

January 2017

The Future of Gas in Decarbonising European Energy Markets: the need for a new approach

Executive Summary
Jonathan Stern

The European gas community has argued that it can play a major role in the transition to decarbonised energy markets because of the advantages of switching from coal to gas, and the role of gas in backing up intermittent renewable power generation. While this remains a logical approach for some countries, in others it has proved either not relevant, or generally unsuccessful in gaining acceptance with either policymakers or the environmental community. This has left gas in a position of continuing to be labelled a fossil fuel, where its carbon-related advantages over other fossil fuels are viewed in the longer term (2030-50) as, at best, questionable. It is not necessary to accept the credibility of carbon reduction targets and timetables that governments have set themselves post-COP21, to recognise that decarbonisation of European energy markets is ongoing and unstoppable. The key variables which will determine the long-term future of gas in Europe will be policy and technology, as well as economics – defined as the price of gas in relation to the costs and prices of other sources of energy, impacted by policy measures such as carbon pricing.

To ensure a post-2030 future in European energy balances, the gas community will be obliged to adopt a new message: 'Gas can Decarbonise' (and remain competitive with other low/zero carbon energy supplies). In this context, there are several potentially different (but related) futures for the groups of companies in the gas value chain:

- commodity producers and exporters may either have to take the initiative on decarbonisation, or run the risk that governments and other value chain stakeholders may decide to pursue non-methane-related options;
- if non-methane-related options are adopted, owners of gas-fired power stations, LNG regasification terminals, and storages will run the risk that their assets will be stranded before they reach the end of their useful lives;
- failure to decarbonise is likely to mean that the gas business of wholesale and retail gas suppliers and traders will decline, but they will be able to reorient their business(es) towards electricity;
- owners of transmission and distribution networks can have different futures depending on decisions taken regarding the decarbonisation of the commodity and the use of the assets. Networks serving different regions may have different futures, depending on decisions to switch to hydrogen (whether produced from gas or renewables), biogas or biomethane. But if decarbonisation follows a path of electrification or district heating based on renewables, gas networks could be stranded.

The European gas community suffers from mismatches of commercial interests and time frames along the value chain; and mismatches between the time horizons of commercial decisions and government decarbonisation policies. The latter may result in policy decisions being taken in the next 5-10 years which will irreversibly impact the future of gas in the period 2030-50. A paradigm shift in commercial time horizons and gas value chain cooperation will be necessary for the industry to



embrace decarbonisation technologies (such as carbon capture and storage), which will eventually be necessary if gas is to prolong its future in European energy markets.

The European gas community must adopt a new approach to its future in decarbonising energy markets. Specifically, it needs to devise and implement a strategy which will lead to the decarbonisation of methane starting no later than 2030. Failure to do so will be to accept a future of decline, albeit on a scale of decades, and to risk that by the time the community engages with decarbonisation, non-methane policy options will have been adopted which will make that decline irreversible.