest LNG-powered container ship in late April.

Revithoussa

DESFA is building a loading bay for LNG tanker trucks at the LNG terminal in Revithoussa and a second jetty to accommodate small LNG vessels.



Questions about accounting data

Geert Hermans

+32 2 282 75 66 – geert.hermans@fluxys.com

Press contacts

Laurent Remy

+32 2 282 74 50 – laurent.remy@fluxys.com

Creation and realisation

www.chriscom.eu

Photography

David Samyn, Will Anderson (Badger Productions), Patrick Henderyckx, Wim Robberechts, Dries Van den Brande, DESFA, Dunkerque LNG – HappyDay, DNV Spadeadam test facility, EUGAL, Hanseatic Energy Hub, Titan LNG, TAP

Fluxys

Avenue des Arts 31 – 1040 Brussels

+32 2 282 72 11 – fluxys.com

VAT BE 0827.783.746 – RPM Bruxelles

D/2022/12.604/3

Responsible publisher

Erik Vennekens

Avenue des Arts 31 – 1040 Brussels

This financial annual report is also available in Dutch and French. Contact our communication service to obtain a copy: communication@fluxys.com



<https://be.linkedin.com/company/fluxys>



[@FluxysGroup](https://twitter.com/FluxysGroup)



shaping together
a bright energy
future