

# Blue fuel is green

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ALEXANDER MEDVEDEV graduated from the Moscow Institute of Physics and Technology and holds a PhD in Economics from the USSR Academy of Sciences. From 1989-91, he was Director of Donau Bank in Vienna and subsequently Director of IMAG until 1996. He joined OAO Eastern Oil Company as Vice-President in 1997 and served as Director from 1998-2002, at which time he joined Gazprom in his current role.

The failure to reach agreement at Copenhagen was both disappointing and frustrating. Without a universal deal on a framework to tackle climate change, it will be very hard to reduce carbon emissions in our atmosphere at the speed and scale needed. We must hope that our leaders respond to the challenge – and public concern – by urgently looking beyond both the short-term and egoistic interests which wrecked hopes at Copenhagen. But while reaching a broad agreement may be difficult, a lot can be done now if leaders take a more pragmatic and rational approach to cutting emissions. This requires us to look at how we can power our economies without polluting our atmosphere.

It is clear, renewable and nuclear energy will be part of a low carbon energy mix. But while solar, wind and tidal power, for example, hold out great possibilities, current technologies still need some time and huge investments to be developed. As for nuclear power there remain public doubts about safety and waste. That is why natural gas should not be overlooked as it has a strikingly positive contribution to make to cost-effective emission reductions in the EU and worldwide. For while natural gas is a fossil fuel, it is far cleaner than both coal and oil. Yet natural gas is strangely missing from many existing European climate change and energy strategies. The ‘dynamic energy mix’ at the heart of the new German government’s approach, for example, fails to mention the importance of natural gas as a cleaner alternative to other conventional fuels.

But when you look at the facts, it is clear that natural gas can play a major role in the twin challenges of meeting Europe’s future energy needs while reducing emissions. Increasing natural gas’s share in the EU energy mix by just 1 per cent would, for example, reduce CO<sub>2</sub> emissions by more than 3 per cent. Replacing every second coal-based power plant with modern gas-turbine units would be enough to see Europe achieve practically half of its 2020 emission reduction target. All this will, of course, require major new investment. But fears that a new generation of gas-fired plants would quickly become redundant as Europe moves, as it must, to even more dramatic cuts in carbon after 2050 are wide of the mark. For the very nature of wind and solar energy, for example, means we can’t rely on them to power our economies throughout the year.

To guarantee supply, every four megawatts of wind capacity installed will need at least one megawatt of back-up from more traditionally-generated supplies. Gas-fired power plants are the low carbon solution. They will also

be the answer to how peak or unusual demand, as we saw in the freezing spell across Europe this winter, can be met. We can’t make the wind blow and the sun shine on demand. But we can keep the turbines rolling. This is why I am confident that the natural gas industry has a bright long-term future. It is true, of course, that demand for Russian natural gas shrank last year and overall annual gas consumption decreased by 7 per cent across Europe. But those who see this as a sign of the future are confusing short-term factors with long-term trends.

For even last year when European economies were in the grip of the worst recession for over 60 years, gas consumption was still above the level in 2007. The fall in demand for gas was a function solely of the economic cycle and not a sign of any structural crisis. Indeed, by the latter half of 2009, demand for Russian gas had bounced back. So despite those who appear to believe gas demand is at or near its peak, we need to keep investing now in new fields and in major infrastructure projects. Without it, Europe faces a dramatic and damaging supply gap in the future. By 2030, predictions show that Europe will need an extra 300 billion cubic metres per year (bcm/a) of imported gas. The share of pipeline gas will amount to around 200 bcm. Meeting this extra demand will need not only the Nord Stream pipeline, through which gas will begin flowing in 2011, South Stream and Nabucco but additional capacity as well. That is why Gazprom is also investing in new LNG capacity.

These major projects are necessary to guarantee that Europe is not running out of gas in the next decades. However, they are expensive. They take many years between planning and operation and require companies such as Gazprom to fund billions of dollars up-front in project financing. This is why long-term contracts for gas are so important. They provide companies with a guaranteed revenue against which to borrow money for these major infrastructure projects. Without this revenue, the cost of funding would be higher, fewer projects would be planned and completed and gas prices would rise. Therefore, long-term contracts are also very much in the interest of our customers and they have repeatedly requested them. European citizens want price stability and long-term secure energy supply. With depleting European reserves and ambitious climate change targets, the ‘green’ blue fuel will play a decisive role in CO<sub>2</sub> emission reductions. We at Gazprom are ready to contribute our part. ■