

# MORGEN IS HIER AARDGAS

MEENTE ENERGIEB... FD. GAS



*'Morgen is hier aardgas' - 'Tomorrow there will be natural gas here'. In the 1960s, Rotterdam switched from city gas to natural gas.  
Photo: municipal energy utility Eneco*

The modern European gas market has its origins in the discovery of the enormous Groningen field in the Netherlands in 1959. The Dutch market structure set up in the 1960s, characterized by close public-private cooperation, a linkage between the gas and oil price, and the creation of a fine-meshed infrastructure, served as an example for Europe. Now that the market is being liberalized, the Netherlands struggles with its inheritance. The ambition of becoming a European gas hub clashes with old structures.

The Netherlands wavers between protection and market

# Battle for the heart of the gas market

| By Sjak Lomme

In 2006, the Netherlands outlined a new gas strategy, aimed at becoming the gas hub of western Europe. The country is trying to strengthen its infrastructure and attract international gas transports. The idea is that the Netherlands could benefit financially by using its ample knowledge of the gas market and its infrastructure. At the same time, Dutch security of supply will be strengthened. Although the Netherlands is still a net gas exporter, domestic production is decreasing rapidly. The Groningen field will be exhausted in a few decades.

However, other countries have the same ambition. Germany and Belgium have an advantage in that they have always been dependent on imports and thus traditionally open to transits. In the past, the Dutch monopoly supplier Gasunie regarded Norwegian and English gas as threats. Norwegian gas currently bypasses the Netherlands to land in France, England, Germany, and Belgium. English gas lands in the Belgian town of Zeebrugge - the same place for landings of LNG and Norwegian gas. It is significant that the BBL (Balgzand-Bacton Line), the link between the Netherlands and England that was opened, last year, is only suitable for exports - away from, not to the Netherlands.

The Dutch scheme has suffered its ups and downs over the past months. Algeria has let it be known that it will not export LNG to the Netherlands for the time

being, and a planned gas pipeline from Norway to the Netherlands has been put on hold. Positive news is the acquisition of the north German BEB gas network by Gasunie, announced in November. Also in November, Gasunie signed an agreement with Gazprom, in which Gasunie takes a 9% interest in the Nord Stream pipeline, whilst Gazprom has the right to acquire a 9% interest in the BBL. But the development of a gas hub is not just about pipelines, but about the combination of

now market conditions have changed.

According to a government policy paper of 1962, the sales price of gas was determined by the costs of the alternative, from the user's point of view. Households saved on domestic fuel oil and thus had to pay a price for gas linked to (slightly lower than) the price of gas oil. Industry ran on heavy fuel oil, so the gas price for industry was linked to (but lower than) the price of heavy fuel oil. This marketing strategy was

## *The gigantic Groningen field will be exhausted in a few decades*

pipelines and added value in services such as trade and storage. To achieve this, the Dutch government needs to ditch old reflexes and to opt for a market-oriented approach.

### Partnership |

Since the development of the gigantic Groningen field in the early 1960s, the Dutch government has been involved intensively in the gas market as producer, transporter, and vendor. This involvement was put into a formal shape in what is called the 'gasebouw' (the gas building) - a public-private cooperation between the government and Shell and ExxonMobil. For decades these parties were woven together by a tight web of contractual obligations, which cannot be broken easily, not even

extremely successful. In this set-up, the special sales office Nederlandse Gasunie, a joint-venture of the Dutch State (50%) and Shell (25%) and ExxonMobil (25%), was required to transfer as much of its income as possible to the gas producers. This was done because it was easier for the Dutch State to demand royalties from the producers than to obtain money through corporation taxes. As a result the Dutch State has always had a major interest in high gas prices for end users.

The first oil crisis, in the 1970s, led to a reorientation of policy. When OPEC turned off the oil tap, the Dutch realized that their natural gas was a precious commodity. The Netherlands then decided to set up a policy that would lead to the production of

as much gas as possible from its numerous small gas fields and to be sparing with the extremely flexible and cheap-to-produce Groningen gas. In order to include the small-fields gas into the gas flows from Groningen, the sales organization for the Groningen gas, Gasunie, was given the additional task of marketing the gas from the small fields.

In order to encourage the extraction of small-fields gas and to secure state income, Gasunie paid a price for gas

development into a 'gas banker'. A drastic overhaul of the system became inevitable. The objective of the free market, lower prices for users as a result of competition, did not square with Gasunie's objectives, i.e. securing supply and reasonable prices for users and producers. In early 2006, the Dutch government sent a letter to parliament in which it indicated that the Netherlands must prepare itself for a time when market players will need to buy and sell gas and services on a transnational basis. Three elements

match the demand. End users often have a capricious purchase pattern and are usually connected to a low-caloric gas-transport network. On the TTF high-caloric base-load gas is traded.

The small-fields policy that requires Gasterra to continue to absorb the small-fields gas is also still intact. This restricts competition.

The market is further restricted, because Gasterra apparently has already largely sold the reserves that are still present in the Groningen field by means of long-term export contracts. Attracting international gas flows is therefore necessary to improve market forces.

#### Taqa |

Another stumbling block is storage, also an important element of a fully-fledged gas hub. Most of the existing underground storage has been contracted by Gasterra. Oil company Taqa wants to construct a commercial underground gas-storage near Alkmaar, a project of real importance to the gas hub, but there have been no public expressions of support yet. The Netherlands also does not have LNG-terminals yet.

True, most of these issues are being tackled. Several LNG-terminals are planned. Additional links with Germany and a strengthening of the domestic network are also on the agenda. In Zuidwending salt caverns are prepared for storage. But more is needed than investments in hardware. The market must be attractive as a whole.

The Netherlands will have to take the bull by the horns. Does it favour a small-fields policy or lively trade? Is Gasunie a public service provider or a commercial company? Does it want to become a successful trading place or will it stick with its historic four gas qualities that fraction the market? Will it continue with a balancing regime that only suits a few players or will it introduce a system that appeals to newcomers? Time is of the essence. At this moment the blueprint is being written for the European gas market to come. The Netherlands must prepare now for the time when the Groningen gold mine is exhausted. ■

## *When OPEC turned off the oil tap, the Dutch suddenly realized that their natural gas was a very precious commodity*

from small fields that was higher than the sales price to Dutch bulk users. Consequently, small-fields producers had no interest in seeking buyers outside of Gasunie. However, the big money was earned with the production from the Groningen field, which was subordinated to the expensive gas from the small fields. Thus the Dutch gas market had an inverse merit order. Normally the cheapest producer will be able to sell his products first, but the reverse applied to Dutch gas.

During the 1990s, awareness grew that gas reserves were finite. To continue playing a role of importance, Gasunie would increasingly need to import gas. By using the flexibility of the Groningen field, this could be done at times that gas was cheap due to low demand. At times of high demand and/or low production, Gasunie would have enough reserves to help out. Gasunie promoted this concept under the heading 'Gasunie as gas banker', a precursor to the idea of 'Netherlands as gas hub'. The company developed successful new concepts, such as Russian gas with Dutch security of supply, and 'time swaps' with Gazprom.

#### Gas banker |

But the liberalization of the gas market prescribed by Brussels disrupted Gasunie's

are crucial: availability, free trade, and expanding the 'gas hub'. In this vision, an integrated free European gas market plays an important role in securing gas supply.

On the basis of this vision, the government has concluded that the Dutch economy will benefit from more gas-related investments and a better integration of the country into the northwestern European gas market. New gas flows, to which value can be added due to specific Dutch circumstances, will lead to more economic activity in gas transport, trade, and activities such as gas storage. It will also be a solid foundation for achieving security of supply in the long term.

Hence, the 'gas hub' concept. So far, however, the new policy awaits concrete measures. The Dutch market still contains many imbalances from the past that impede the development of a genuine market. For example, traders and suppliers demand more import capacity, while the Netherlands is a significant gas exporter. This is because domestic production, with a few exceptions, is bought up by Gasunie (now Gasterra). Traders and suppliers that wish to compete with Gasterra therefore need imports. The Netherlands does have a successful wholesale market, known as the Title Transfer Facility (TTF), but the package of products does not always

## Gasunie responds

'Lomme has some good recommendations to offer', reacts Pieter Trienekens, member of the executive board of Gasunie, 'but he misses a crucial point. He describes the desire of the Netherlands to become a western European gas hub primarily as an internal Dutch struggle. But the real battle for the heart of the international gas market takes place internationally. It is a competition between countries. Some countries, like Germany and France, try to ensure security of supply by the creation of vertically integrated national champions (Eon, RWE, Suez-Distrigaz, Gaz de France) that can enter into long-term gas contracts with producers. The Netherlands opts for a liberalized market and tries to ensure security of supply by becoming an international gas hub. In this setup, Gasunie plays a crucial role as independent system operator and supplier of infrastructure. In a competition like this, there will be ups and downs for everybody. But the outlook for the Netherlands is not as gloomy as Lomme seems to imply. The Dutch approach seems to be working very well so far. Market place TTF is growing steadily. The BBL-gas pipeline to the UK has been built and is flourishing. Gasunie takes part in Nord Stream and has acquired the BEB-network in northern Germany, which creates opportunities for connecting Nord Stream to the Dutch-German gas hub. The domestic gas network will be expanded considerably in the coming years. There may be several LNG-terminals built. Last but not least, the Dutch government has promised to create a legal framework to increase competition in the important area of seasonal gas storage. All in all we are confident our strategy is working.'

*At a central conversion workshop at the Feijenoord Municipal Gas Plant in Rotterdam, city gas appliances are adjusted for the use of natural gas.  
Photo: Eneco*