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For centuries, the industrious Dutch have made their fortune from a passionate relationship with the sea. This tiny country in the north west of Europe, squeezed between the North Sea and, at times, expansionist neighbors, has forged its national identity over a strong maritime vocation. The Dutch have sailed the world as conquerors and merchants, reclaimed at least a quarter of their land from the sea, which they protect with man-made barriers, and, more recently, successfully exploited the oil and gas riches under their waters.

This sponsored supplement was produced by Focus Reports. Project Director: Julie Avena. Editorial Coordinator: Henrique Bezerra. Project Assistant: Olivia Scarlett. Graphic Assistant: Omar Rahli. For exclusive interviews and more info, log onto energy.focusreports.net or write to contact@focusreports.net

Courtesy of Port of Rotterdam

For centuries, the industrious Dutch have made their fortune from a passionate relationship with the sea. This tiny country in the north west of Europe, squeezed between the North Sea and, at times, expansionist neighbors, has forged its national identity over a strong maritime vocation. The Dutch have sailed the world as conquerors and merchants, reclaimed at least a quarter of their land from the sea, which they protect with man-made barriers, and, more recently, successfully exploited the oil and gas riches under their waters.

Up until the 1950s, the Dutch considered themselves one of the most prosperous nations in the world despite an apparent lack of natural resources, land and population. The belief that their wealth relied entirely on an indomitable character, a Calvinist ethic, and an adventurous spirit was deeply rooted in the national psyche. But the 20th century gave the Dutch a concrete asset. In 1959, the massive Groningen gas field was discovered, which up until today is Europe's biggest gas field and the tenth largest in the world.

Groningen marked the beginning of the natural gas era for Europe. By 1963, the Dutch had the biggest public-private partnership to date, the N.V. Nederlandse Gasunie, between Esso (now ExxonMobil), Royal Dutch Shell and the Dutch government, which since 2005 is 100% state owned. Since then, Holland's destiny has been inextricably linked to the oil and gas industry.

From then on the world's oil and gas industry would not only perceive the Netherlands as home to the number one oil company – Royal Dutch Shell – but also as the foundation stone of the European gas industry. This was helped by the Port of Rotterdam's new role as a refining and trade hub for the region.



Maria van der Hoeven, Minister of Economic Affairs



Marcel Kramer Chairman and CEO of Gasunie



Bart van de Leemput Managing Director NAM

For almost fifteen years Dutch gas production (oil production was insignificant in relative terms) was almost entirely dependent upon the Groningen gas field. Nevertheless, following the first oil crisis in 1973-1974 the Dutch government designed a new energy policy, which saved Groningen as a strategic reserve to be used over a longer period, and promoted the exploitation of marginal fields via the Small Fields Policy (SFP).


According to Mr. Bram van Mannekes, Secretary General of NOGIPA, the Netherlands Oil and Gas Exploration and Production Association, the SFP has been very successful, and until now the Netherlands has recovered approximately 800 bcm from the small deposits. "Since its implementation, Groningen's proven reserves have increased in size, but the fact remains that the field, which in total contained around 2,800 bcm, is down to 1,000 bcm left" highlights Mr. van Mannekes.

However, the Netherlands's luck in the gas business came at a price for the national economy. The revenues generated from the gas business were used by successive governments as current income, flooding public finances, overvaluing the national currency, and making exports in guilders far too expensive up until the emergence of the Euro in 2000. This vicious circle came to be known as the "Dutch Disease". Many national manufacturing industries struggled to export while public investments and resources were lost in bureaucracy.

Things have changed for the better in the past decade, says the Minister of Economic Affairs, Maria Van der Hoeven, with revenues being used wisely for future prosperity. "In the last twenty years a considerable proportion of the oil and gas revenues have been used for investments to strengthen our economic position in the long term. Infrastructure projects were for a long time a top priority, but the last cabinet placed innovation and education as a national priority," she explains. Van Mannekes is even more specific: "Today, about 5% of the Dutch GDP comes from the revenues of the gas industry and the state profit share goes into funds partially for infrastructure development, roads, rails, and major R&D activities".

On the 50th anniversary of the Groningen gas field the Netherlands has a lot to celebrate. Their expertise in the oil and gas business combined with the country's strategic location at the door to Europe's main markets have made the Netherlands a leader in oil and chemical refinery, as well as cutting-edge areas such as underground gas storage and seismic studies.

True to their merchant nature, the Dutch have been very good at selling not just their gas, oil and derivatives, but also their technology. According to Mr. Hans de Boer, Managing Director of IRO, the Association of Dutch Suppliers in the Oil and Gas Industry, the Dutch industry is successfully exporting equipment as well as their skill in



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designing, constructing and operating offshore equipment for the wider natural gas value chain. "This is why IRO has a strong focus on exporting our members' expertise to other markets worldwide. The upstream supply industry in the Netherlands had an estimated annual turnover of US\$ 7 billion for 2009, of which 70% is export-related", he says.

All of this would not have been possible without the Port of Rotterdam. Known as the "Energy port of Europe", it serves as a safe harbor for Western Europe's refinery and maritime industries as they struggle to keep costs to a minimum. As Mr. Rob Nijst, Managing Director of VTTI, puts it, "Refineries in the hinterland are struggling with the increased competition from new refineries being built in the Middle East, India and China. Thus, they have concentrated even more their regional activities around the Port of Rotterdam to gain in scale and international competitiveness".

The Netherlands' gas revolution since Groningen has not changed just the balance of its energy basket but also its relationship with its European neighbors. According to Mr. van de Leemput, the Managing Director of NAM (the joint venture between Royal Dutch Shell and ExxonMobil, which explores the Groningen gas field and holds 54% of the Dutch gas assets), in only one generation almost 100% of the Dutch households have switched to gas for heating and 45% of them use gas for electricity. The Netherlands also produces and exports 15% of the gas consumed in the European Union.

To meet such high demands the Dutch hurried to build the world's densest pipeline grid onshore and offshore, and its links to the rest of the European gas grid continue to grow. As the Dutch fields get depleted, their regional connectivity is more important than ever, especially as Russian gas finds its way to Europe via new pipeline projects such as Nord Stream. The Dutch government and companies like NAM, Gasunie, TAQA, VOPAK, GDF-Suez and many others are investing in new pipelines, LNG terminals, and gas storage projects. They want to secure the supply of gas both to the country and continent, and place the Netherlands at the heart of Europe's energy strategy for years to come.

BIG PLANS FOR SMALL FIELDS

The 21st century brought a radical change in the Dutch fiscal policies towards field exploration. With many major companies leaving the country in search of bigger and more profitable fields elsewhere, the government is trying to encourage newcomers not only by improving the legal framework but also by providing an attractive institutional set-up.

Until the end of 2002, the Netherlands had a Depreciation At Will (DAW) policy that encouraged the fast exploration of existing fields by offering companies tax breaks. But, as reserves decreased, the

authorities decided there was no need to hurry up exploration and dropped the DAW. Pressure from the industry managed to partly reinstate it and, in September 2009, the Dutch parliament approved new tax incentives to small fields with marginal economics.

Besides that, for every new development and producing field in the country, EBN – a 100% state-owned non-operator – participates with 40% of the project, assisting companies with the financing as well as the Exploration & Production (E&P) expertise which has built up more than five decades of experience in the area.

To Mr. Jan Treffers, Managing Director of GDF-Suez E&P Nederland BV, EBN plays a crucial part in the operation's success. "On the one hand E&P companies are competitors, but in a small area with limited infrastructure like the Netherlands you have to cooperate in order to be able to achieve ultimate recovery of the remaining reserves. Thus, the role of EBN is central to stimulate this cooperation".

The advantages of exploring for natural gas in the Netherlands are obvious. Most of the necessary E&P infrastructure is already in place; companies have a safe buyer in GasTerra, thanks to the Small Field Policy; the country has stable and market-friendly laws; the final market is extremely close and it has total integration with the



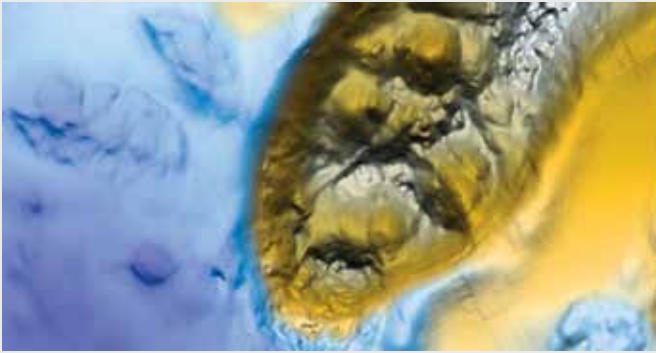
Jan Treffers, Managing Director of GDF-Suez E&P Nederland



Scott Ferguson, Managing Director of Vermilion



Courtesy of Vermilion



Automatic Underwater Vessel data - Fugro

European gas grid. The only problem is: how do you find gas at competitive costs?

GDF-Suez E&P Nederland BV has found a suitable answer. The company has grown to become the number one offshore operator in the Dutch continental shelf by acquiring assets close to its main energy markets. The company bought important assets from NAM in 2003 and sealed deals along the NOGAT pipeline in 2008 that included both fields and pipelines. "Both acquisitions fit very well in our portfolio since we had many years of experience with operating the Noordgastransport B.V. (NGT) offshore pipeline system", says Mr. Treffers. According to him, the reason GDF-Suez can operate

fields in an area with higher production costs is due to the fact that they are a smaller E&P organization able to reduce operating costs and increase efficiency.

But buying already depleted assets would not be a lasting solution for companies searching for long-term supply. Hence, most of the newcomers have invested heavily in new explorations. "We have been drilling three to four exploration wells per year – which is a considerable number for a mature area such as the Netherlands. This tactic has brought us important new reserves which we have developed in the past 10 years", says Mr Treffers. Even so, these advances wouldn't be possible without the latest generation 3D seismic data as well as data-processing and interpretation techniques that were neither available nor economically viable a few years ago.

These technological developments and their economic viability were brought about by the fact that the Dutch continental shelf is



Klaas Wester, President and CEO of Fugro

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Argos Oil is one of the larger independent oil companies in North West Europe and is active in trading, storage, logistics and marketing of (bio) fuels and lubricants. Rotterdam-based Argos is strategically positioned in the centre of the oil industry. Currently Argos is setting foot in niches of the upstream market.

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CANADIAN SCOUTS

The E&P spectrum in the Netherlands is rather limited in terms of operators – for now not more than thirteen. But what makes it unique is the increasing number of Canadian players entering this market. Juniors such as Vermilion and Cirrus Energy Nederland have invested considerable sums of their limited financial portfolio in Dutch resources. With majors leaving their assets and betting on billion-dollar investments in frontier areas elsewhere, plenty of opportunities remain.

Mr. Scott Ferguson, Managing Director of Vermilion, acknowledges it is no coincidence that Canadians are taking the lead in the process. “Just as in Western Canada, the Dutch fields are mostly mature and large E&P companies have left the country because they didn’t see opportunities for further growth on a large scale. Hence, there are many opportunities in the Netherlands for smaller Canadian companies such as Vermilion that grew up in Calgary doing exactly the same thing when majors left Western Canada.”

What’s more, the financial industry in Canada is familiar with marginal field investments and provides the necessary funding for this kind of opportunity elsewhere.

Mr. Ruud Zoon, the Managing Director of Cirrus, couldn’t agree more even though his company’s activities are in contrast to those of Cirrus which are mostly onshore. According to him, offshore exploration in the Netherlands offers significant processing and pipeline infrastructure, which helps companies like his to bring on new developments quickly and efficiently.

“Cirrus has a strong preference to be the designated operator of its licenses. That means we can then control the pace of development and the capital expenditures, important for a small company with limited access to financial markets”, he highlights. As a result, with just one exception Cirrus operates all their assets in the Netherlands. Just like scouts, they may be small players, but they are brave ones.

served by a myriad of world-league service providers. Some of the most successful built their technological expertise in these waters, Fugro being the best known example of the acclaimed Dutch expertise.

According to Mr. Klaas Wester, President and CEO of Fugro, their client base is made up of big and small oil companies. “The first thing they need is data on the locations before they can decide what type of design or what structure they want to build, hence Fugro assists them in the very early stages of exploration.” The company provides the industry with all the relevant information needed to locate oil and gas and to build the suitable structures for extraction.

Mr. Wester attributes Fugro’s success to its focus on cutting-edge technologies developed in-house and on it being a neutral player able to service all oil companies and all contractors, not competing with their clients in any way. Some 20% of the company’s activities are concentrated in seismic studies to find new oil and gas fields and a growing part of its business comes from the abandonment of fields, which is also of special relevance for depleted areas such as the North Sea.

FMC Technologies gives another good example of how technology advances provide further viability to Dutch assets. They recently developed a unique integral tubing rotator for the NAM Schoonebeek redevelopment project, allowing this historical field to oper-

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Graham Horn - General Manager for Europe, Africa & CIS of FMC Technologies Surface Wellhead

ate once again. Mr. Graham Horn, General Manager for Europe, Africa & CIS of FMC Technologies Surface Wellhead explains its significance. "This was a piece of equipment which didn't exist in the market, so FMC agreed to develop it in the Netherlands as part of the project, helping NAM meet their safety criteria and redevelop Schoonebeek properly."

According to Mr. Horn, this is a fairly large project with approxi-

mately 80 wellheads. "Roughly half of those are steam injectors and the other half are producers. It is exciting for us because our facilities sit right in the middle, so we always laugh and joke that we can go and service the job on a bicycle, which is perfect for the Netherlands."

Despite the fact that some major companies are leaving the country, Mr. Horn has reasons for optimism. "It's safe to say that we will have good E&P activities in the Netherlands for at least another 20 years. I don't believe it will go away any time soon," he says. "You

also have to be aware that when FMC installs a wellhead, our expectation is that it will be there for another 20 years as well. We cannot abandon it, it will be supported by FMC throughout its lifetime." For Mr. Horn, FMC's long-term commitment and knowledge of the local business culture are the reasons for the company's deep penetration in the Dutch market.

Like GDF Suez, Wintershall Nederland BV, a company which does exploration, development and production until abandonment, has acquired a number of assets in the Dutch continental shelf. Mr. Gilbert van den Brink, the managing



Gilbert van den Brink, the Managing Director of Wintershall

director, points out that Wintershall Nederland BV developed a unique offshore expertise that is currently being exported to their overseas activities, especially in other North Sea operations in Norway. "The Netherlands is recognized inside the Wintershall Holding AG for its expertise in the development of offshore prospects, small and large platform or subsea projects that

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are now being exported elsewhere”.

An especially interesting project developed by Wintershall was the P9, constituted by two subsea wells tied together like a daisy chain. Attached to each other, together they sent the gas to the main station. This was the first time that this technology had been applied in the Netherlands. “That has opened quite a large perspective for Wintershall because in the Netherlands there are a number of restricted areas due to the military zones, water ways, offshore wind farms and so on”, says Mr. van den Brink. Even though these regions present good opportunities, companies are normally restricted from installing platforms; hence, the subsea wells daisy-chain concept is something Wintershall is looking at, and other companies are following suit.

Furthermore, companies such as Workfox, a growing Dutch service provider specialized in the offshore accommodation and construction-support units, saw the potential created by the increasingly relevant decommissioning market in the North Sea. “In 2008, Workfox was awarded an important contract with Shell for their first



big Southern North Sea decommissioning project. Irrespective of oil and gas prices, the market inexorably moves forward and at some point decommissioning will become unavoidable,” forecasts Mr. Keesjan Cordia, Managing Director of Workfox. As a result, in recent years Workfox has considerably increased its number of support vessels, acquiring some units of the Seafox family. Cordia’s strategy is to position Workfox as a front-runner in this market and take advantage of its pioneering role.

Decommissioning apart, the Netherlands still holds some treasures to be discovered and developed. Of course, it will be more difficult to find new assets, but with a success rate of up to 60% or 70% the prospects are far from scarce.

The challenge will be to make these ever decreasing fields economical. Companies such as Wintershall, GDF-Suez, Vermillion and Cirrus found a way, but in order for others to enjoy the same success, some believe the government will need to change its stiff tax system and in the long term provide a greater incentive. By doing this, and by investing heavily in new frontier areas maybe the country will still be producing 30 bcm by 2030 and NAM will keep its promise and celebrate the 100th anniversary of the Groningen gas field.

NAVIGATING AROUND THE ENERGY PORT

A quick look at the map is enough to understand the Dutch passion for the sea. The sixteen million Dutch live in a territory sixteen times smaller than Texas and are all squeezed between the Rhine, the Meuse and the Scheldt rivers, countless channels formed by their delta and the imposing North Sea.

Even before the discovery of the country’s important fossil fuel reserves, much of the trading, storage and maritime industry has become concentrated around the Port of Rotterdam, and the ARA (Amsterdam-Rotterdam-Antwerp) region overall. In fact, the rise of the Amsterdam Stock Exchange (AEX) as the world’s first stock



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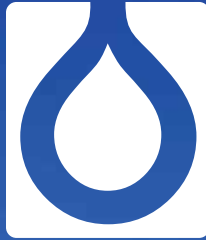
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Nowadays, the Port of Rotterdam is the biggest port not just of Europe but of the western world with more than 400 million tons of trade passing through each year. Over half of its industry and trade is related to energy, dealing in coal, natural gas, crude and refined oil and the entire value chain surrounding these products.

For instance, the Port of Rotterdam has five big refineries, including the two biggest in Europe: the Shell Pernis Refinery and BP Rotterdam. What's more, the oil that comes to the Port of Rotterdam is connected to ten other refineries thanks to a wide network of pipeline systems in Germany, Netherlands and Belgium.



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For Willem-Arie Kuijl, the Business Unit Leader of BP Refinery Rotterdam, "The Rotterdam market is different from inland markets in that the range of specifications for products and the availability of different intermediates are considerably higher compared to those of the inland markets".

In a business where refining margins have been squeezed by global over-capacity, many industry executives believe the market for oil-based road fuels in the developed world will never grow again, partly because of improved fuel economy standards and competition from alternatives such as biofuels.

But according to Mr. Bas Hennissen, Director of Industry and Bulk Cargo of the Port Of Rotterdam, biofuels offer another opportunity. "Thanks to the obligatory biofuels mix percentage that is currently increasing from 5% to 10%, the Port of Rotterdam has seen important new investments in the sector", he explains. This port is already the biggest ethanol port of Europe with an increasing amount of trade with countries like Brazil. Besides trade, we already have four biodiesel plants, and counting."



Bas Hennissen, Director of Industry and Bulk Cargo of the Port Of Rotterdam

Argos is a good example of the increasing shift towards biofuels. This company, which grew from 25 employees to more than 500 in the last 25 years, mostly operated in the downstream business when



Peter Goedvolk, the founder and CEO of Argos

it acquired a part of the NEREFCO refinery, a joint venture between BP and Texaco, and became active in storage and blending facilities. According to Mr. Peter Goedvolk, the founder and CEO of Argos, "This acquisition rendered Argos an important amount of land and storage capacity with many tanks that gave us the possibility to blend products from Western Africa, Eastern Europe and Russia

so they could comply with western-European standards and refine all kinds of feedstock for the use of biofuels".

Argos' current capacity for storage in these facilities is close to 650.000m³ and it will soon increase it to 1.000.000m³. The company's strategy is to further expand towards gas condensates, oil and especially feedstock for the biofuels industry. But Mr. Goedvolk doesn't discard the possibility of engaging in partnerships in the upstream sector, especially due to the opportunities brought by the SFP.

He also considers Argos' location to be one of the company's main assets. "Argos' terminal in the Port of Rotterdam has a very strategic location close to Shell Pernis Refinery and can offer a unique set of services in storage and blending", Mr. Goedvolk explains.



Rob Nijst, Managing Director of VTTI

VTTI, the terminal and infrastructure asset group within the Vitol Group, is another global leader with Dutch roots, having built its first worldwide greenfield site in Rotterdam. In its early days, this terminal was dedicated to the bunkers market in Rotterdam. According to its Managing Director, Mr. Nijst, VTTI's activities in Rotterdam are more focused on bulk activities because they reflect the original sense of what a hub

location is. "In 2006 the terminal started with about 280,000m³ and then in 2007 we expanded to 645,000m³, when we increased the capacity mainly for gasoil purposes – imports predominantly. Now VTTI has approved a third phase of expansion with another 465,000m³ of capacity, bringing the total to roughly 1.1 million m³. As you know, size does matter in the oil market."

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tons going from Rotterdam into Antwerp mainly by barge. Part of this volume can easily be pushed through pipelines. That's why VTTI is involved in the pipeline project linking these two sites. "Effectively, we already have 6km of pipes in the port of Antwerp, which is now waiting to be connected to the 110km pipeline that will be brought into the Netherlands," highlights Mr. Nijst. "We are currently in the process of detailed engineering and permitting applications and the construction is expected to start in 2010."

Naturally, the oil and gas related maritime industry also thrived in the Netherlands, especially after the country became the energy hub that it is nowadays. Jumbo, the world leader in heavy lift transportation with a fleet of 14 dedicated heavy lift vessels and lift capacity of up to 1,800 tons is a clear example of that.

Six years ago, Jumbo decided to enter the oil and gas offshore market and created the Jumbo Offshore branch. In the words of Mr. Michael Kahn, Managing Director of Jumbo, "The reasoning behind this decision was that cutting-edge engineering, efficient and safe transportation, a partnering mentality towards our clients and a long-term vision are ingrained in Jumbo's DNA. We always try to find innovative ways to solve logistical challenges. These characteristics meet perfectly with offshore industry requirements". Nowadays, Jumbo Offshore has a clear focus on transporting and installing subsea

structures, mooring systems and smaller jackets and topsides, aiming to make "total transport solutions" available to the oil and gas industry.

While the traditional maritime industry is still relevant for the Netherlands, the spotlight is increasingly being stolen by the oil- and gas-related industries. The newest of these is LNG, whose first terminal is being built in the Port of Rotterdam.

Gate Terminal, as the project is called, is a joint venture between Vopak and Gasunie and is one of the leading lights of the gas round-about project. The main incentive behind the construction of Gate Terminal was to secure the supply of gas for the Dutch and European market for the long term.

Besides, for Mr. John Paul Broeders, Chairman of Vopak, the long-term offtake contracts signed with four major European energy suppliers – Dong Energy, EconGas OMV International, Essent Trading International (Essent) and E.ON Ruhrgas – have provided enough security in demand for the project to make Gate Terminal immune to market fluctuations as seen in the American LNG gas in recent years.

Mr. Branko Pokorny, Managing Director of Gate Terminal, emphasized that one of the most successful elements of this project was its permitting process; a direct result of Gate Terminal's unique green footprint. "We are constructing a zero emissions terminal and that's rather particular for a LNG terminal. It will only be possible because we will use the waste energy of adjacent industries to do it". This is important because it guarantees Gate's clients a long-term assessment of their costs, without being affected by a probable rise in carbon prices.

Based around the main logistical focal point of the Western hemisphere, a well established maritime industry, a solid and well-developed backdoor network of oil and gas pipelines to Europe's hinterland, highly efficient refineries, important investments in environmental sustainability as well as new and old sources of natural gas, the Dutch oil and gas industry is managing to constantly reinvent itself and secure its leadership worldwide.



Michael Kahn, Managing Director of Jumbo



John Paul Broeders, Chairman of Vopak

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CIRRUS is a Canadian-based oil & gas company exclusively focused on international exploration and development opportunities in lower risk environments.

Cirrus has built a substantial portfolio of exploration and development assets in the Dutch sector of the prolific Southern North Sea gas basin.

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THE GAS ROUNDABOUT

The undeniable truth that the Netherlands will become a net importer of gas in the decades to come has taken on a significance of its own. A country that has for decades relied on a safe, efficient and clean energy source is now struggling to diversify its gas provisions.

The Gas Roundabout concept was the solution that national government and companies found to tackle the challenges to the security of energy supply and make the most of the unique gas infrastructure and expertise that were already in place.

Gasunie is the biggest player in this ambitious project. Because of the market liberalization in the early 2000s the old Gasunie went through an unbundling process that culminated in the separation of the trading arm, now GasTerra, from the gas infrastructure and transportation company, the new Gasunie.

Since then, Gasunie has doubled its market value from US \$7 billion to US \$14 billion and set the Gas Roundabout project in motion with various landmark enterprises of which Gate Terminal is just one. Others include a cutting-edge salt cavern storage project in Zuidwending (Groningen), the acquisition of the North German gas grid, the North-South route – an important expansion of the Dutch pipeline system –, and the participation in important international pipelines such as the BBL project linking the UK grid to continental Europe and most notably the upcoming Nord Stream pipeline that will provide an alternative route to the much-needed Russian gas.

All of these projects place the Netherlands at the very core of the European gas grid. As Mr. Marcel Kramer, Chairman and CEO of Gasunie, points out: "This is why the gas roundabout concept is not about making the Netherlands the roundabout in itself. Instead, this project is about positioning the Netherlands at the center of it". Most of all, he stresses the importance that these projects have to guarantee the long-term security of supply not only to the Netherlands but also the rest of Europe.

Another important change brought about by the market liberalization was the arrival of other companies involved in parallel projects that will play a part in the existence of the Gas Roundabout, such as the consortium led by TAQA in the Bergemeer Underground Gas Storage Project. In the words of Mr. Gertjan Lankhorst, CEO of GasTerra, "Partners such as NAM also have big storage facilities in Grijpskerk, close to Groningen. In the next 10 years both Bergemeer and Grijpskerk storage facilities could be extended to get more production capacity going on".

Paul van Gelder, Managing Director of TAQA, believes these projects will provide an essential seasonal swing capacity to the system and allow the Netherlands and the region to deal in a safer



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KEEP YOUR FRIENDS CLOSE...

Years of gas disputes between Russia and Ukraine culminated in January 2009 in eighteen European countries reporting major falls or cut-offs of their gas supplies from Russia transported through Ukraine. Since then, a number of Western-European policy-makers raised the concerns of European over-dependency on Russian gas supplies and the risks this brought to the continent's energy security.

Not everybody is as worried. Some industry leaders believe Europe's energy security will be better served by working closely with Russia. One of them is Mr. Marcel Kramer, Chairman of Gasunie – one of the shareholders of the Nord Stream pipeline, which will bring Russian gas to Europe. He explained the nature of this mutual dependency in an exclusive interview with Focus Reports. Here, some excerpts:

OGFJ - In the new strategy of securing the supply of gas for Western-European markets, Russia plays a prominent role. But many raise the issue of whether Russia can deliver on its promises and be able to provide enough volume of gas to feed pipelines such as Nord Stream in the longer term. How is Gasunie assessing this issue?

Mr. Marcel Kramer - Firstly, there is simply no 'easy gas' waiting to be shipped to Europe. The Shtokman field is a good example, where shareholders have now decided to take additional time to see if there are options for further cut cost reductions and find technical solutions for some of the challenging elements of the project.

However, independently from eventual E&P delays, projects such as the Nord Stream will not be affected since Russia is not only investing considerably in new fields, but also in the optimization of its vast gas network system and internal gas utilization. For you to have an idea, the efficiency improvement of a few percentage points in the Russian gas system can alone fill more or less the Nord Stream system. Hence, I am not particularly concerned about this.

After all, the same efficiency gains happened in Western-Europe and they were quite dramatic, even though they didn't happen overnight – there is no reason to believe that the Russians won't be able to do the same.

*For the full unedited interview,
log on to www.energy.focusreports.net

and more efficient way with rapid increases in demand caused by the weather or with unexpected cuts on the supply of natural gas.

However, to create a real gas roundabout you need more than that. As Mr. Aad Groenenboom, a partner at PricewaterhouseCoopers, points out, it is also necessary to have good trading options through spot market facilities such as the TTF and exchanges such as

APX/Endex, which have become very important gas trading tools in Europe. "Since Gasunie's unbundling, GasTerra has set up a TTF spot market for gas that already adds to the liquidity of the market, but it doesn't bring about full liquidity for the entire gas market, yet it's a first step."

He also believes that the LNG coming in with Gate Terminal will provide a boost to developing a gas-to-gas market and help increase its liquidity. "Some people ask for an abrupt liberalization, but due to the gas market's long-term nature, the developments in this industry are slow. Hence, it is natural that changes are gradual and lengthy processes."

After all, the concept of the Netherlands as the center of the North-Western European Gas Roundabout is not just about security of supply. It is also about creating competitive markets, liberalization, offering open access and equal business opportunities for everyone.

TRADITION MEETS INNOVATION

At the OTC Houston, the Dutch pavilion happens to be the biggest, and this is a reflection of the increased leadership of Dutch oil and gas companies. This does not only apply to giants such as Shell, but also niche market leaders such as Fugro, Allseas, Jumbo, Tebodin, Stork and many others.

According to Mr. Pieter Koolen, Chairman of Tebodin, the history behind the Netherlands' trading and sailing tradition and the five decades of exploration of massive gas reserves has played an important role. But the fact that these historical elements happened in a highly educated country helped to build up the expertise and guarantee the current success of Dutch companies in cutting-edge sectors.

Indeed, this year Tebodin celebrates its 65th anniversary proud not only of its remarkable history but also of its important innovations to the oil and gas industry. The company was founded at the end of the Second World War and was in charge of helping the



Paul van Gelder, Managing Director of TAQA



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Tebodin/Fabricom: Heiligerlee Underground Gas Storage Project for GasUnie.



Pieter Koolen, Chairman of Tebodin

of gas through pipelines and also in underground gas storage, to name a few.”

He also acknowledges that Tebodin’s current success in the gas industry is a product of both the company’s unique experience in contributing to the construction of the Dutch gas infrastructure and its current heavy investments in R&D all over the world. As he concludes, “One of Tebodin’s principles and the main

reason for its current success is that through our different knowledge hubs worldwide we try to bring people together to team up and enrich the knowledge they gain within each project so that Tebodin is in a position to act as a professional counterpart for clients everywhere”.

Netherlands to restore its industrial capacity. With the discovery of the Groningen gas field the company again took advantage of the structural changes in the Dutch economy and invested heavily in the gas sector.

“Nowadays, the gas business generates more than 40% of Tebodin’s revenues,” says Mr Koolen. The current trend of consumer markets being increasingly distant from producing fields has boosted Tebodin’s businesses in areas such as transportation

Stork has an even longer tradition. The first roots of the company date back to 1827, since when it has accompanied the Dutch through industrialization and their many other transformations

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over the last two centuries. According to Mr. Doug Meikle, CEO of Stork Technical Services, Mr. Charles Theodoor Stork, the founder of one of the company's branches, was a particularly innovative

and caring employer who introduced a unique pension system, as well as providing housing and healthcare for his employees in the 19th century. "Thanks to that there is a tremendously deep heritage in Stork of a commitment to the Netherlands and the communities that we work in, always prioritizing the well-being of our employees and promoting cutting-edge technical innovations".

Mr. Meikle highlights the fact that Stork's increased international presence is not followed by the common "fly the Dutch" strategy: "Stork is not the kind of company that takes experts from the Netherlands and flies them somewhere



Doug Meikle, CEO of Stork Technical Services

else. We take the people from the local communities and develop their knowledge locally. We train

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LICENSE TO DRILL

The Dutch seem to have a knack for consensus decision-making. The term 'polder model' was coined to describe this process designed to find cooperation between groups despite differences of opinion.

However, as Mr. Jeff Sluijter, Partner at Ernst & Young, points out, this may bring some inconveniences. "Getting an onshore license can be a tedious process. The Netherlands is one of the most densely populated countries in the world; therefore we are sensitive to space and there is sometimes a bit of a 'not in my back yard' mentality" he says.

But the Dutch are not sitting around waiting, as Mr Sluijter explains. "There are definitely hurdles which need to be and are being addressed. EBN is for instance addressing quite successfully the license issue". The expertise and know-how built up over five decades are helping the main stakeholders to understand the pressing needs of the local gas industry and to acknowledge its importance to the Dutch economy. In this way, he believes they are speeding up the decision-making process to promote business in the area.

For Mr Sluijter, reducing administrative hassle is a good thing. He also thinks that tax incentives and/or subsidies should be considered by the government to support the industry. This could be



Jeff Sluijter, Partner at Ernst & Young

done to promote investment or, as has been done recently, to support the critical R&D function.

"We have recently carried out a survey amongst 300 Oil Service companies. This survey confirms that the Dutch Oil and Gas Industry already has, for such a small country, a strong position in international markets and the expectation is that it is well-equipped to at least maintain this position in the coming years," he continues. "Although mature, the

Dutch upstream sector is definitely not "dead", with ambitious newcomers and numerous opportunities still out there. For example, in 2010, approximately 15 wells are planned, up from 10 in 2008 and 19 new fields will be coming into production. Our unique location and the strength of Rotterdam as a port and commercial centre means that we are well placed to continue our success in this important sector."

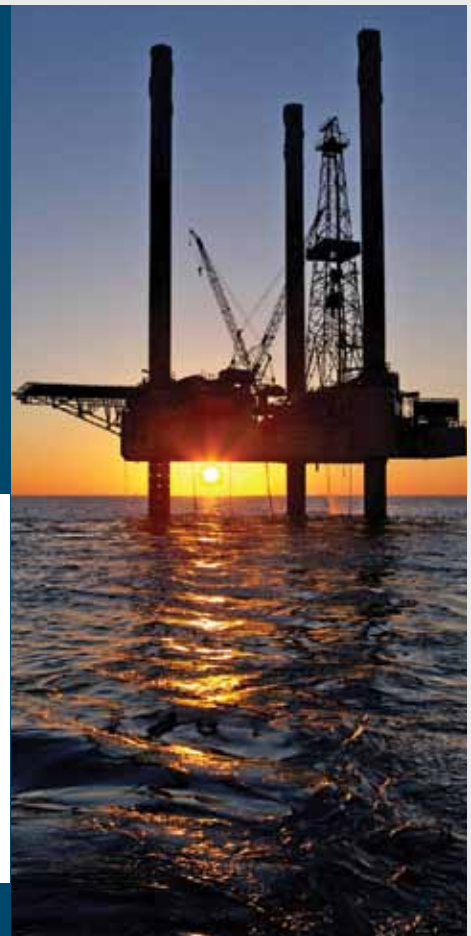
"All in all, I believe we have a magnificent oil and gas industry in the Netherlands which exemplifies every positive attribute the Dutch people have to offer," he concludes. "The problem is the Dutch can be, except when it comes to soccer, a bit too humble and modest. I feel we should be more proud of this great industry and the opportunities it offers."

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and teach them the Stork way of doing things and then put them back to work with the local communities. This is our way of promoting sustainable development wherever we are.”

This is a good example of how the knowledge and experience developed in mature markets such as the Netherlands is exported around the world. For instance, Stork currently has 3.000 people in Colombia with whom they successfully managed to transfer the company’s expertise in operating safely and with a highly efficient business model. To Mr. Meikle, this is the only way a company based in one region of the world can develop into becoming an international group – “the secret is to be local wherever you are”.

Allseas offers another demonstration of how far Dutch ingenuity can take their companies. Their emphasis on ever more advanced vessels allowed them to scale up into the mega-vessels niche and brought them to the Pieter Schelte which, once constructed, will be the biggest platform installation, decommissioning and pipelay vessel ever built.

However, this expertise shouldn’t be taken for granted. With an increasingly aging workforce, even compared with other developed markets, the local industry is struggling to pass the knowledge accumulated from one generation on to another.

In order to overcome this challenge, initiatives such as the Energy Delta Institute (EDI) and the Global Gas Network Initiative (GGNI) are tackling the problem on two fronts. Companies like GasTerra, Gasunie, Gazprom, RWE, Shell and others founded the EDI at Groningen in 2003 to help transfer local know-how to the international business community and as a means of attracting the young, who nowadays are more financially and commercially driven, to the gas industry as well as giving young engineers a much-needed market knowledge.

Meanwhile, the GGNI, an initiative created by Gasunie, promotes the passing on of knowledge from retired, but proactive, professionals to the next generation of operators and to developing gas markets overseas. By doing so, they fill the knowledge gap and build bridges with other emerging and knowledge-hungry markets.

The Dutch oil and gas industry has set out on a journey towards a gas future, where its unique mix of tradition and innovation will be one of its key assets. The Dutch strategy is banking on exporting its expertise and technology, and cementing its links with the rest of Europe as their natural resources begin to decline. In this voyage, the Netherlands can continue to take advantage of its natural ingenuity, flexibility and determination to navigate the seas of discovery and opportunity.



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