

Bulgarian gas market: Role of gas in decarbonisation

Presentation panel 11 April 2018, Jayesh Parmar

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Baringa overview



A market-leading consultancy focused on the challenges of tomorrow in the energy, financial services, telecoms & technology sectors

Our people join from industry, tier 1 consultancies and SIs. We engage with our clients in a range of models, from taking accountability for deliverables and outcomes to client side advisory and assurance.

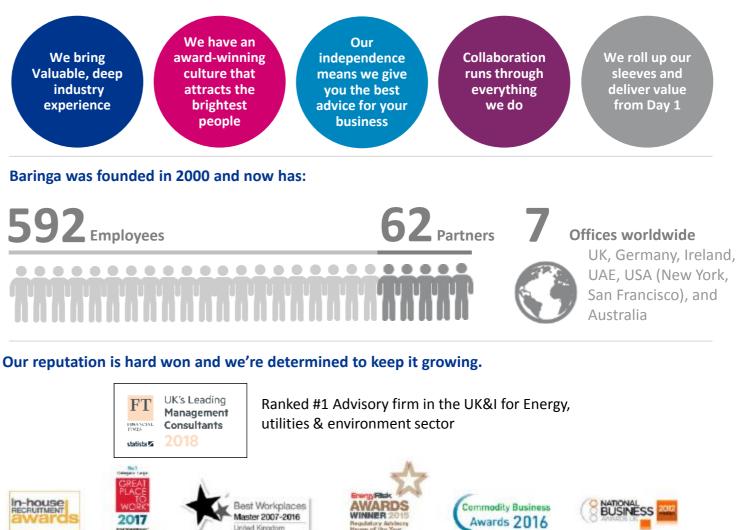
We help clients using our deep industry insight to:

- Run more effective businesses
- Launch new businesses and reach new markets
- Understand and navigate industry change

We are international, working jointly with US-based Energy and Environmental Economics



- Founded in 1989 and based in San Francisco
- E3 has 45 professionals focusing on electricity sector economics, regulation, planning and analysis



Our clients



We have extensive depth of expertise across the Energy Industry via our work with different clients across the energy value chain



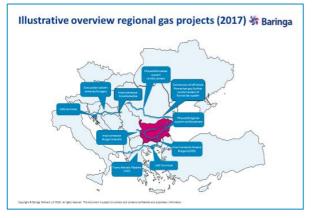
Scope and approach report



Baringa has undertaken an independent review of the Bulgarian gas market timed to the formulation of the 2030 energy strategy by Bulgarian policy makers



Sources: Bulgartransgaz



Source projects: CESEC

Scope:

- To review and discuss the current gas market situation in Bulgaria, and the approach to enhanced role of gas in reaching decarbonisation targets in 2030 within the broader energy mix discussion
 - Set within the context of the ongoing development of greater market access and diversification of gas infrastructure routes, and the emergence of a gas distribution and trading hub in Bulgaria
- ▲ To assess the opportunities for gas as an enabler to addressing Bulgaria's energy trilemma of affordability, decarbonisation and security of supply and identify a set of focused recommendations.

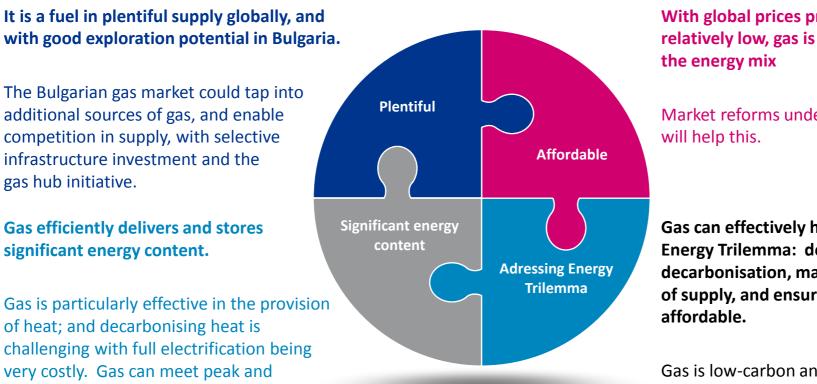
Approach:

- Desktop study* to gather information and data on 1) status and outlook on Bulgarian gas market, role of gas in the energy mix as well as the decarbonisation agenda and 2) Regional gas infrastructure development, where relevant to Bulgaria
- Baringa qualitative analysis and assessments
- Engagement with stakeholders to exchange insights. The discussions were conducted in the week of 26.02.2018 and included Government institutions, electricity and gas traders, natural gas distributors, RES generators and investors, infrastructure developers, NGOs active on market and energy issues, associations from the gas and electricity sectors, energy sector advisors and experts

Increasing the use of gas is an opportunity



The characteristics of natural gas mean that it can and should play a key and increasing role in the future energy mix of Bulgaria.



With global prices projected to remain relatively low, gas is an affordable part of

Market reforms under EU-acquis guidance

Gas can effectively help address the **Energy Trilemma: delivering** decarbonisation, maintaining security of supply, and ensuring that energy is

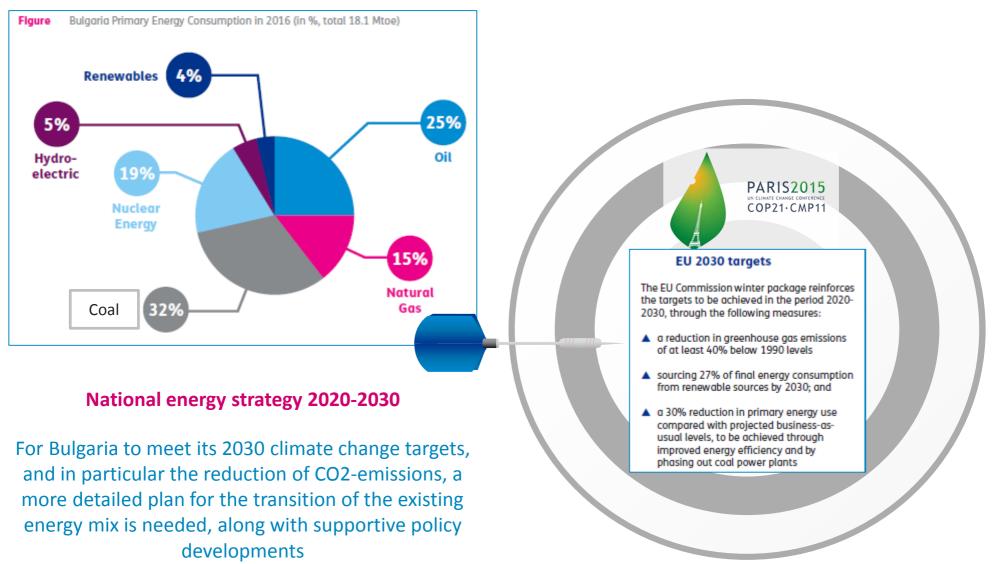
Gas is low-carbon and can play a key role in Europe's decarbonisation pathways by replacing higher carbon emitting fuels, and working in partnership with renewables to meet energy demand and flexibility needs.

flexibility needs at a relatively low cost.

Role of gas has been relatively limited thus far



Hitting the EU 2030 and longer term targets could be focused with an enabling energy strategy



Focus areas for detailed transition plan to 2030



Two focus areas are suggested for policy makers in the plans to be set out in the national energy strategy for 2020-2030 as a bridge to the future

- Unlock market access for gas
 - Enable enhanced market access using the detailed EU-acquis as guidance
 - Support for selective infrastructure investment
- Create level playing field between gas and power
 - Allow gas to freely compete in the market by ensuring it is not detrimentally treated via regulation and policy versus electricity

Suggested next steps



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Engagement with stakeholders is key

A key first step is for the Bulgarian policy makers, during the course of 2030 strategy definition, to engage thoroughly with gas industry participants and stakeholders (including trade bodies and NGOs) to build a complete picture of the opportunity for gas and the role it can play in Bulgaria's energy future.

Maintaining the status quo is not an option

If the status quo for gas in Bulgaria is unchanged, the opportunity to deliver a transition to a further decarbonised, low cost and secure energy supply in Bulgaria will be missed. Bulgaria will continue to be a relatively small gas market with a flat growth outlook, lacking attraction for competitive suppliers and investors.

The fundamental risk is in Bulgaria not meeting affordably and securely its 2030 European energy and climate targets, and failing to have an appropriate plan for achieving these and longer term targets.



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*Note slide 4:

This qualitative case study is a Baringa contribution to the debate across Europe, as initiated by 'role of gas'-event co-organised in November 2017, with Eurogas, National Grid, and support of ENTSOG. This case study – made in part possible by commercial funding by Shell – can be a helpful input to the preparation of national energy and climate plans in course of 2018. As a strong believer in the critical role that natural gas will play in addressing the energy transition, Shell is highly motivated to lead the dialogue and support others, such as Baringa, who contribute to it with analyses and recommendations.