

26ο Εθνικό Συνέδριο «Ενέργεια & Ανάπτυξη 2022»

The role of Natural Gas as a strategic transition fuel in a rapidly changing environment

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Overview

- The role of Natural Gas in Europe
- **■**The transformation of the Greek Market
- **■DEPA**'s positioning in the changing environment



Recent Developments at EU level

EU policy post 2019: Acceleration of decarbonization path

- Green Deal
- Fit for 55 package

Russian – Ukraine war (Feb. 2022): EU measures to replace Russian gas imports

RePowerEU



Lack of clarity on the future role of natural gas



The real challenge for Europe to implement its energy choices

REPowerEU

Reduce faster the dependence on fossil fuels/switch from gas to alternative fuels

Short-term (W-22) Energy savings of **10 Bcm** through behavioural changes, e.g. by turning down the thermostat by 1°C

Medium-term (to 2027) Delayed coal phaseout and fuel switching saves 24 Bcm while nuclear lifespan extensions saves 7 Bcm

Increased energy efficiency and accelerated heat pump roll-out saves 37 Bcm

Higher solar PV and wind capacity saves 9
bcm in the power sector and 12 Bcm via
increased hydrogen use in industrial sector

Higher biomass production saves 1 Bcm

Long-term (to 2030)

Domestic renewable hydrogen production and imported renewable hydrogen saves 27 Bcm Replace 155 Bcm of Russian gas imports by 2027

70 Bcm of total savings

Total savings of 177 Bcm by 2027 allows for contingency of decreasing domestic gas production, lower gas-tocoal fuel switch potential, front-loading of some targets and does not include "Fit for 55" savings

107 Bcm of total savings

27 Bcm of total savings

Diversify gas supply

LNG imports to replace 50 Bcm of Russian gas while non-Russian pipeline imports replace another 10 Bcm

Biomethane production increases by an additional **17 Bcm** (to 35 Bcm in total when accounting for "Fit for 55" target)



EU relies on consumers and LNG to limit Russian gas exposure

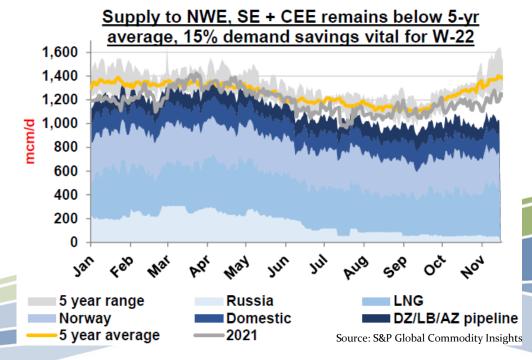
 Russia's invasion of Ukraine on Feb. 24 had triggered a major energy supply and security crisis that sent commodity prices to new highs, with wider implications for the global economy.

The conflict has put further considerable pressure on gas markets and raised uncertainty in the context of an already tight

market.

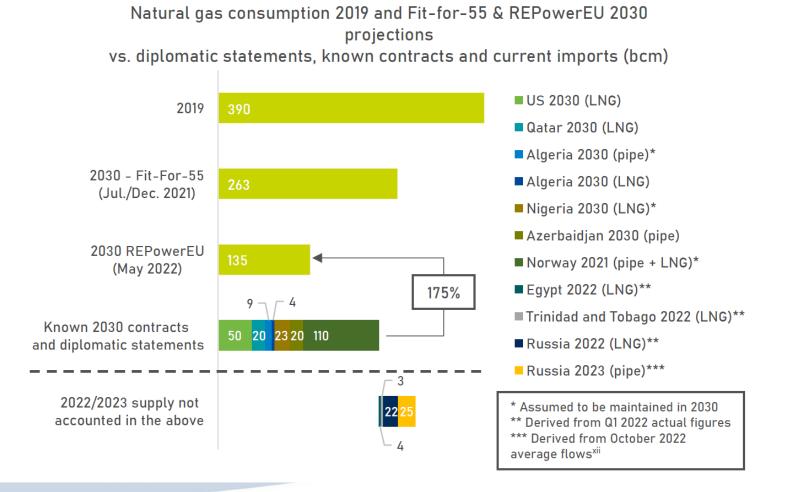
 Gas demand forecasts for almost all regions had been revised downwards.

- Lower Russian supplies had largely been compensated for by LNG, "turning Europe into the premium market and drawing cargoes away from Asia Pacific and other regions."
- There are no legally binding import restrictions on Russian gas in the EU, yet there is a strong drive to reduce the bloc's exposure to Russian energy imports.





Are the targets of RePowerEU clear and realistic?

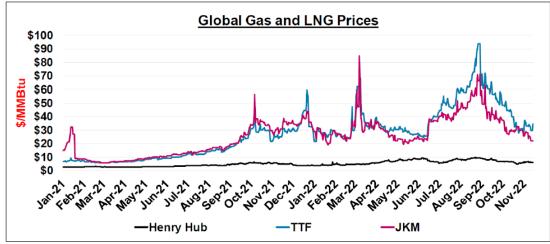




Europe and Asia compete for global LNG supplies Price signals towards the right direction

- Until now, spot LNG cargoes are heavily concentrated in the Asian markets. China was the largest spot LNG market in 2021.
- Towards the end of 2021 prices rose sharply in some regions, from the record lows of 2020 to new record highs. This was an effective price signal for the supply to go to where it is needed most in a situation of an extremely tight market, with no excess capacity and demand growth outpacing new supply additions.





Source: S&P Global Commodity Insights

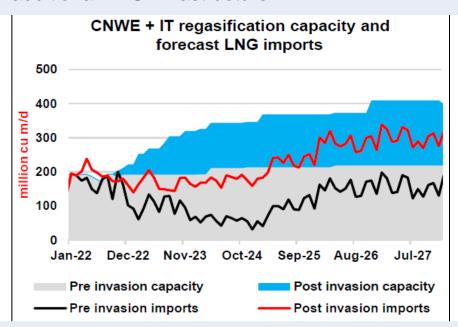
Price volatility indicates the need for more energy input

 The global gas market has been able to respond very effectively to the significant change in LNG flows, most recently being diverted to Europe to replace declining pipe imports from Russia.



Diversifying EU market with LNG Europe's race to secure floating LNG storage

Intra-regional disparities between countries with spare regasification capacity and those with high dependency on Russian pipeline gas (capacity bottlenecks), highlights the need for additional LNG infrastructure.



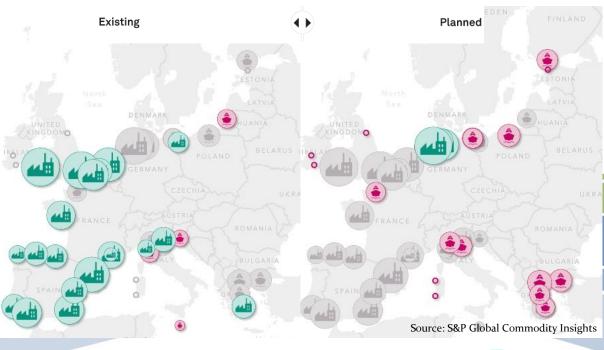
Countries across Europe are rushing to secure new LNG import infrastructure as they look to cut Russian pipeline imports, with plans being made to realize numerous projects, both old and new, in record time. Many of the terminals will also be future-proof and technically able to import hydrogen and ammonia. Most of the plans are for floating LNG import facilities which can be installed more quickly than onshore, permanent import terminals.

European LNG import facilities

Sized by capacity (Bcm) Maximum: 21.2 Minimum: 0.7









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■The role of Natural Gas in Europe

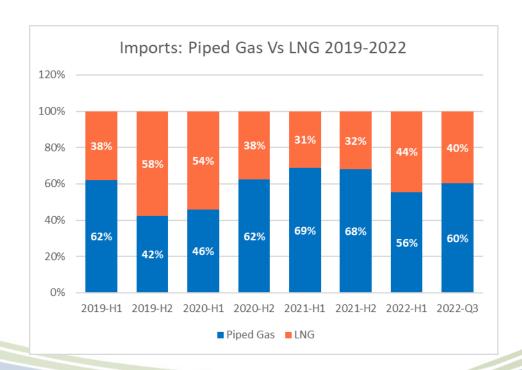
■ The transformation of the Greek Market

■DEPA's positioning in the changing environment

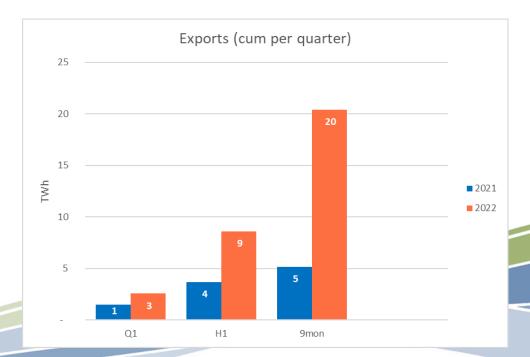


Greece: From destination country to regional hub.

■ In the first 9months of 2022, out of 65,4 TWh of total gas imports, 43% referred to LNG imports, and 57% referred to piped gas imports (vs 32%-68% for the whole 2021).



 During the first 9months of 2022 exports from Greece reached 20,4 TWh, almost tripled compared to 2021.





Greek energy/gas market: Expected developments

Supply side

- > Power mix: Accelerate RES deployment, but natural gas will remain a key pillar
- Infrastructure: Exploit new LNG terminals to enhance Greece's role in achieving SE Europe security of supply and diversification of supply sources.
- Accelerate investments in green gas production technologies (H2, biofuels), being in favor of EU decarbonization targets

Demand side

- Focus on energy efficiency measures (Energy savings)
- Enhanced LNG role Development of ssLNG market
- Gas market: Increased uncertainty (initially negative impact, followed by slower development depending on gas price deflation rates)



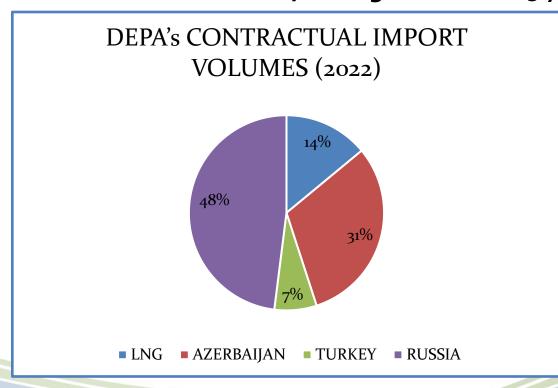
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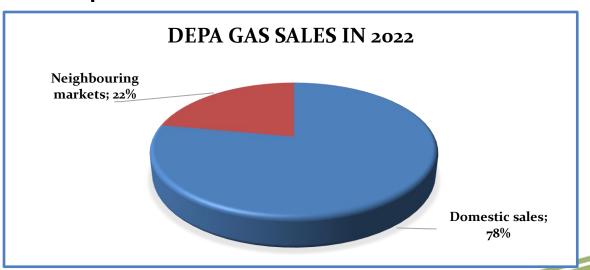
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DEPA commercial S.A.: a leading gas supplier

DEPA COMMERCIAL is the main importer of pipeline gas and Liquefied Natural Gas (LNG) in Greece, having more than 25 years of experience in the Greek market.





With a diversified gas portfolio with LT contacts promotes security of supply and competitive prices



DEPA Commercial promotes the country's emerging role as regional gas hub.

20% stake in the Alexandroupolis FSRU, a strategic infrastructure for the future regional gas system



https://www.gastrade.gr/en/the-project/?privacy=updated

*LNG terminals of Alexandroupolis also incorporate another FSRU project "Thrace LNG", currently in pre-approval phase.

Long-term booked capacity in both Alexandroupolis FSRU and IGB pipeline

- Alexandroupolis FSRU will represent a strategic LNG import infrastructure, increasing security of supply and allowing market participants to seize LNG import opportunities in the South East Europe
 - Binding market test was successfully concluded;
 - Project COD (commercial operation date) set by the end of 2023 / beginning of 2024
 - 5,5 bcm regasification capacity
 - 153 500 cm LNG storage capacity
- IGB started commercial operation in 01.10.2022. IGB will be able to transport annually 3 bcm of gas to Bulgaria (transportation capacity may be expanded up to 5 bcm).



DEPA's strategic transformation into a vertically integrated energy group.

The strategic choice of DEPA Commercial is to transform from a Natural Gas wholesaler in Greece, to an integrated, regional energy company, creating additional value from synergies within its core assets.



Wholesale Business

Energy Retail
Business

New gas Infrastructure

RES



DEPA's Development Plan

Key DEPA's Initiatives

- ☐ Strengthen position in the energy retail market through Fysiko Aerio Greek Energy Company
- ☐ Enter the electricity market leveraging from RES production and gas fired power generation
- ☐ Take position in key regional infrastructure (FSRU Alexandroupolis)
- □ Promote renewable gases (Hydrogen & bio-methane projects)
- □ Develop new gas delivery models Gas for road and marine transport (CNG-Fisikon / SSLNG projects)

Total 5-year Investment plan of more than 130 M€ (including direct investments and participations in JVs /associations)



Working for a sustainable Energy Future

DEPA Commercial: a key player in the Greek Energy System

- ➤ Contributes continuously to the *Greek Economy* with a dynamic presence in the Energy Sector
- > **Provides secure** and diversified supplies of natural gas at **competitive prices**
- ➤ Participates or is positioned in *large regional projects* (TAP, IGB, Alexandroupolis FSRU, storage), enhancing the county's transformation into an important regional gas hub
- > Supports the society to face the current energy crisis, by granting more than 170 M€ until now, to lower end gas users' bills
- ➤ Is *self-transforming* in order to contribute to a *greener energy future*



Thank you!

