



• Vol.22

# The Future of Greek Power & Gas Networks



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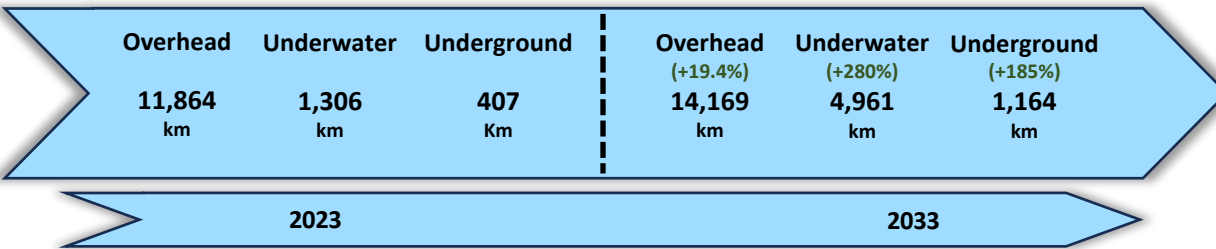
**Deloitte.**

€ 4.3 billion are to be allocated to **over 158 projects**, the majority being scheduled for the **2024-2025 period**.

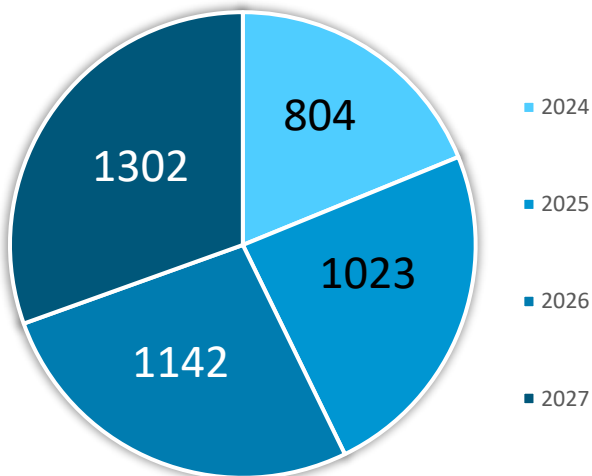
As for the grid itself, there will be a slow fading out of **Low-Voltage** overhead cables, in contrast to the total overhead system which is set for an 18% and 26% increase in **Mid-Voltage** and **High-Voltage** cables, respectively.

3,655 km of underwater cables will be deployed so as to integrate autonomous islands with the mainland grid by 2033.

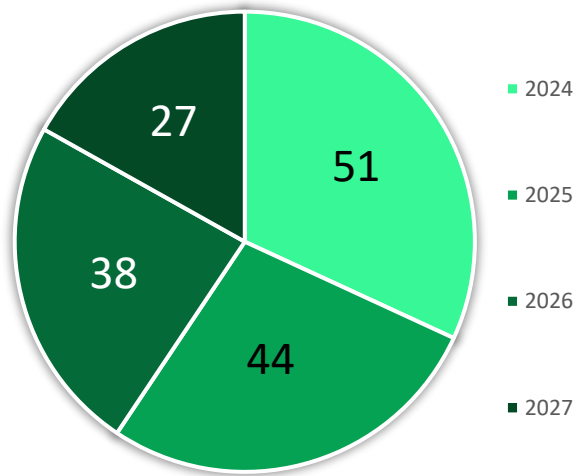
Greek Electric Grid planned Infrastructure development and expansion (km) [2023 – 2033]



Electric Grid planned Infrastructure development and expansion (km) [2023 – 2033]



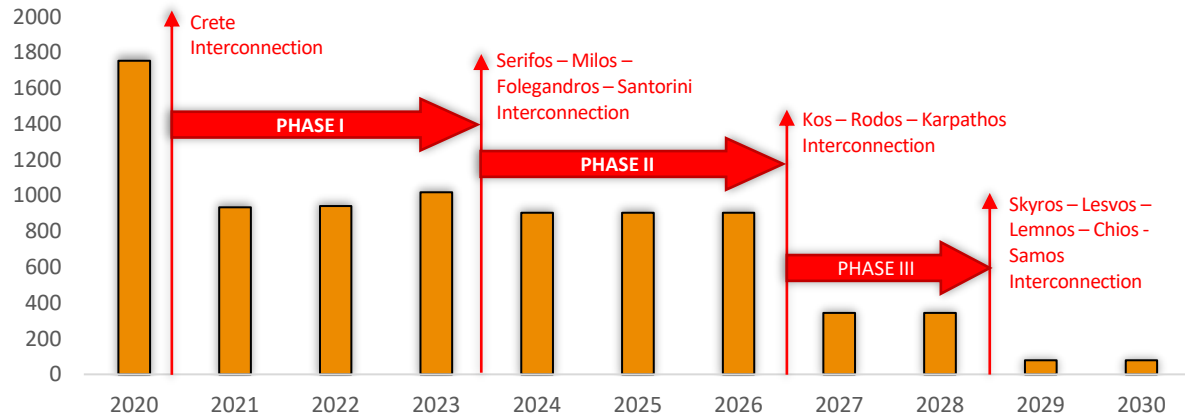
Number of Grid Infrastructure Development Projects [2024-2033]



As of March 2023, the Greek-German interconnection was included in the ENTSO-E list of interconnection projects.

This new electric corridor shall act as an extension of the latest announced Greek-Saudi interconnection, starting from Preveza and reaching southern Germany. The project is set for a two-phase plan, whereas the completion of 'Phase I' will establish a link with a 3 GW net transfer capacity, reaching 9 GW by the end of 'Phase II'

Evolution of the installed power from thermal units (MW) [2020-2030]



	Budget	Scheduled Completion
<b>PHASE I</b> Cyclades Interconnection	€ 389 Million	2024
<b>PHASE II</b> Dodecanese Interconnection	€ 1.5 Billion	2027
<b>PHASE III</b> North Aegean Interconnection	€ 885 Million	2029

The **€2.8 billion NII interconnection project** has set course for **completion in 2030**, with the final phase of the Cyclades Interconnection expected to be completed within 2024.

The interconnections will significantly reduce high energy costs and carbon emissions of the NIIs, which currently rely on costly and polluting oil-fired generators. In order to increase energy security of Crete, some of the remaining oil units might need to be converted to gas and remain as CRM for periods of low supply and/or cable malfunctions.

## Gr - Eco Islands



Transforming Greek islands into models of **green economy**, energy autonomy, digital innovation and ecological mobility.

### Astypalea

**Pioneering in e-mobility solutions**, gradually replacing over 1,500 ICEs.

PV installations support local **electricity needs at 60%**, planned to rise to **90%** through hybrid solar-wind solutions.

### Chalki

Greece's **first energy - autonomous island** status with a 1MW PV park surpassing the 1,700 MWh demand, **cutting electricity bills by 55%**.

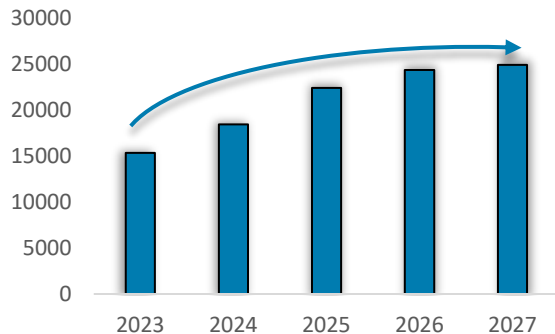
€ 180-250 th. saving for the community.

### Poros

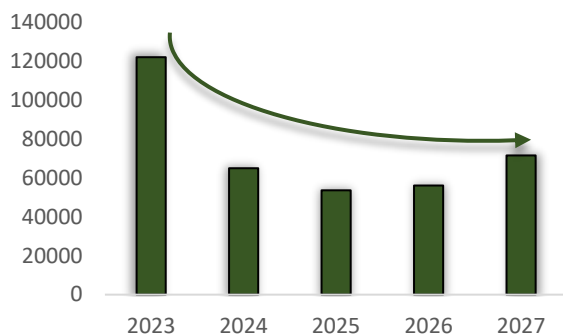
Bettering the lives of **4,000 residents**, the project aims to shift waste management away from burials and towards **zero-waste** applications, as well as decarbonise sea transportations and **electrifying land mobility**.

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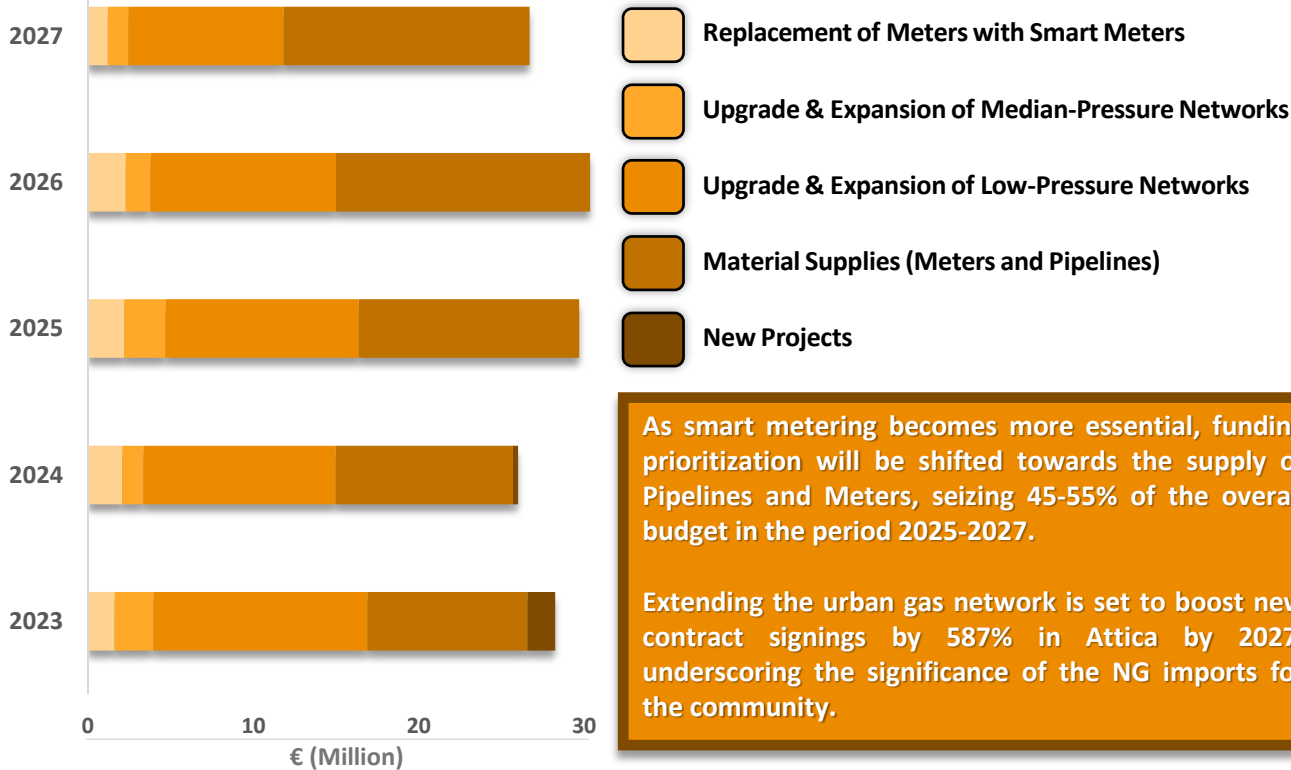
Low Pressure Network Expansion in Attica (m) [2023-2027]



Number of New Connections in Attica [2023-2027]



Dedicated budget for NG Infrastructure modernization and expansion in Attica (Mil. €) [2023 – 2027]

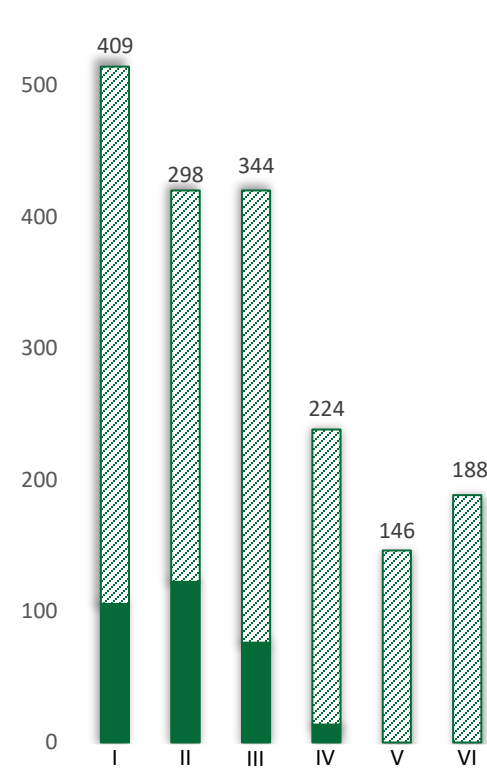


As smart metering becomes more essential, funding prioritization will be shifted towards the supply of Pipelines and Meters, seizing 45-55% of the overall budget in the period 2025-2027.

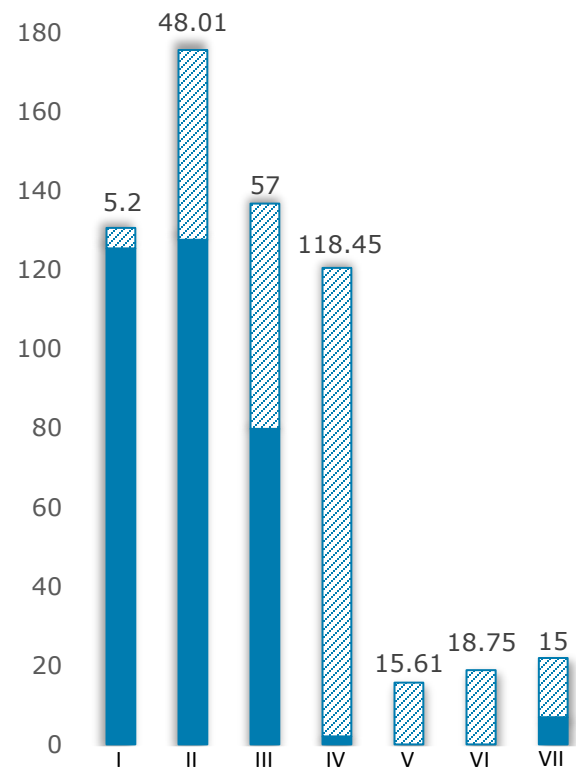
Extending the urban gas network is set to boost new contract signings by 587% in Attica by 2027, underscoring the significance of the NG imports for the community.

I → E. Macedonia & Thrace	IV → W. Macedonia	VII → Peloponnese
II → Central Greece	V → Epirus	
III → Central Macedonia	VI → W. Greece	

Mid-Pressure Network Expansion (km) [2023-2027]



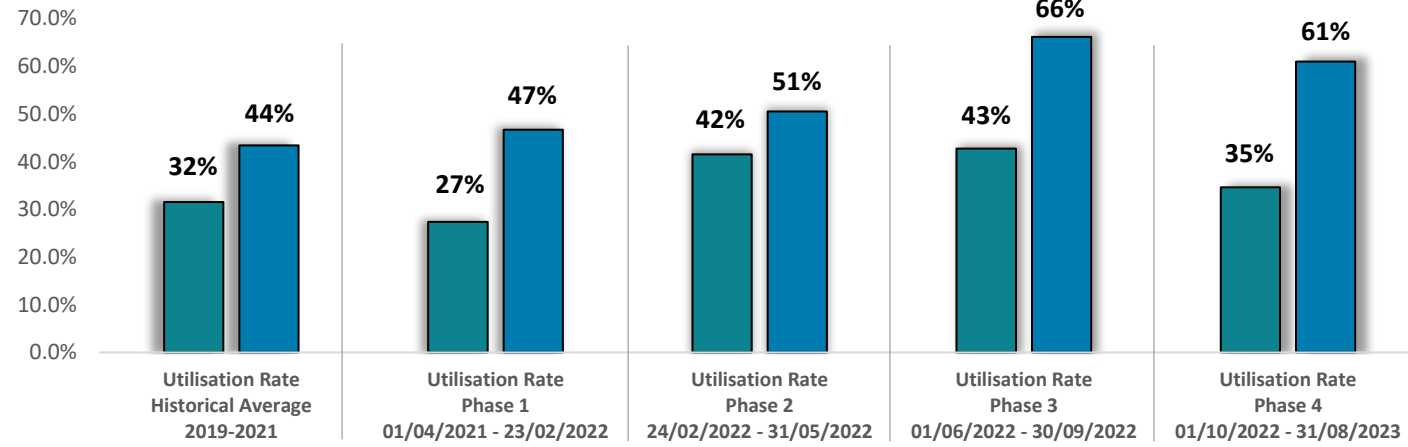
Low-Pressure Network Expansion (km) [2023-2027]



Existing Network (2023)

Network Expansion (2027)

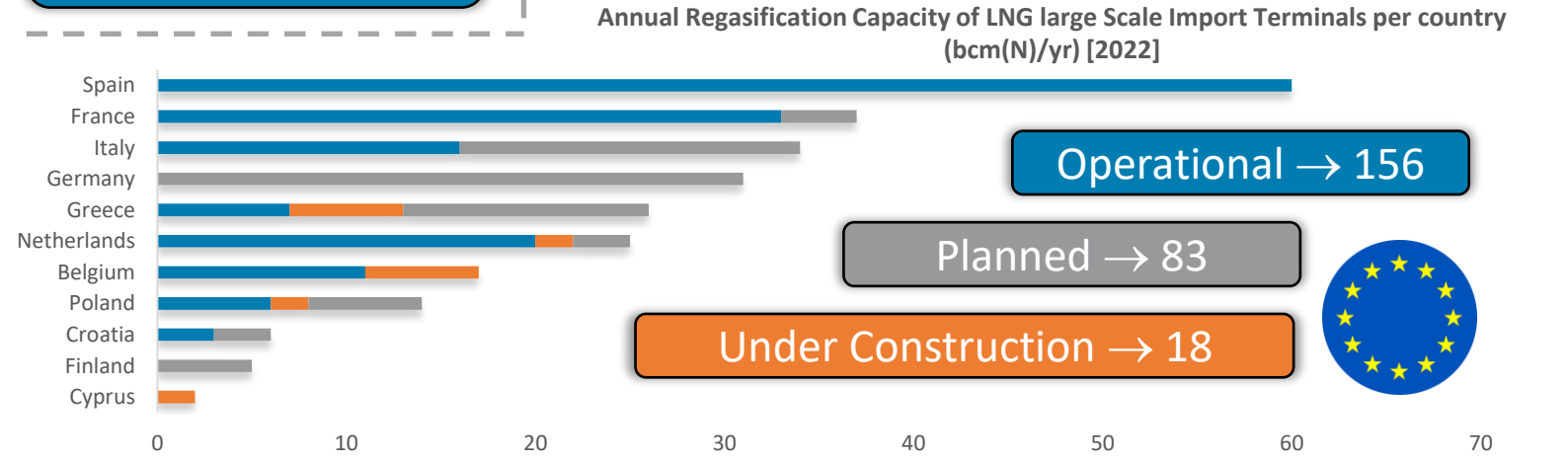
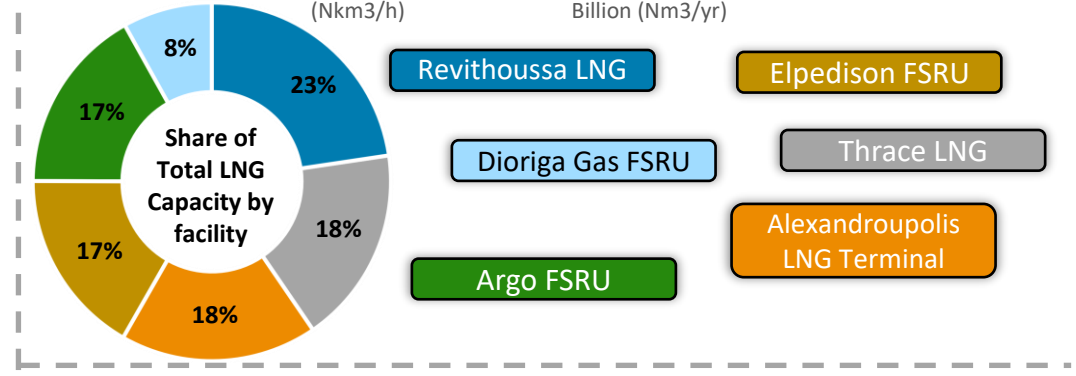
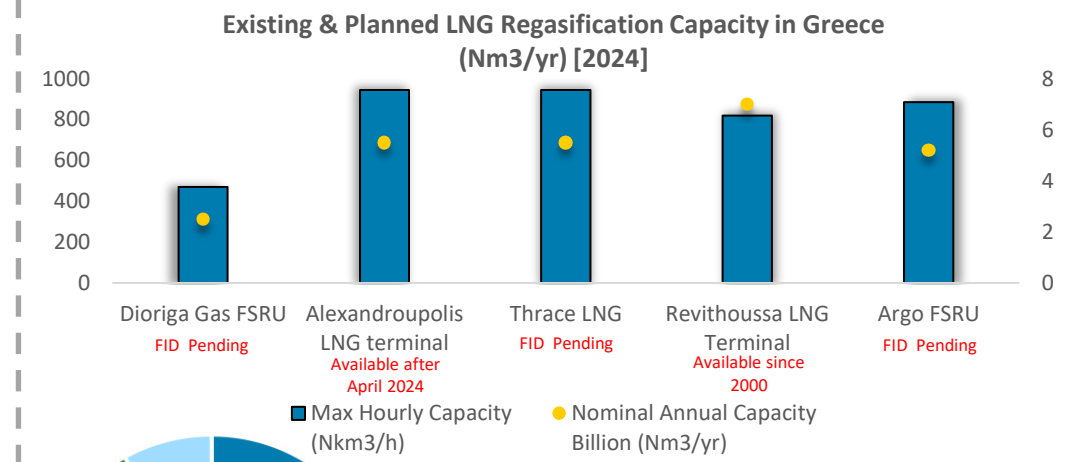
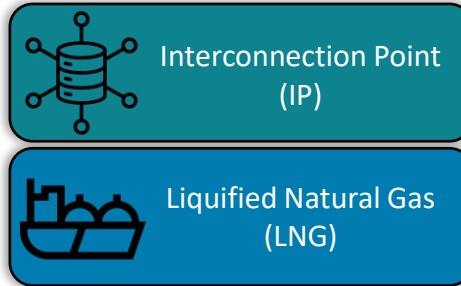
IP & LNG Utilization Rate between 2021 and 2023 compared with the Historical average in the EU27 (% send-out capacity) [Jan 2019 - Aug 2023]



In 2023, global supply congestion improved due to lower demand and strategic infrastructure investments. Expanded regasification capacity at LNG terminals reduced congestion and normalized price spreads. **Interconnection points** from Northwest to West Europe, **especially BENELUX to DACH, faced physical congestion.**

**Storage reserves** reached **96% by September 2023**, exceeding the 2017-2022 average of 87%. However, the market remains exposed to geopolitical risks, emphasizing the need for ongoing vigilance and adaptive strategies in the energy supply landscape.

**Germany** has made a commitment to EU energy security and to reduce Russian dependency with their **4<sup>th</sup> FSRU** set in **operation** in Feb 2024 with a 5<sup>th</sup> one underway.



Operational → 156

Planned → 83

Under Construction → 18



# Meet the Team

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