# Nabucco: A pioneering pipeline project

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abucco is Europe's flagship project in what has become known as the southern corridor linking demand in European markets to the abundant and almost untapped supply of gas in the Caspian region and the Middle East beyond.

As the new gas bridge from Asia to Europe, Nabucco is the first pipeline project that will connect European and Turkish markets and the South East European national grids. Nabucco will run from the eastern border of Turkey via Bulgaria, Romania and Hungary to the Central European Gas Hub near Vienna in Austria and have off-take points in every country. Once completed, the 3.900 km pipeline will have a capacity of 31 bcm. Six shareholders make up the Nabucco consortium: Germany's RWE, Austria's OMV, Hungary's MOL, Romania's Transgaz, Bulgarian Energy Holding and Turkey's Botas. Each of them holds equal stakes on the project company.

## Increasing demand for natural gas

The issue of supply security is one of the biggest challenges that Europe will have to cope with in the energy sector in the coming years. Further diversification of natural gas supplies and the creation of new transit routes are therefore of the utmost relevance. Consequently, it is crucial that new infrastructure will be established to meet the future growing demand in Europe for natural gas, and thus contribute to a stable and secure future of European energy.

Europe will need additional gas, for in the light of dwindling indigenous gas resources it will have to import more and more of it. According to estimates from the International Energy Agency, demand for natural gas in Europe will rise from the current level of 555 bcm (in 2008) to 653 bcm in 2030. According to the IEA the reasons lie in the increasing abundance of affordable natural gas, coupled with rising demand for the fuel from China and the fall-out from the Fukushima nuclear disaster in Japan. The latter has called into question the future role of nuclear power and prompted re-evaluation of related policies in many countries, for instance, Germany which has decided to accelerate its exit from nuclear power. Acquiring new sources and suppliers of gas is therefore the right thing to do. In turn, Azerbaijan, Turkmenistan, Iraq and Egypt are developing new gas fields and raising production. These are the world's richest natural gas regions. They have huge reserves, which taken together are significantly higher than those of all the other regions of the world.

Nabucco is therefore the answer to the energy security challenge outlined above, and consequently will open up a new transport route to Europe. It is also the most viable transport route from the Caspian basin, both logistically and economically, making it more attractive than other alternatives being discussed. Nabucco will enable Europe and Turkey to diversify their energy sources and contribute considerably to gas supply for the next decades.

## Nabucco legal framework finalised

The Intergovernmental Agreement (IGA) was signed in Ankara on 13th July 2009 and ratified by all national parliaments by March 2010. It marks an important milestone in the development of Nabucco, as it is a treaty between the governments of the Nabucco transit countries – Austria, Hungary, Romania, Bulgaria, and Turkey - which harmonises the legal framework and grants stable and equal transport conditions for all partners and customers. It is also the first treaty ever concluded between Turkey and EU Member States for an energy project.

The signing of the Project Support Agreements (PSAs) - a bilateral agreement between NABUCCO Gas Pipeline International GmbH and the responsible ministries of the five transit countries - took place in Kayseri, Turkey, on 8 June 2011. The PSAs set out the practical aspects and uniform standards for the construction and long-term operation of the pipeline in each country. The main elements of the PSAs are the affirmation of an advantageous regulatory transit regime under EU and Turkish energy law; the protection of the Nabucco Pipeline from potential discriminatory changes in the law; and support for legislative and administrative actions for the further implementation of the project. The PSAs also mark a commitment by each government to support the project. Together with the IGA, the PSAs are a necessary prerequisite for the successful financing of the project. They create the stable, long-term regulatory regime, which is required by the group of international lenders to secure the financing of one of the largest multi-national gas transmission projects worldwide.

#### **Route selection**

The route selection was a complex process in which many different factors have been taken into account; areas with high population density, protected areas and areas with valuable cultural heritage have been avoided as far as possible. In addition existing energy supply corridors will be fully utilized to minimise the impact on the environment. Extensive surveys were conducted to select the route, such as subsoil investigations as well as



geological, archaeological, ecological, social and climatic assessments. A comprehensive Environmental and Social Impact Assessment under strict European standards is currently work in progress by international experts to assure long term cooperation between our pipeline project and the people living along the route.

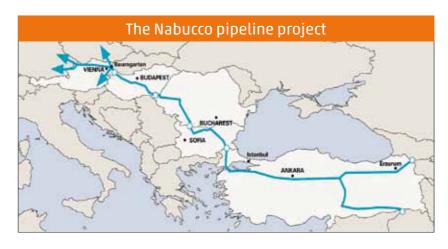
### **Project financing**

In September 2010 a mandate letter was signed by the European Bank for Reconstruction and Development (EBRD), the European Investment Bank

(EIB), the International Finance Corporation arm of the World Bank Group, and the shareholders of Nabucco and NABUCCO Gas Pipeline International GmbH. The signing of the mandate letter marks the start of the appraisal process of the Nabucco project, a required step towards a potential financing package of up to €4 billion. The current investment figure of €7.9 billion for the Nabucco construction is based on the technical feasibility study. We are currently reviewing our calculations of the capital expenditure estimate in order to better reflect the intermediate results of the Front End Engineering Design and a number of recent developments in the market and adjustments to the technical and commercial parameters. The results of this review will be available in the upcoming months. The investment will be raised from shareholders, international financial institutions, export credit insurance companies and the commercial banking market in accordance with internationally recognized social and environmental standards. 30 per cent of the investment will be funded by the shareholder consortium and 70 per cent by lenders.

# Project status and next steps

As soon as gas commitments will be negotiated between the suppliers and the Nabucco shareholders Nabucco will start with the open season process and the final investment decision will be taken by the shareholders. Before construction will start, detailed planning as well as the Environmental and Social Impact Assessments (ESIA) must be finalised. The ESIA process is currently ongoing and the long lead items such as line pipes, bends and valves will be ordered in a transparent tender process after the final investment decision will have been taken. Nabucco already



carried out a pre-tender process where potential suppliers from around the world participated and the best companies were identified. This assures that the actual tender will be carried out most efficiently.

Pipeline projects such as Nabucco, which open new sources for gas traders and customers, are of crucial importance in terms of more diversification and greater market liquidity. Nabucco offers the opportunity to negotiate long-term transport contracts with a pre-arranged tariff structure. That is an important incentive for investors. 'Open Season' is the name of the process for reserving capacity. It consists of two phases. In the first phase, shareholders will be given the opportunity to reserve a total of 50 per cent of the transport capacity. In the second phase, it will be possible for third party market participants to reserve capacity on the same terms. This means that 16 bcm of transport capacity every year will be offered to third parties.

In sum, Nabucco provides Europe with a unique opportunity to obtain gas directly from Central Asia, rather than via alternative routes. We must now utilise this mammoth opportunity. The shareholders will be negotiating gas supply contracts with potential gas supply countries in the coming months and thus a further foundation for a decision on construction by the shareholders is laid. Start of construction is planned for 2013. First gas will flow from the eastern border of Turkey to the Central European Gas hub in Austria in 2017. The southern corridor between the Caspian region, the Middle East, Turkey and Europe will then be a symbol for a new and viable partnership. Or as European Commission president Jose Manuel Barroso put it so succinctly: "Gas pipes may be made of steel, but Nabucco can cement the links between our peoples."