



The Netherlands as a European gas transmission hub

A gas hub: benefits, need and risks

Original title

Algemene Rekenkamer (2012). Gasrotonde: nut, noodzaak en risico's; Nederland als Europees knooppunt van gastransport. Tweede Kamer, vergaderjaar 2011-2012, 33 292, nr. 1.
ISBN 978 90 12 57591. Den Haag: Sdu.



Contents

	Part I Conclusions, recommendations and ministers' response	1
1	About this audit	2
1.1	About the gas hub	2
1.2	Policy context	4
1.2.1	Leading actors	4
1.2.2	Internal supervision	8
1.2.3	Investments in the gas hub	9
1.3	Audit questions and aim	12
1.4	Format	13
2	Conclusions and recommendations	14
2.1	Main conclusion	14
2.2	Evidence in support of the gas hub strategy	16
2.2.1	Evidence and decision-making	16
2.2.2	Information supplied to the House of Representatives	18
2.3	The implementation of the gas hub strategy	19
2.3.1	A variety of roles	19
2.3.2	Investments by State-owned corporations	21
2.3.3	Assessing the public-interest implications	24
2.3.4	Information supplied to the House of Representatives	27
2.4	Recommendations	28
3	Ministers' response and Court afterword	30
3.1	Response of the Minister of Economic Affairs, Agriculture and Innovation and the Minister of Finance	30
3.2	Court afterword	33
	Part II Audit findings	
1	Introduction	38
2	Evidence in support of the gas hub strategy	40
2.1	Introduction	40
2.2	The decision-taking process in 2007	41



2.3	No supporting evidence	44
2.4	European developments	45
2.5	The gas hub and energy security	46
2.6	Information supplied to the House of Representatives	47
3	The implementation of the gas hub strategy	50
3.1	Introduction	50
3.2	Investments by Gasunie and EBN	51
3.2.1	Aggregate investments of €8.2 billion	51
3.2.2	Risks for the State	54
3.3	Assessing the public-interest implications of the investments	61
3.4	Information supplied to the House of Representatives	68
	Appendix 1 List of abbreviations	71
	Appendix 2 Audit methods	72
	Appendix 3 Audit criteria	74
	Bibliography	77



Part I

1

Conclusions, recommendations and ministers' response



1 About this audit

The Netherlands Court of Audit examined the Dutch government's policy of positioning the Netherlands as the gas transmission hub for northwest Europe. We examined the evidence provided in support of the gas hub strategy, the way in which the Minister of Economic Affairs, Agriculture and Innovation manages the creation of the gas hub, and the way in which the Dutch House of Representatives has been informed about the process.

Our conclusions and recommendations are set out in the next chapter.

1.1 About the gas hub

In 2005, the Dutch government announced its aim of turning the Netherlands into a 'gas hub' for northwest Europe.¹ The idea is for the Netherlands to become a hub to which gas is transported (partly for use by Dutch consumers), where gas is stored and from which gas is exported to foreign buyers.

Why create a gas hub?

According to the Minister of Economic Affairs, Agriculture and Innovation, the 'gas hub strategy' is not only a vital part of the Dutch government's aim of securing the country's energy supply, it is also economically important in the light of the investments, innovations and trading activities it will generate (Ministry of Economic Affairs, 2009b). The primary aim of the gas hub strategy is '*to secure the country's gas supply and promote the continuity of European gas supplies*' (Ministry of Economic Affairs, 2010). By creating a gas hub, the government wishes to guarantee the country's access to energy sources in the long term (Ministry of Economic Affairs, 2008). The secondary aim the government is seeking to achieve is economic growth and boosting the country's earning potential. The thinking is that the presence of a gas hub will not

¹ Letter from the minister in response to an advisory report from the General Energy Council entitled '*Gas voor Morgen*' ('Gas for Tomorrow', Ministry of Economic Affairs, 2005).



just help the country retain its international competitiveness, but will also create new jobs (Ministry of Economic Affairs, 2009b). 3

Where does the idea come from?

The idea of turning the Netherlands into an international gas transmission hub began with the realisation that Dutch gas stocks were gradually depleting. Thanks to the vast quantities of gas stored under its surface, the country has become both a major consumer of gas and a major supplier of gas to the rest of northwest Europe. The government expects this situation to alter by around the year 2025, by which time Dutch gas stocks will have been used up to such an extent that the country will have become a net importer of gas (Ministry of Economic Affairs, 2009b).

How does the government plan to create a gas hub?

The gas hub strategy is part of the energy policy formulated by the Minister of Economic Affairs, Agriculture and Innovation. The first progress report on the gas hub, which the Minister sent to the House of Representatives in 2009, lists eight activities that the government hopes will help it to achieve its aim (Ministry of Economic Affairs, 2009b):

1. promoting investments in gas transmission capacity (i.e. pipelines), gas storage capacity and facilities for liquefied natural gas (LNG);
2. forming a 'Gas Hub Consultation Platform' made up of representatives of research institutes and energy companies from the Netherlands and abroad;
3. promoting the liberalisation of the gas market and the integration of the gas market in northwest Europe;
4. making use of the country's own gas resources;
5. pursuing 'gas diplomacy';
6. promoting international business;
7. strengthening the knowledge infrastructure;
8. monitoring the progress of the gas hub strategy.

This report centres on the first of these activities, i.e. promoting investments in the infrastructure for gas transmission (i.e. pipelines), gas storage capacity and facilities for liquefied natural gas. These are investments of €8.2 billion that have been planned for the period from 2005 to 2014 and which are being made by 100% State-owned corporations, viz. NV Nederlandse Gasunie ('Gasunie') and Energie Beheer Nederland (EBN).

The Minister of Finance and the Minister of Economic Affairs, Agriculture and Innovation represent the Dutch State as the shareholder of Gasunie and EBN respectively. Subject to certain provisions of the companies'



articles of association, investment proposals in excess of a given threshold value must be submitted to them for their approval.

4

Powers of the shareholders representing the Dutch State

Investments planned by Gasunie for sums in excess of € 100 million must be submitted for approval to the Minister of Finance. Investments planned by EBN in excess of €200 million must be submitted for approval to the Minister of Economic Affairs, Agriculture and Innovation. The fact that the Minister of Finance and the Minister of Economic Affairs, Agriculture and Innovation are entitled to approve major Gasunie and EBN investments gives the government a degree of control over the implementation of the gas hub strategy.

1.2 Policy context

1.2.1 Leading actors

Minister of Economic Affairs, Agriculture and Innovation

The Minister of Economic Affairs, Agriculture and Innovation discharges his responsibility for the gas hub strategy by ensuring, among other things, that the right conditions are put in place for investments in the gas hub. One of the ways in which he seeks to bring this about is by amending the relevant statutory regulations, i.e. the Gas Act and secondary legislation.

The Minister of Economic Affairs, Agriculture and Innovation regards the creation of the gas hub as a strategy that has to be effectuated by market parties, including Gasunie and EBN as State-owned corporations (Ministry of Economic Affairs, Agriculture and Innovation, 2011c; 2011e). Gasunie and EBN are both fully owned by the State of the Netherlands. The Minister of Economic Affairs, Agriculture and Innovation regards all investments made by Gasunie² and – in so far as these are gas-related – by EBN as being investments in the gas hub (Ministry of Economic Affairs, Agriculture and Innovation, 2011e).

One of the points raised in a government policy document entitled *Nota Staatsdeelnemingenbeleid* ('Policy document on State-owned corporations', Ministry of Finance, 2007) is that the Minister of Economic Affairs, Agriculture and Innovation should use his responsibility as EBN's

² Such as investments in gas transmission capacity, gas storage capacity and facilities for LNG.



shareholder to safeguard the public interest. In the case of energy policy, the term 'public interest' equates with achieving the government's general policy objectives of securing a clean, reliable and affordable energy supply (Ministry of Economic Affairs, 2008). 5

Energie Beheer Nederland

As part of its public, statutory duties, EBN is involved in exploring for and producing gas from the Groningen field near Slochteren and from smaller gas fields in other locations. The law also offers some limited opportunities for other, commercial activities, such as participation in gas storage projects.

Minister of Finance

As Gasunie's sole shareholder, the Minister of Finance is responsible for Gasunie's investments in the context of the gas hub. Under the government position set out in the policy document referred to above, the Minister of Finance is required to take account of the public-interest implications of these investments.

Gasunie

Gasunie was established in its present form in 2005. The company is responsible for the transmission of gas in the Netherlands. Gasunie performs both statutory (i.e. public) and commercial activities. Its statutory duties include operating the national gas transmission network, an activity performed by a wholly-owned subsidiary called Gas Transport Services (GTS). Gasunie owns the national gas transmission network. Its commercial activities include landing LNG, taking part in foreign gas transmission systems, and storing gas.

Netherlands Competition Authority

The Netherlands Competition Authority (NMa) regulates the tariffs that Gasunie (and, more specifically, GTS) is entitled to charge its customers, i.e. energy companies, banks, energy producers and various bulk consumers, for operating the gas network.³

Other market parties

In addition to EBN and Gasunie, other private-sector operators also make investments in the gas infrastructure which the Minister of Economic Affairs, Agriculture and Innovation also claims are related, to a greater or lesser degree, to the gas hub strategy (Ministry of Economic Affairs,

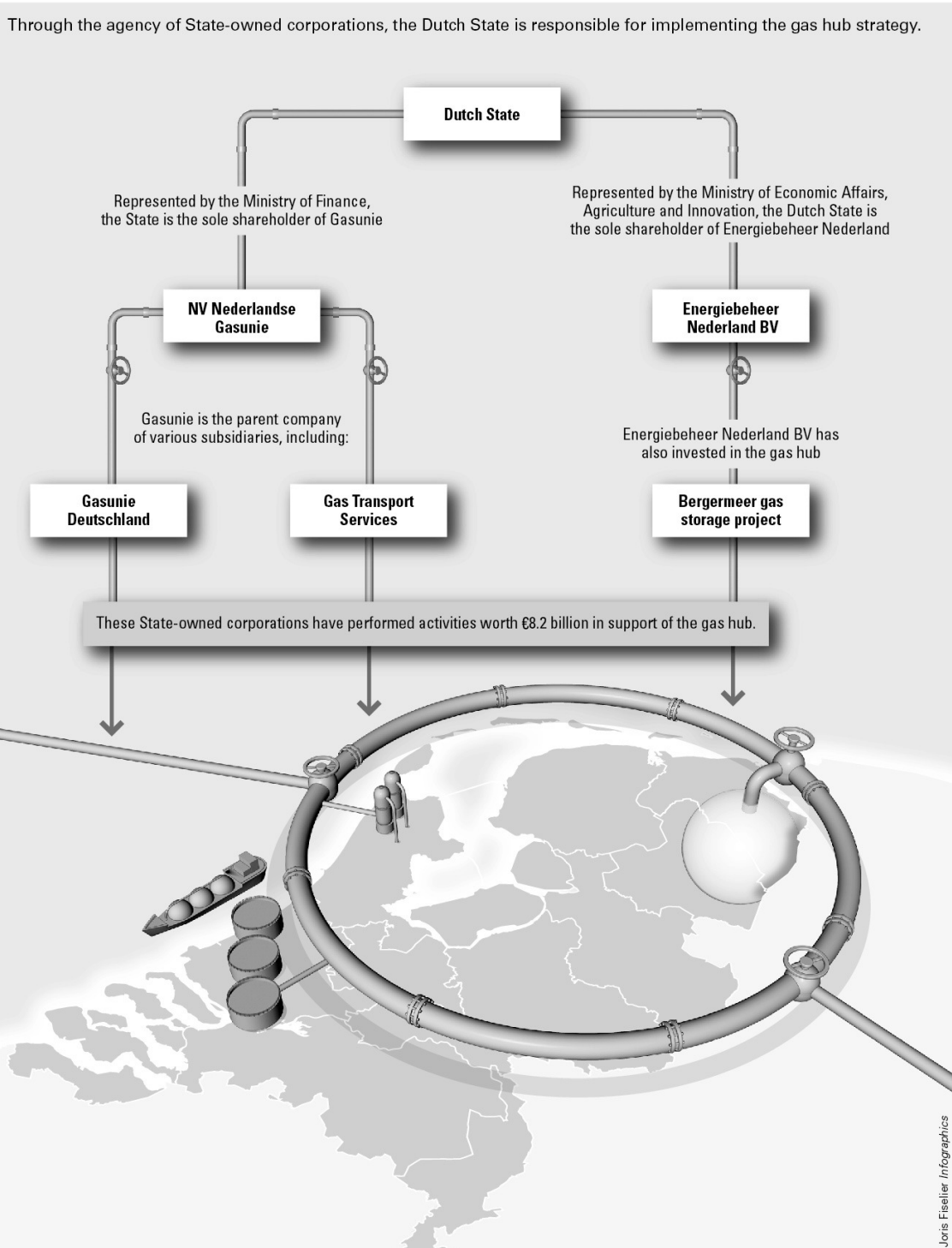
³ In 2008, the Minister of Economic Affairs, Agriculture and Innovation intervened in one of the preconditions for tariff regulation by setting the asset value of the national gas transmission network. However, a court subsequently ruled in 2010 that this was the NMa's prerogative.



Agriculture and Innovation, 2011f). These include investments in gas storage facilities. This audit report centres on the two companies in which the State is involved, i.e. Gasunie and EBN, both of which are State-owned corporations.



Figure 1 The Dutch State's financial involvement in the gas hub





The Minister of Economic Affairs, Agriculture and Innovation is responsible for the gas hub strategy. Accordingly, the Minister has named the gas hub as a spearhead of the government's energy policy and is responsible for government policy on the preconditions that need to be created in order to achieve this. As Gasunie and EBN both invest in the gas hub, the execution of this policy also effects the responsibilities of the Minister of Finance and the Minister of Economic Affairs, Agriculture and Innovation as shareholders. The latter responsibilities are set out in the provisions of Gasunie's and EBN's articles of association that describe the nature of the companies' relationship with the responsible ministers.

This audit report concerns both ministers. It is addressed to the Minister of Economic Affairs, Agriculture and Innovation as the minister responsible for the gas hub strategy and as EBN's shareholder, and to the Minister of Finance as Gasunie's shareholder.

Division of responsibilities

	Minister of Economic Affairs, Agriculture and Innovation	Minister of Finance	Source
Gas hub strategy (policy planning and preconditions for investments)	Full responsibility	No responsibility	Progress reports in 2009 and 2011; energy reports; departmental budget
Policy implemented by State-owned corporations	Responsible for EBN investments of over €200 million. Responsible for Gasunie investments of over €100 million, only in order to assess whether these are in the public interest, if such an assessment is requested by the Minister of Finance.	Responsible for Gasunie investments of over € 100 million.	See arrangements made in the articles of association; policy paper setting out government policy on State-owned corporations

1.2.2 Internal supervision

We also examined the role played by Supervisory Boards in approving major investments by Gasunie and EBN. In his capacity as the shareholder, the relevant minister is next in line after the Supervisory Board as the authority who is required to approve investments planned by Gasunie and EBN. As the sole shareholder, the State is each company's supreme governing body.



Both companies have a mitigated two-tier board structure, i.e. the general meeting of shareholders – rather than the Supervisory Board – is the body that is empowered to appoint and dismiss members of the Managing Board. In the case of Gasunie, therefore, it is the Minister of Finance who holds this authority, and in the case of EBN it is the Minister of Economic Affairs, Agriculture and Innovation.

Under their articles of association (EBN, 2008; Gasunie, 2008a), the Supervisory Board is responsible for supervising the policy pursued by the Managing Board (in the case of Gasunie) or the general managers (in the case of EBN), and for overseeing the general state of the company and its business activities. To this end, the managers are required to inform the Supervisory Board on a regular basis about the main points of their strategic policy, the general and financial risks, and the company's internal control systems. The approval of the Supervisory Boards of both Gasunie and EBN is required for investment plans worth more than €50 million. In performing its duties, the Supervisory Board is required to act in the interests of the company and its business activities.

Meetings between the shareholder and the chairman of the Supervisory Board are held at least once a year (Ministry of Finance, 2007).

1.2.3 Investments in the gas hub

The investments in the infrastructure of the gas hub have been made in:

- pipelines in the Netherlands;
- pipelines in foreign countries;
- facilities for landing LNG;
- gas storage facilities.

Pipelines in the Netherlands

Gasunie invests in the construction and maintenance of Dutch pipelines; this is a statutory responsibility. The tariffs that GTS (a Gasunie subsidiary) is entitled to charge its customers for using Dutch pipelines are regulated by the Netherlands Competition Authority. This is because GTS has a monopoly: there is no alternative national gas transmission network that customers can use.

Pipelines in foreign countries

Gasunie also invests in gas pipelines in foreign countries that can serve as import and export lines for the gas hub. These investments do not fall under Gasunie's statutory responsibility and are undertaken on a commercial basis. These are long-term investment projects to which



Gasunie has contributed sums ranging from around €310 million to €850 million, the latter being for the construction of long-distance pipelines. In such cases, Gasunie is one of the parties in a project, owning a share of somewhere between 10% and 60%. Generally speaking, the tariffs paid by customers for the transmission of gas through these foreign pipelines are not regulated but are the result of the interplay of supply and demand. The difference here is that, unlike the Dutch national network (for which Gasunie has a statutory responsibility), these pipelines are not subject to any monopoly. Gasunie also invests in foreign gas pipelines in relation to which transmission tariffs are regulated, but by a foreign regulator. In these cases, regulation does not fall within the remit of the Netherlands Competition Authority.

10

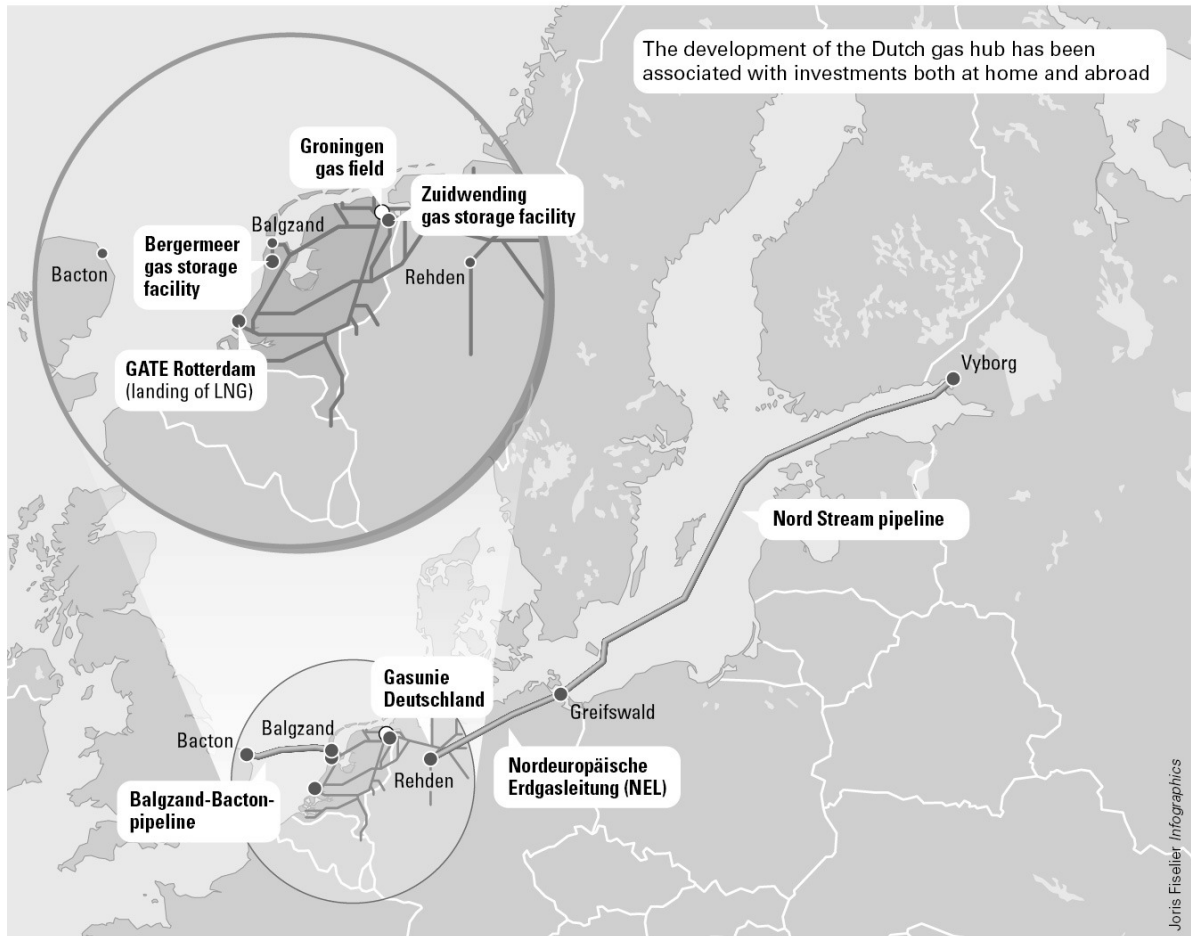
The following are the foreign pipelines in which Gasunie has invested to date:

- The Balgzand-Bacton Pipeline (BBL),⁴ a pipeline between the Netherlands and the United Kingdom. Gasunie owns 60% of this pipeline, which was completed in 2006.
- Nord Stream, a pipeline taking gas from Russia to Germany. Gasunie owns 9% of this pipeline, the first section of which was completed in November 2011.
- A gas transmission network in northern Germany (Gasunie Deutschland). Gasunie acquired this network in 2008 and is its sole owner. The tariffs charged for the use of this network are regulated by the German regulator.
- The Northern European Gas Pipeline (NEL), connecting Nord Stream with Gasunie's north German network. Gasunie owns 20% of the NEL pipeline. The tariffs charged for the use of the NEL are regulated by the German regulator. The pipeline is expected to be completed in the latter half of 2012.

⁴ Although the BBL is a regulated investment, it has been temporarily exempted from regulation.



Figure 2 Major gas hub projects undertaken by Gasunie and EBN in the Netherlands and abroad



11

Facilities for landing liquefied natural gas (LNG)

As part of the gas hub strategy, investments have also been made in facilities for landing liquefied natural gas (LNG). The advantage of LNG is that it takes up much less space than gas, which makes it relatively cheap to transport, for example by sea. It represents an alternative to the transport of gas in long-distance pipelines, which requires massive investments. LNG is reconverted into gas in LNG terminals, from where it continues its journey through pipelines.

A Dutch LNG terminal called GATE has been built in the port of Rotterdam. Gasunie is involved in this project on a commercial basis, together with a number of other parties. There were initially plans for two more LNG terminals, one in Eemshaven (in which Gasunie was also involved) and one in the Meuse delta (with no public-sector involvement). These projects have since been cancelled because (as we were informed by one of the parties) the investment was not expected to produce an adequate return. The decision was affected by the lower gas prices prevailing at the time.



Gas storage facilities

Finally, the gas hub strategy also involves investments in gas storage facilities (Ministry of Economic Affairs, 2009b). The biggest investment currently planned is in the underground gas storage facility at Bergermeer. EBN owns 40% of this project.⁵ For the time being, this is EBN's only commercial investment in the gas hub project. The idea is to meet fluctuations in the demand for gas by storing gas under the Bergermeer lake in the province of North Holland. Gasunie is also investing in gas storage in the form of a project near Zuidwending. Although gas storage facilities are connected to the gas transmission network, they are not a part of it.

1.3 Audit questions and aim

The gas hub is one of the main tools used by the Ministry of Economic Affairs, Agriculture and Innovation for achieving its policy aim of 'securing the country's energy supply' (Ministry of Economic Affairs, 2009a; 2010). Not only that, but the creation of the gas hub involves a massive financial investment. These two aspects of the gas hub guided us in formulating the audit questions for this audit. These were as follows:

What evidence, if any, is there that the gas hub will help to secure the country's energy supply? How is the Minister of Economic Affairs, Agriculture and Innovation managing the creation of the gas hub? How is he planning to inform the House of Representatives, both on his own and in conjunction with the Minister of Finance?

Our audit will produce information on the evidence adduced in support of the gas hub strategy and the investments made by the State-owned corporations as part of this strategy. We will describe how the responsible ministers are implementing the strategy and will discuss whether the ministers sought to assess whether the investments by State-owned corporations are indeed in the public interest. We will also be describing when and how the House of Representatives has been informed about the relevant decisions and their implementation.

⁵ The other member of the project is Taqa Energy BV.



1.4 Format

13

This report consists of two parts. Chapter 2 of the first part of the report sets out the conclusions of our audit and the ensuing recommendations. Chapter 3 contains the response to the audit report we received from the Minister of Economic Affairs, Agriculture and Innovation on 9 May 2012, in a letter also written on behalf of the Minister of Finance. Our afterword is also included in the same chapter.

The first part of this report concludes with a list of the main conclusions and recommendations and the undertakings given by the ministers.

Part 2 sets out the audit findings on which our conclusions and recommendations are based.



2 Conclusions and recommendations

14

2.1 Main conclusion

In recent years, the State of the Netherlands, which is the sole shareholder of Gasunie and EBN, has given permission for investments totalling €8.2 billion by these companies in the creation of a gas hub. The State has not consistently performed a verifiable assessment of whether all these various investments are in the public interest, i.e. whether they are conducive to a clean, reliable and affordable energy supply.

Evidence provided in support of the gas hub policy

At the outset, the Minister of Economic Affairs, Agriculture and Innovation (then known as the Minister of Economic Affairs) did not study, or commission any study that would generate the evidence on which the gas hub policy was to be based. Although the Minister did commission a study in 2010, Gasunie had already invested €7.2 billion in the gas hub by then (with the consent of the two ministers). These investments were based partly on the conditions set by the Minister in March 2007 for the regulation of national gas transmission tariffs. In setting these conditions, the Minister made it easier for Gasunie to invest in the gas hub.

Investments by Gasunie and EBN

Gasunie and EBN, both State-owned corporations, will have invested a total of €8.2 billion in the gas hub strategy between 2005 and 2014. Of this sum, approximately €7.9 billion will have been invested by Gasunie, with EBN accounting for €326 million. As Gasunie's sole shareholder, the Minister of Finance gave his approval to the company's investments. Similarly, as EBN's sole shareholder, the Minister of Economic Affairs, Agriculture and Innovation approved EBN's investments. Given that Gasunie and EBN are both State-owned, these investments pose certain risks to the Dutch State. For example, the investments made by Gasunie in implementing the gas hub strategy, and the subsequent capital charges, affect the company's profits and hence the size of the annual dividend that Gasunie pays the State. The dividend fell from €416 million in 2009 to €182 million in 2010. Gasunie expects to make an operating loss in 2011.



Gasunie bought part of the German gas network in 2008 for € 2.1 billion, despite doubts surrounding the regulation of gas transmission tariffs in Germany. Since then, a total of €1.4 billion has been written-off the value of the German network, in part due to changes in the system of tariff regulation in Germany. In investing in the gas hub, Gasunie benefits from the fact that it formally owns the Dutch national gas network.

According to government policy, the Minister of Finance (in the case of Gasunie) and the Minister of Economic Affairs, Agriculture and Innovation (in the case of EBN) are supposed to take the public interest into account when deciding whether or not to approve investment plans. This is a different type of judgement to that made internally by State-owned corporations in adopting their investment plans. The overriding factor in the latter judgement is the company's own interest. Both ministers have approved investment plans in the past, i.e. Gasunie's purchase of the German network in 2008 and EBN's recent participation in the Bergermeer gas storage facility. We were not able to ascertain whether and how the Minister of Economic Affairs, Agriculture and Innovation assessed these investment plans in order to determine whether they were in the public interest.

Supply of information

The information on the gas hub that the Minister of Economic Affairs, Agriculture and Innovation supplies to the House of Representatives on a routine basis centres on the Minister's role and responsibility in ensuring that the necessary preconditions are in place. The documents do not discuss the role played by the Minister of Economic Affairs, Agriculture and Innovation and the Minister of Finance in implementing policy through the agency of EBN and Gasunie, the way in which the two ministers have divided their responsibility for safeguarding the public interest, and the potential risks posed to the State as a result of investments made by State-owned corporations. The most recent progress report on the gas hub (issued in November 2011) is an improvement, in that it contains information on the amounts invested by the State-owned corporations in the gas hub strategy. However, there is no discussion of the role played by the government as a shareholder, the way in which a judgement is made as to whether investments are in the public interest, the nature of this judgement, and the resultant risks posed to the State.

Certain aspects of our main conclusion are discussed in more detail in sections 2.2 and 2.3 below, which examine firstly the evidence adduced



for the gas hub strategy and secondly the reporting procedures on the implementation of the strategy. Both sections discuss the information supplied to the House of Representatives. Section 2.5 sets out our recommendations to the ministers concerned.

16

2.2 Evidence in support of the gas hub strategy

2.2.1 Evidence and decision-making

In 2005, the Dutch government announced its plans for turning the Netherlands into a 'gas hub' for northwest Europe. The Minister of Economic Affairs, Agriculture and Innovation is responsible for government policy aimed at achieving this objective (Ministry of Economic Affairs, 2008). The Minister regards the gas hub as a strategy. This means that the gas hub has no owner, no clearly defined ultimate aim and no time horizon (Ministry of Economic Affairs, Agriculture and Innovation, 2011d). Prior to the decision-making process in 2007, the Minister did not study, or commission any study of, how the gas hub could contribute to the government's two main policy objectives, i.e. securing the country's energy supply and fostering economic growth, nor did he investigate, or commission an investigation of, the benefits of and need for the gas hub strategy or perform a cost-benefit analysis.

The Minister shapes the strategy in conjunction with market parties such as EBN and Gasunie, both of which are State-owned corporations. The Minister facilitates investments in the strategy by ensuring the necessary preconditions are in place.

Permission to raise tariffs

In March 2007, the Minister of Economic Affairs, Agriculture and Innovation took a concrete step towards creating the necessary preconditions for the gas hub: the Minister told Gasunie that transmission tariffs could be raised to recoup a series of major investments in the gas hub. This would lead to higher energy prices for households and firms (i.e. an increase of around €4 per annum for households).

Gasunie wanted the Minister to decide by 1 April 2007 whether it would be possible to recoup the first round of investments in the gas hub by raising the gas transmission tariffs it charged its customers. This date was important as the undertakings given by gas exporters would otherwise lapse. Gasunie claimed that it would not be able to recoup the investments using the current system of regulating transmission tariffs.



Gasunie and the Netherlands Competition Authority (the NMa, which regulates tariffs) found themselves in a stalemate. The NMa felt that Gasunie should be able to recoup its investments with the aid of current tariffs.

17

In March 2007, the Minister of Economic Affairs, Agriculture and Innovation came under growing pressure from Gasunie and the Minister of Finance to reach a decision. The Minister of Economic Affairs, Agriculture and Innovation decided that she would end the stalemate herself by adjusting the way in which transmission tariffs were regulated.⁶ One of the means of achieving this was by setting the asset value of the national network (which formed the starting point for tariff regulation by the NMa) higher than the NMa felt was necessary.⁷ This decision was based on an agreement the Minister reached with Gasunie's shareholder, the Minister of Finance (Netherlands Court of Audit, 2009). The aim was to raise the revenue from transmission tariffs in order to give Gasunie greater scope to invest in the gas hub as planned, and thus foster the country's energy security.

The Minister wrote to the House of Representatives on 29 March 2007, informing the House of her decision (Ministry of Economic Affairs, 2007).

Following the Minister's intervention, Gasunie began investing in the gas hub, both in the Netherlands and abroad. In 2010, a court overturned the decisions on the system of regulation on which the adjustments were based. The court ruled that, in adjusting the system of regulation, the Minister had violated the NMa's statutory duty to make an independent judgement (Trade and Industry Appeals Tribunal, 2010).

No account taken of critical comments made by Netherlands Bureau for Economic Policy Analysis

In March and April 2007, the Netherlands Bureau for Economic Policy Analysis (CPB) drew the attention of the Minister of Economic Affairs, Agriculture and Innovation to certain shortcomings in the decision-making process at Gasunie. The CPB claimed that no detailed alternatives had been presented and that no analyses had been made of a range of future

⁶ This decision was made public in the form of a 'policy rule' adopted by the Minister of Economic Affairs, Agriculture and Innovation in July 2008.

⁷ See section 2.2. of part 2 of this report for more information on the relationship between the regulated asset value and gas transmission tariffs.



scenarios.⁸ The Minister did not take these warnings into account in taking a decision on the first round of investments in the gas hub (Ministry of Economic Affairs, 2007).

18

Evidence

We expect careful policy planning to satisfy certain conditions, one of which is that a minister, before implementing a policy, should first ascertain whether the chosen policy either has a proven track record or is potentially effective and what alternatives are available. As the Minister of Economic Affairs, Agriculture and Innovation did not produce any evidence demonstrating the benefits of and the need for his policy, i.e. the gas hub strategy, before implementing it, it is not clear whether and how the policy's intended aims of securing the country's energy supply and promoting economic growth are to be achieved (Ministry of Economic Affairs, 2007). Similarly, it is not possible to say whether account was taken during the decision-making process of any complementary or competing plans drawn up by neighbouring countries (such as Belgium) for creating a European gas hub.

The Ministry commissioned a study into the economic impact of the gas hub strategy in 2010 (Brattle Group, 2010). By that time, however, the Minister of Economic Affairs, Agriculture and Innovation had already adjusted the system of tariff regulation and Gasunie had already invested €7.2 billion in the gas hub. The Minister has made clear that this study is not a cost-benefit analysis (Ministry of Economic Affairs, Agriculture and Innovation, 2010).

2.2.2 Information supplied to the House of Representatives

The Minister of Economic Affairs, Agriculture and Innovation did not make clear to the House of Representatives why the gas hub strategy is the best way of securing the country's energy supply. Imported gas that flows through Dutch pipelines or which is stored in Dutch gas storage sites is intended for customers both at home and abroad who have signed contracts to this end. In other words, the gas in the gas hub flows to whoever is prepared to pay the highest price for it. Although the presence of the infrastructure in the Netherlands is a valuable step on the road to greater energy security, it does not guarantee that the imported gas can actually be used by customers in the Netherlands.

⁸ The Netherlands Bureau for Economic Policy Analysis sent a draft version of the paper to the Minister of Economic Affairs, Agriculture and Innovation on 28 March 2007. The final version was published on 19 April 2007.



The Minister of Economic Affairs, Agriculture and Innovation proposed an alternative to the gas hub in his letter to the House of Representatives (Ministry of Economic Affairs, 2007). This alternative consisted of expanding the Dutch transmission capacity only to the extent required to handle the additional imports that would be needed to compensate for the exhaustion of the small fields and the Groningen gas field. The Minister did not provide any details or any outline of the relevant costs and benefits. The Minister also informed the House of Representatives of his plans at a late stage: Gasunie was due to assume certain contractual obligations just two days after the date on which the Minister wrote to the House (i.e. 29 March 2007) in which he proposed adjusting the system of regulation applying to Gasunie.

The Minister did not inform the House about the critical comments made by the Netherlands Bureau for Economic Policy Analysis (CPB) about the decision-making process in relation to Gasunie.

2.3 The implementation of the gas hub strategy

2.3.1 A variety of roles

The Minister of Economic Affairs, Agriculture and Innovation is responsible for the gas hub strategy. The Minister is required to approve major investments planned by EBN and the Minister of Finance is required to give his approval to major investments planned by Gasunie. Under the articles of association of Gasunie and EBN, the shareholders representing the State (i.e. the Minister of Finance and the Minister of Economic Affairs, Agriculture and Innovation respectively) are granted special powers making them also responsible for investment decisions.

It is important, however, to distinguish between two types of investment: investments stemming from the companies' statutory duties and other investments. One of Gasunie's statutory duties (more specifically, of GTS, its subsidiary) is to expand the national gas transmission network. Since July 2011, the Minister of Economic Affairs, Agriculture and Innovation has assessed both the benefits of and the need for expansions of the national gas transmission network at an early stage (Ministry of Economic Affairs, Agriculture and Innovation, 2011f).



EBN is under a statutory duty to contribute to gas exploration and production. The other investments are not the result of this statutory duty and may be regarded as being of a commercial nature.

20

In accordance with the policy principles set out in the government's 2007 policy document on State-owned corporations (*'Nota Staatsdeelnemingen-beleid'*), ministers are required to make use of their positions as shareholders in order to safeguard the public interest of a clean, affordable and reliable energy supply. There is a degree of overlap between this public interest and the objectives of the gas hub, i.e. securing the country's energy supply and fostering economic growth. The responsibility for taking account of the public interest in decision-making rests with the Minister of Economic Affairs, Agriculture and Innovation in relation to investments by EBN, and with the Minister of Finance in relation to investments by Gasunie. The standard procedure is for the Minister of Finance to consult the Minister of Economic Affairs, Agriculture and Innovation (as the minister responsible for policy in this field) in all cases where it is not clear whether or not an investment by Gasunie is in the public interest. In practice, this situation arises mainly in relation to investments that have no bearing on the company's statutory duty.

There is a difference between the process of ministerial approval and the review of investment plans by the Supervisory Board, in that the Supervisory Board is motivated primarily by the interests of the company and its business activities. In the case of both Gasunie and EBN, investment plans are submitted for approval to the minister, in his capacity as the shareholder, only once they have received the go-ahead from the Supervisory Board. In such cases, the minister is presented with an investment plan (where his approval is required due to the size of the investment in question), plus all relevant documents such as business cases. As the sole shareholder, the State is the company's supreme governing body.

This means that the Minister of Economic Affairs, Agriculture and Innovation is involved in the gas hub strategy at three different levels:

1. as the minister with responsibility for government policy in this field;
2. as EBN's shareholder;
3. as the person consulted by the Minister of Finance on the question of whether investments planned by Gasunie are in the public interest.



In other words, the division of responsibilities between the two State-owned corporations, the Minister of Economic Affairs, Agriculture and Innovation as the minister responsible for policy matters, and the Minister of Economic Affairs, Agriculture and Innovation and the Minister of Finance as shareholders acting on behalf of the State, is a complex matter. At the same time, this close involvement creates scope for government intervention.

21

2.3.2 Investments by State-owned corporations

Investments worth €8.2 billion in total

Gasunie is the State-owned corporation which has invested most heavily in the creation of the gas hub since 2005. As the company's sole shareholder, the Minister of Finance has approved these investments.⁹ In doing so, he is entitled to consult the Minister of Economic Affairs, Agriculture and Innovation as to whether investments planned by Gasunie are in the public interest, i.e. whether they are conducive to the country's energy security, and a supply of clean and affordable energy.

Gasunie has invested €7.9 billion in the gas hub since 2005. As far as the Dutch national gas transmission network is concerned, these investments have been made in a series of instalments marking three stages in the creation of the gas hub. Gasunie has also made a number of additional investments in import and export lines, and also in gas storage facilities. Gasunie has invested some €3 billion in the national gas transmission network, plus a further figure of approximately €4.9 billion in import and export lines and other activities. EBN has invested €326 million in gas storage. As the sole shareholder, the Minister of Economic Affairs, Agriculture and Innovation has given his approval to EBN's investments.¹⁰

Gasunie and EBN will have invested a total of €8.2 billion in the gas hub between 2005 and 2014. This figure is in line both with the information given by the Minister to the Dutch Senate at the end of 2011 (Ministry of Economic Affairs, Agriculture and Innovation, 2011d) and with the figures quoted in the most recent progress report on the gas hub (Ministry of Economic Affairs, Agriculture and Innovation, 2011g). Together with the investments that Gasunie is planning to make in the coming years, the grand total of investments in the gas hub is likely to work out at €9.6

⁹ Under article 24.7 (d) of the company's articles of association, the minister's approval is required for investments of over € 100 million.

¹⁰ Under article 10.7 (c) of the company's articles of association, the minister's approval is required for investments of over € 200 million.



billion. The precise figure is not known as the Minister has decided not to impose a time horizon on the gas hub.

22

Risks posed to the State

Certain risks are associated with Gasunie's and EBN's investments in the gas hub. Because both these companies are State-owned corporations, the State of the Netherlands is also exposed to these risks. By approving these investments in accordance with the powers vested in them under the articles of association, the Minister of Economic Affairs, Agriculture and Innovation and the Minister of Finance take on a responsibility for these risks.

The investments made by Gasunie in the implementation of the gas hub strategy may affect the size of the dividend the State receives from Gasunie each year. Between 2005 and 2009, the value of the dividend paid by Gasunie fluctuated between €296 and €432 million per annum. In 2007, the Ministry of Finance expected future dividend payments to be lower than in the past due to the large investments planned by Gasunie.¹¹ The dividend paid in 2010 was lower, at €182 million (Gasunie, 2011b).¹²

When Gasunie presented its figures for the first half of 2011, it claimed to have made a loss of €548 million as a result of the tariffs set by the Dutch and German regulators. The assumption was that it would post a loss of €370 million for the year as a whole (Gasunie, 2011a).

The gas transmission tariffs set by the regulators are one of the main determinants of Gasunie's revenue. If the tariffs are set lower than expected, this means considerably less income for Gasunie and also affects the Dutch State. Although the parties were aware of the risks inherent to an adjustment of German transmission tariffs and although Gasunie had made a prior analysis of these risks, both Gasunie and the Minister of Finance had assumed that the degree of risk would not be as great as it in fact turned out to be. As a result, the book value of the purchase had to be reduced by a further €570 million, following an earlier reduction of €150 million.

During the presentation of its figures for the first half of 2011, Gasunie announced that it would also be applying a €679 million write-off to the

¹¹ This conclusion is based on the contents of an internal memorandum from the Ministry of Finance, dated 12 November 2007.

¹² Of the 2010 profit, 60%, i.e. € 272 million, will be transferred to the general reserve. The remaining 40%, i.e. € 182 million, will be paid to the shareholder.



goodwill resulting from its purchase of the German network (Ministry of Economic Affairs, Agriculture and Innovation, 2011a). In other words, when this figure is added to the €720 million reduction in the asset value of the network referred to above, it becomes clear that the book value of the German network has fallen by a total of €1.4 billion, compared with an original purchase price of €2.1 billion.

23

The 2010 court ruling quashing the regulatory decisions based on the conditions set by the Minister of Economic Affairs, Agriculture and Innovation cleared the way for the Netherlands Competition Authority (NMa) to fix the gas transmission tariffs that Gasunie would be charging during the coming years. The NMa duly took a number of new decisions in the autumn of 2011, against which appeals were subsequently lodged by Gasunie (through its subsidiary, GTS), EnergieNed (the association of energy producers) and VEMW (the association of bulk energy buyers). During the period before the NMa took its decisions, Gasunie did not know what tariffs it would be charging in the future, and hence how much income it would be earning in the coming years. In its report on the first half of 2011, therefore, Gasunie announced that, pending a decision by the regulator, it would be making a capital charge of €900 million. This charge consisted of the €679 million goodwill charge referred to above, plus a €221 million reduction in the asset value of the Dutch gas transmission network (Gasunie, 2011a).

In making its investments, Gasunie benefits from the fact that it owns the national gas transmission network and that this has a positive effect on its equity capital. At the same time, there is also a risk in that the same national gas transmission network forms the security for Gasunie's commercial investments. Risks associated with Gasunie's commercial investments could be passed on to the operator of the network.

Following the implementation of European law,¹³ the Ministry of Economic Affairs, Agriculture and Innovation originally planned to transfer the ownership of the national transmission network to GTS, a Gasunie subsidiary. Gasunie and its shareholder, the Minister of Finance, were against this idea as they were afraid that it would make it more expensive for Gasunie to borrow on the capital market. In the end, the Minister of Economic Affairs, Agriculture and Innovation decided not to transfer the ownership of the network to GTS.

There is also a financial risk involved in relation to EBN's investment in the Bergermeer gas storage project. Either the demand for storage

¹³ See chapter 3 of part 2 for more information on this aspect.



capacity could prove lower than projected at the start of the project, or other sites could boost the supply of gas storage capacity. Under the Mining Act, the income earned by EBN from its public services may not be used for funding commercial activities. The incorporation of a separate company for accommodating the Bergermeer gas storage project should provide an extra guarantee that the risks resulting from EBN's liability will be limited to its initial investment. To date, no such separate company has been established.

24

Investments are currently being made in the gas hub strategy, even though the future level of income is uncertain. The profitability of the strategy depends on a wide variety of factors that are beyond the control of the Dutch government, such as the state of the economy and the resultant demand for gas.

2.3.3 Assessing the public-interest implications

The government's energy policy centres on meeting three public needs, i.e. the need for 'reliable', 'affordable' and 'clean' energy (Ministry of Economic Affairs, 2008). We sought to ascertain whether the responsible ministers, i.e. the Minister of Economic Affairs, Agriculture and Innovation and the Minister of Finance, take account of these public needs when assessing investments in their roles as shareholders. The investments in question are those made by State-owned corporations in the gas hub that are not the direct result of their statutory duty. The basic question the ministers need to address is whether the planned investments are in the public interest. The answer to this question has no bearing on the cost-effectiveness of the gas hub strategy.

The issue of whether the ministers looked at the public-interest aspect of the investments was included in our audit. We examined this aspect with reference to two specific cases, i.e. the assessment by the Ministry of Finance of Gasunie's plans for purchasing the German gas network, and the assessment by the Ministry of Economic Affairs, Agriculture and Innovation of EBN's plans for taking an interest in the Bergermeer gas storage project.

The assessment by the shareholders, i.e. the ministers, is the next step after the plans in question have been approved by the company's internal supervisor, i.e. the Supervisory Board. We examined whether, in the two cases under review, the assessments performed by the shareholders were verifiable, systematic and thorough. We concluded that it was not possible to verify whether the ministers, in their capacities as



shareholders representing the State, had taken sufficient account of the public interest in assessing the plans of State-owned corporations to invest in the gas hub.

25

Gasunie's purchase of the German gas network

Gasunie needs to obtain the approval of the Minister of Finance (as its shareholder on behalf of the State) for all investments of over €100 million.¹⁴ In assessing investment proposals, the Minister of Finance is supposed to take account both of the public interest and the financial viability (Ministry of Finance, 2007). In assessing the public interest, the Minister of Finance is entitled to ask the Minister of Economic Affairs, Agriculture and Innovation for advice, as the latter is responsible for the government's energy policy. This he does if it is not immediately clear whether the planned investment will be conducive to the public interest.

In accordance with the articles of association, the purchase of the German transmission network was first scrutinised by Gasunie's Supervisory Board. The latter approved the deal, making clear that it regarded the plan as forming part of the government's gas hub strategy. One of the main issues debated by the Supervisory Board was how to set the best price to offer for the network. The Supervisory Board left it to the company's shareholder, i.e. the Minister of Finance, to decide whether the investment was in the public interest.

In 2007, the Minister of Finance gave his approval to Gasunie's plan for purchasing part of the German gas network. After assessing the plan, the Minister concluded that the purchase was in line both with Gasunie's strategy and with the energy policy formulated by the Minister of Economic Affairs, Agriculture and Innovation.

The Minister of Finance assessed whether the proposed investment was consistent with 'State strategy', and also whether it was financially viable. He concluded that the proposed investment might be beneficial to the gas hub strategy and hence that it would be likely to foster the country's energy security. The Ministry did comment, however, that these benefits were not guaranteed and would require additional investments.

In approving the investment plan, the Minister of Finance weighed the potential benefits resulting from the purchase of the German network against the risk of unfavourable tariff-setting decisions taken by the German regulator. In assessing the financial viability of the plan, the Minister also took account of a further potential benefit, i.e. the fact that

¹⁴ As laid down in article 24.7 (d) of Gasunie's articles of association.



the purchase would boost the market for gas from the Groningen field.¹⁵ The assumption was that the deal would generate extra revenue for the State. As the responsible shareholder, the Minister of Finance then consulted the Minister of Economic Affairs, Agriculture and Innovation on the public-interest implications of the proposed investment and its compliance with government policy. The Minister of Economic Affairs, Agriculture and Innovation advised positively on both these aspects.¹⁶ However, no written record was made of how the public interest criterion (in relation to the government's energy policy) was applied in assessing the investment plan. Neither the Ministry of Economic Affairs, Agriculture and Innovation nor the Ministry of Finance have any records describing the grounds on which the Minister of Economic Affairs, Agriculture and Innovation arrived at his decision to approve the plan. There is no way of knowing whether the public-interest implications of the plan to invest €2.1 billion in the purchase of the German network were assessed in a systematic and thorough manner.

26

EBN's participation in the Bergermeer gas storage project

EBN needs to obtain the approval of the Minister of Economic Affairs, Agriculture and Innovation (as the shareholder on behalf of the State) for investments of over €200 million.¹⁷ The Minister assesses both the financial viability and the public-interest implications of EBN's investment plans.

In September 2009, EBN's Supervisory Board gave its approval to the company's participation in the Bergermeer gas storage project. As the company's shareholder, the Minister of Economic Affairs, Agriculture and Innovation then assessed the future return the company would be likely to earn from its participation in the scheme. This judgement was based on the same documentary evidence as had previously been used by the Supervisory Board. The Minister of Economic Affairs, Agriculture and Innovation also assessed the public-interest implications of EBN's participation in the project, concluding that the gas storage facility in Bergermeer would be conducive to the development of the Dutch gas hub, and would help to secure the future supply of energy on the northwest European gas market.

No documentary evidence is available indicating how the Minister of Economic Affairs, Agriculture and Innovation reached this conclusion; nor is there any documentary proof that, as the responsible shareholder, the

¹⁵ This is confirmed by an internal Ministry of Finance memorandum dated 7 November 2007.

¹⁶ Ibid.

¹⁷ See article 10.7 (c) of EBN's articles of association.



Minister actually assessed EBN's participation in the project in the light of the objectives of the government's energy policy. There is no way of knowing how the public-interest implications of the plan were assessed.

27

The Minister of Ministry of Economic Affairs, Agriculture and Innovation subsequently approved EBN's participation in the scheme in October 2009 (Ministry of Economic Affairs, 2009a).

2.3.4 Information supplied to the House of Representatives

The progress report compiled by the Minister of Economic Affairs, Agriculture and Innovation on the gas hub strategy in 2009, and also the 2008 and 2011 energy reports, list the policy objectives that the Minister of Economic Affairs, Agriculture and Innovation hopes the gas hub strategy will achieve. In the most recent progress report published in November 2011, the Minister also lists the amounts invested by State-owned corporations in the gas hub. Whilst this information represents an improvement in the completeness of the information previously provided to the House of Representatives, there is still scope for further improvement.

The 2011 progress report does not provide any information on the role played by the State in its capacity as a shareholder in implementing the gas hub strategy. The risks to which the State is exposed as a result of the investments also go unreported, as does their contribution to the public interest.

The division of responsibilities between the ministers concerned is complex. Not only is the Minister of Economic Affairs, Agriculture and Innovation responsible for government policy on the gas hub strategy, he is also EBN's shareholder and is the specialist minister whom the Minister of Finance is supposed to consult about the public-interest implications of Gasunie's investment plans. This explains the importance of transparency about the division of roles and responsibilities.

It is not always easy to draw a clear line between the interests that the Ministry of Finance is required to protect and those served by the Ministry of Economic Affairs, Agriculture and Innovation. This was illustrated by the decision taken by the latter Minister to intervene in the regulation of gas transmission tariffs in 2007, and by his decision in 2010 not to transfer the ownership of the network to GTS.



2.4 Recommendations

28

This report is a call for clarity and transparency. There is a need for clarity as to whether the Minister of Economic Affairs, Agriculture and Innovation can be called to account for achieving, or failing to achieve, certain clearly defined, preset policy objectives. And there is a need for transparency about the State's financial involvement through State-owned corporations, and about the safeguarding of public interests.

In this light, we are making the following recommendations to the Minister of Economic Affairs, Agriculture and Innovation and the Minister of Finance:

1. Give the House of Representatives full and accurate information on the degree to which the State is involved in the creation of the gas hub and on the costs, benefits and risks involved. Clearly define the responsibilities of the Minister of Economic Affairs, Agriculture and Innovation and the Minister of Finance for the creation of the gas hub, in the light of the distinction that needs to be made between policy-making and the duties of a shareholder.
2. Perform a systematic and verifiable assessment of the public-interest implications of any new commercial projects undertaken by State-owned corporations as part of the gas hub strategy. Inform the House of Representatives about the results of these assessments.

Note on first recommendation

The above recommendation should be incorporated in the routine progress reports on the gas hub strategy prepared by the Minister of Economic Affairs, Agriculture and Innovation for the House of Representatives. Although some of the information in question was already included in the 2011 progress report, there is still room for improvement. These reports should address not just the responsibility for policy matters borne by the Minister of Economic Affairs, Agriculture and Innovation, but also the responsibilities borne by both the Minister of Economic Affairs, Agriculture and Innovation and the Minister of Finance in their capacities as shareholders. The Minister of Economic Affairs, Agriculture and Innovation should also define the extent of his responsibility for the attainment of certain preset policy objectives.



Note on second recommendation

29

Alongside the routine progress reports, the House of Representatives should also receive in good time separate interim reports from the Minister of Economic Affairs, Agriculture and Innovation and the Minister of Finance, in their capacities as the shareholders of the relevant State-owned corporations, containing full information on major investments by State-owned corporations in the gas hub. Bearing this responsibility in mind, it should be made clear which minister is responsible for assessing whether investment plans are in the public interest. This assessment should be performed in a verifiable, systematic and thorough manner.

As regards the decision on whether or not to transfer the ownership of the national gas transmission network from NV Nederlandse Gasunie to its subsidiary, GTS, we urge the ministers to provide a clear answer to the question of whether Gasunie is currently acting in compliance with European law and to explain the grounds on which they decided that NV Nederlandse Gasunie should retain ownership of the network.



3 Ministers' response and Court afterword

30

Acting also on behalf of the Minister of Finance, the Minister of Economic Affairs, Agriculture and Innovation responded to our audit report on 9 May 2012. His letter is summarised in section 3.1. The full text of the letter is available (in Dutch) on our website (www.rekenkamer.nl). Section 3.2 contains the text of our afterword.

3.1 Response of the Minister of Economic Affairs, Agriculture and Innovation and the Minister of Finance

General

The Minister of Economic Affairs, Agriculture and Innovation was gratified to learn that the Court regarded the most recent progress report on the gas hub as an improvement in terms of the information provided to the House of Representatives.

The Minister pointed out that, although our report was concerned with investments in the infrastructure for the gas hub, the gas hub strategy encompassed much more than just this. Referring to the first progress report on the gas hub issued in 2009, he listed the other activities performed in the same context, stressing that these were just as vital to the gas hub strategy – and formed just an integral part thereof – as were the investments in the infrastructure for the purpose of the transmission and storage of gas, and the landing of liquefied natural gas (LNG). The Minister also emphasised the role played by private-sector parties in the investments.

The Minister said that the report took too narrow a view, as it did not take sufficient account of the role and context of the liberalisation of the energy market and the impact of liberalisation on the government's ability to control the market.



The Minister shared our view that the presence of an infrastructure did not in itself provide any firm guarantees that the imported gas would actually be used by Dutch customers.

31

Supporting evidence and information given to the House of Representatives

The Minister of Economic Affairs, Agriculture and Innovation did not agree with our conclusion that no evidence had been provided in support of the gas hub strategy prior to the important decision taken in 2007. The Minister claimed that the decision in 2007 only affected part of the gas hub and did not concern the strategy as a whole. The Minister also pointed to the policy document setting out the government's views on the future of the gas market, which was presented to parliament in March 2006, and to the General Energy Council's report entitled '*Gas voor Morgen*' ('Gas for tomorrow') that was published prior to the presentation of the policy document. The Minister said that the gas hub strategy was subsequently refined in consultation with all the parties concerned. The House of Representatives had been regularly informed and progress discussed with parliament on a regular basis. The Minister cited in this connection the 2008 Energy Report, the motion tabled by Representative Ten Hoopen et al., the Brattle Group's 2010 study, the 2011 Energy Report and the 2011 progress report.

Implementation of the gas hub strategy

The Minister claimed that the Court's conclusions about the implementation of the gas hub strategy and the role played by the shareholder in this connection needed some qualification. To start with, he said that, where Gasunie and EBN were concerned, a distinction needed to be made between investments resulting from their statutory duties and other forms of investment. There was no reason, the Minister asserted, to assess specifically whether investments made by Gasunie and EBN as part of their statutory duties were in the public interest, as the assumption is that such investments are by definition in the public interest. This applied to €3 billion of the €8.2 billion invested as part of the gas hub strategy during the period from 2005 to 2014.

A second qualification the Minister of Economic Affairs, Agriculture and Innovation wished to add related to the role played by the shareholder. The Minister wrote that close consultations had been held – and would if necessary continue to be held in the future – between the Ministry of Finance and the Ministry of Economic Affairs, Agriculture and Innovation with regard to Gasunie's commercial activities. The Minister of Finance had informed the House of Representatives that the investments were



being made as part of the gas hub strategy. The Minister of Economic Affairs, Agriculture and Innovation claimed that there was no standard procedure for the Minister of Finance to consult the Minister of Economic Affairs, Agriculture and Innovation as the specialist minister in those cases where it is not immediately apparent whether a given Gasunie investment is in the public interest. The two ministers do discuss with each other the need for public-interest considerations to be factored into investment decisions, he said.

32

The Minister said that we were 'hasty' in concluding that the Minister of Economic Affairs, Agriculture and Innovation had not performed a verifiable assessment of the public-interest implications of EBN's participation in the Bergermeer gas storage project. The Minister had always been a vociferous supporter of the need for additional gas storage capacity and claimed that there could be no doubt as to the benefits of any project that was subject to the 'national coordination regulations for large-scale energy infrastructure projects', including gas storage projects.

Response to recommendations

The Minister of Economic Affairs, Agriculture and Innovation said he would gladly adopt our recommendation to provide more information, in the routine progress reports on the gas hub strategy, on the State's involvement in the creation of the gas hub and on the costs, benefits and risks associated with this involvement.

In response to our recommendation to clarify the respective responsibilities of the Minister of Economic Affairs, Agriculture and Innovation and the Minister of Finance for the creation of the gas hub, in the light of the distinction that needs to be drawn between the roles of a policy-maker on the one hand and a shareholder- on the other, the Minister said that he believed the present policy on State-owned corporations already provided the necessary clarity.

The Minister then responded to our recommendation that the public-interest implications should be assessed in a verifiable, systematic and thorough manner and that the House of Representatives should be informed separately of the results. Referring to the 2010 annual report on the State-owned corporations, the Minister described the way in which investment plans are assessed. The prime consideration is whether the investment in question is conducive to the public interest (preferably expressed in quantifiable terms). The financial impact, the governance effects and the mitigation of risks are secondary considerations. Having



assessed the plans on the basis of these criteria, the Minister then takes a decision and informs the House of Representatives accordingly.

33

The Minister pointed out that the Minister of Finance had commissioned an independent enquiry into Gasunie's takeover of the German gas network in 2007 and would be reporting the findings to the House of Representatives.

Finally, the Minister responded to our recommendation to explain whether the current ownership structure of the national gas transmission network complies with European law, and why it was decided that NV Nederlandse Gasunie should remain the owner of the network. The Minister wrote that the method of ownership unbundling adopted by the Dutch government was consistent with the model for 'full ownership unbundling' in the European Union's Third Energy Package.

3.2 Court afterword

This audit concerned three aspects of the gas hub strategy:

1. the evidence adduced in support of the strategy;
2. the implementation of the strategy;
3. the information given to the House of Representatives.

We focused on one specific aspect of the strategy, i.e. the infrastructure. We decided to do so because of the large amount of money that has been spent on the infrastructure and because of the involvement of State-owned corporations.

On the question of the evidence provided in support of the investments, the Minister referred to the policy document setting out the government's views on the future of the gas market, which was presented to parliament in March 2006, and to the General Energy Council's report entitled '*Gas voor Morgen*' ('Gas for tomorrow') published prior to the policy document. The latter report sketched the benefits of the gas hub strategy. It did not examine the potential drawbacks, risks and the alternative means of attaining the same policy objective. The further evidence to which the Minister alluded in his response was not provided until a later stage of the process.

In his response, the Minister emphasised the importance of distinguishing between investments made in order to discharge statutory responsibilities and other, commercial investments. In relation to investments made for



the purpose of performing statutory duties, the Minister said there was no need to assess specifically whether these were in the public interest, nor was there any need for the Minister of Finance, as the shareholder, to consult the Minister of Economic Affairs, Agriculture and Innovation in the latter's capacity as the specialist minister.

34

The term 'commercial investments' covers the investments included in our audit, i.e. Gasunie's purchase of the German gas network and EBN's participation in the Bergermeer gas storage project. Because of the risks associated with commercial investments, it is important that these are shown to be in the public interest. The type of assessment described by the Minister in his response, i.e. in which the prime consideration is whether the investment in question is conducive to the public interest (expressed preferably in quantifiable terms), and in which the financial impact, the governance effects and the mitigation of risks are secondary considerations, is a good example of how this should work. We look forward to seeing such assessments put into practice.

The Minister claimed that there was no standard procedure for the Minister of Finance to consult a specialist minister if it is not immediately apparent whether a given investment is in the public interest. We were delighted to hear that, in accordance with the government's policy document on State-owned corporations, consultations do take place on the specific issue of the need for public-interest considerations to be factored into investment decisions.

The losses incurred on the German gas network, which are inherent to the risks we identified in the implementation of the gas hub strategy, have risen further in the meantime. At the time we wrote this report, a total of €1.4 billion had been written-off the original purchase price of €2.1 billion that Gasunie paid for the German network. Gasunie reported in its annual report for 2011 that it had written off a further €400 million. We look forward to the publication of the Minister of Finance's report on the findings of the enquiry into the purchase.

As a final point, we were pleased to read that the Minister of Economic Affairs, Agriculture and Innovation sees opportunities for improving the information supplied to the House of Representatives on the progress of the gas hub strategy. The most recent progress report is a step in the right direction and our audit report makes clear where improvements can be achieved, i.e. in providing full and accurate information on the degree to which the State is involved in the gas hub and on the costs, benefits and risks involved.



Main conclusions, recommendations and undertakings

Where in Part 1?	Conclusions	Recommendations	
Main conclusion			
Section 2.1	The 2010 evidential study was not published until <i>after</i> Gasunie had invested €7.2 billion in the gas hub, based on the new gas transmission tariffs set by the Minister of Economic Affairs, Agriculture and Innovation.		
	The Minister of Finance approved Gasunie’s investments. The Minister of Economic Affairs, Agriculture and Innovation approved EBN’s investments. As a result, the Dutch State is exposed to certain risks that may affect the size of the dividend paid. A sum of €1.4 billion has been written-off the purchase price of €2.1 billion that Gasunie paid for the German gas network in 2008. Both Gasunie’s acquisition of the German network in 2008 and EBN’s recent participation in the Bergermeer gas storage project were formally approved, despite the absence of any evidence to suggest that the public-interest implications of the investment plans were assessed.		
	The routine information supplied to the House of Representatives does not: indicate that the Minister of Economic Affairs, Agriculture and Innovation and the Minister of Finance are involved in the implementation of government policy by Gasunie and EBN; describe the way in which the two ministers have divided their respective responsibilities for		



	<p>safeguarding the public interest; contain any information on the potential risks inherent to investments by State-owned corporations.</p> <p>The most recent progress report on the gas hub published in November 2011 is an improvement in this respect.</p>		
Secondary conclusions			
Section 2.2	<p>The 2010 evidential study was not published until <i>after</i> Gasunie had invested €7.2 billion in the gas hub.</p>		
Section 2.3	<p>The government is involved in the implementation of policy in the shape of the shareholders representing the State, i.e. the Minister of Economic Affairs, Agriculture and Innovation and the Minister of Finance. The investments made by the two State-owned corporations are sizeable and entail certain risks for the State.</p>	<p>Inform the House of Representatives about the degree to which the State is involved in the creation of the gas hub and on the costs, benefits and risks involved. Clearly define the responsibilities borne by the Minister of Economic Affairs, Agriculture and Innovation and the Minister of Finance for the creation of the gas hub, in the light of the distinction that needs to be made between policy-making and the duties of a shareholder.</p>	<p>The Minister of Economic Affairs, Agriculture and Innovation promised to adopt the first part of the recommendation (and said that he had already acted on it in preparing the most recent progress report). The Minister said that the second part of the recommendation was already covered by the government's policy on State-owned corporations.</p>
	<p>There is no evidence to show that the public-interest implications of investments in the gas hub by State-owned corporations were assessed, i.e. of whether they were conducive to the aim of securing a clean, reliable and affordable energy supply.</p>	<p>Perform verifiable public-interest assessments of any new projects performed by State-owned corporations as part of the gas hub strategy; report the findings to the House of Representatives.</p>	<p>No undertaking given. The Minister of Finance has commissioned a study into Gasunie's purchase of the German gas network in 2007, and will be informing the House of Representatives of the findings.</p>
	<p>In undertaking commercial investments, Gasunie benefits from the fact that the parent company owns the national gas transmission network.</p>	<p>Clearly explain whether Gasunie is in compliance with European law and on what grounds it was decided that the parent company should retain ownership of the network.</p>	<p>The Minister claimed that the method of ownership unbundling was consistent with the model for 'full ownership unbundling' in the European Union's Third Energy Package.</p>



PART 2

Audit findings



1 Introduction

The aim of this audit report is to examine the evidence supporting the gas hub strategy pursued by the Minister of Economic Affairs, Agriculture and Innovation, and the minister's accountability for the implementation of the strategy. Our analysis also extends to the timing and type of information supplied to the House of Representatives about the policy in this connection. Our audit questions were as follows:

What evidence, if any, is there that the gas hub will help to secure the country's energy supply? How is the Minister of Economic Affairs, Agriculture and Innovation managing the creation of the gas hub? How is he planning to inform the House of Representatives, both on his own and in conjunction with the Minister of Finance?

This report is concerned with the investments in the infrastructure for the gas hub. These involve large amounts of money, with two State-owned corporations, Gasunie and EBN, investing €8.2 billion between 2005 and 2014. We are particularly interested in the activities performed by the two corporations as part of the gas hub strategy. Activities performed by other market players do not fall within the scope of our audit.

This part of the report contains the audit findings on which the conclusions set out in Part 1 are based:

- Chapter 2 discusses our findings in relation to the evidence provided in support of the gas hub strategy. The findings concern the Minister of Economic Affairs, Agriculture and Innovation as the minister who is directly responsible for government policy in this area.
- Chapter 3 sets out our findings in relation to the government's accountability for the implementation of the gas hub strategy. The findings concern both the Minister of Economic Affairs, Agriculture and Innovation and the Minister of Finance as the corporations' shareholders on behalf of the Dutch State.¹⁸

¹⁸ We are interested specifically in how they discharged their responsibilities as shareholders, including how they complied with the provisions of the corporations' articles of association describing the arrangements affecting the responsible minister and the Gasunie or EBN, as the case may be.

A gas hub: benefits, need and risks



39

Both chapters address the issue of how the House of Representatives was informed in this connection.



2 Evidence in support of the gas hub strategy

40

2.1 Introduction

The aim of the gas hub strategy is to position the Netherlands as a hub at the centre of international gas flows and as the gas distribution centre for northwest Europe (Ministry of Economic Affairs, Agriculture and Innovation, 2011g). Prior to the decision-making process in 2007, the Minister of Economic Affairs, Agriculture and Innovation did not study, or commission any study of, how the gas hub could contribute to the government's two main policy objectives, i.e. securing the country's energy supply and fostering economic growth, nor did he define the purpose of the gas hub strategy or analyse its respective costs and benefits. The gas hub has no owner, clearly defined ultimate aim or time horizon (Ministry of Economic Affairs, Agriculture and Innovation, 2011d).

The gas hub is one of the priorities of the government's energy policy (Ministry of Economic Affairs, 2008). The strategy is formulated in conjunction with market parties. The Minister of Economic Affairs, Agriculture and Innovation is responsible for creating the necessary preconditions for facilitating investments in the gas hub (Ministry of Economic Affairs, 2009b). The market parties themselves pay for the investments in the gas hub. Two of the market parties involved in implementing the government's gas hub strategy are State-owned corporations, i.e. EBN and Gasunie (Ministry of Economic Affairs, Agriculture and Innovation, 2011c).

This section contains a chronological summary of the decision-making process surrounding the gas hub. The strategy was adopted despite the fact that the Minister had not analysed the various alternative means of achieving the government's objectives, i.e. of securing the country's energy supply and fostering economic growth. At the time when the Minister of Economic Affairs, Agriculture and Innovation and the Minister of Finance gave the go-ahead for the massive investments proposed by Gasunie, no information was available on the relative merits of the gas hub strategy as compared with other options.



2.2 The decision-taking process in 2007

In the spring of 2007, the Minister of Economic Affairs, Agriculture and Innovation decided to alter the system by which gas transmission tariffs were regulated so as to make it easier for Gasunie to invest in the gas hub. The Minister claimed that the current system of regulation did not take sufficient account of the need to invest in the country's energy security.

In March 2007, the Minister of Economic Affairs, Agriculture and Innovation needed to take a decision on Gasunie's first series of investments in the gas hub. Gasunie wanted the Minister to take a decision by 1 April 2007 as the undertakings given by gas transporters would otherwise lapse. In other words, Gasunie was due to assume certain contractual obligations by 1 April 2007 at the latest. What Gasunie wanted to know was how exactly the government was planning to alter the regulations on gas transmission tariffs (i.e. the regulatory framework), so that it would be clear what return the company would earn on its new investments.

Gasunie and the Netherlands Competition Authority (the NMa, which is responsible for regulating transmission tariffs) found themselves locked in a stalemate. Gasunie claimed that the proposed investments would not be feasible under the current method of tariff regulation, but the NMa disagreed, saying that Gasunie should be able to recoup the investments without any extra support from higher tariffs. Gasunie and its shareholder, the Minister of Finance, asked the Minister of Economic Affairs, Agriculture and Innovation to intervene, which the latter finally did in March 2007, making clear that the aim of his intervention was to facilitate the first round of investments in the gas hub (Ministry of Economic Affairs, 2007).

**The importance of the regulated asset value (RAV)**

The value of the national gas transmission network, generally known as the 'regulated asset value' (RAV), is a vital factor when setting the tariffs that GTS is allowed to charge. The RAV is not the same as the national network's market value and is used only for regulatory purposes. The value is important as it affects two other key regulatory parameters, i.e. the 'reasonable return' and the rate of depreciation that GTS is permitted to apply. The figure for the reasonable return in turn affects both the rate of interest GTS pays for its loan capital and the dividend paid to the shareholder, i.e. the State. In other words, the network's RAV is absolutely vital.

If tariff regulation is to be effective, the RAV set by the NMa must be as accurate as possible. If the RAV is too low, the rate of depreciation will not be enough to enable GTS to undertake replacement investments and the return earned by GTS on its investments will not be sufficiently high to enable it to pay its funders, i.e. banks and the State, enough interest and dividend. On the other hand, if the NMa sets the RAV too high, customers will pay too much for the transmission of energy and the GTS will earn an exorbitant level of profit.

Writing to the House of Representatives on 29 March 2007, the Minister of Economic Affairs, Agriculture and Innovation announced that she had set the RAV of the national gas transmission network at €6.4 billion. The figure had been agreed with the Minister of Finance as Gasunie's shareholder and was in accordance with Gasunie's own view. The NMa, on the other hand, favoured a lower figure, of €4.8 billion. In our 2009 audit report on the regulation of energy transmission tariffs, we made clear that the nature of this intervention by the Minister of Economic Affairs, Agriculture and Innovation had been agreed with the Minister of Finance, as Gasunie's shareholder (Netherlands Court of Audit, 2009). Because of the decision taken by the Minister of Economic Affairs, Agriculture and Innovation to adjust the value of the national gas network and hence to raise the permitted returns, Gasunie was able to undertake its proposed investments in the gas hub.

On 22 March 2007, the Minister of Economic Affairs, Agriculture and Innovation sought the advice of the Netherlands Bureau for Economic Policy Analysis (CPB). The Minister asked the CPB to perform a quick scan of the likely costs and benefits of three alternative gas hub projects, and to report back within a week. These three alternatives were as follows:



- (a) not investing in the national gas transmission network;
- (b) investing only in gas import pipelines, and not in transit pipelines;
- (c) investing in both import and transit pipelines.

43

The CPB presented a draft version of the report on 28 March 2007. The final version was completed on 19 April 2007. The quick scan was based on data supplied by Gasunie.

The CPB drew the Minister's attention to a number of serious shortcomings in Gasunie's calculations. The CPB claimed, for example, that the business case on which the calculations were based did not contain any alternative scenarios for meeting the future demand for gas, for example by making use of foreign sources of gas. The Minister did not take these warnings into account in arriving at a decision; similarly, the CPB's analysis did not affect the contents of the letter that the Minister sent to the House of Representatives on 29 March 2007 (Ministry of Economic Affairs, 2007). The letter did not mention the quick scan performed by the CPB. The Minister did, however, refer to another report the CPB had been asked to compile, viz. on the desired capital yield of investments in the national gas transmission network.

In July 2008, the basic principles of tariff regulation (as set out in the Minister's letter of 29 March 2007) were translated into a 'policy rule' issued by the Minister of Economic Affairs, Agriculture and Innovation. The decisions based on this policy rule were subsequently quashed by the courts in 2010, following appeals lodged in 2009 by EnergieNed (the association of energy producers) and VEMW (the association of bulk energy buyers) against the NMa's decisions. The court upheld the appeals.

In the meantime, in part in response to the tariff regulation conditions announced by the Minister in the letter of March 2007, Gasunie had invested €7.2 billion both at home and abroad (for example, in the purchase of part of the German gas network in 2008) in the creation of the gas hub.

**Conditions for tariff regulation set out in the policy rule**

44

The policy rule issued by the Minister of Economic Affairs, Agriculture and Innovation on 7 July 2008 contained the following provisions:

- the NMa should apply a capital yield of 5.5% and a 55-year period of depreciation to replacement investments in the current network or to investments in the expansion of the current low-pressure network (primarily intended for domestic consumption);
- the NMa should apply a capital yield of 7% and a 20-year period of depreciation to investments in the expansion of the high-pressure network (used primarily for international gas flows);
- the Minister sets the value of the existing network at €6.376 million as at 1 January 2005.

The NMa subsequently based its regulatory decisions on this policy rule. These decisions were set aside by a court of law in 2010.

2.3 No supporting evidence

Prior to the decision-making process in 2007, the Minister of Economic Affairs, Agriculture and Innovation did not study, or commission any study of, how the gas hub could contribute to the government's two main policy objectives, i.e. of securing the country's energy supply and fostering economic growth, nor did he investigate, or commission an investigation of, the benefits of and need for the gas hub strategy, or perform a cost-benefit analysis. In his correspondence with the Senate, the Minister of Economic Affairs, Agriculture and Innovation claimed that the evidence in favour of the gas hub strategy was provided by a combination of parliamentary documents (Ministry of Economic Affairs, Agriculture and Innovation, 2011f): the 2006 policy document setting out the government's views on the future of the gas market, the 2008 Energy Report, the motion tabled by Representative Ten Hoopen, and the 2009 progress report on the gas hub. Many of these documents were not published until after the decision had been taken.

In opting for the gas hub strategy, the Minister of Economic Affairs, Agriculture and Innovation did not assess its viability. In other words, the Minister did not verifiably examine the impact that changes in the external environment might have on the beneficial effects she expected the gas hub to generate. For example, she did not factor in the potential effects of long-term changes in the gas market. These can have far-reaching effects: witness the rise of 'unconventional gas'. Such unforeseen developments can have a big impact on the gas price and



hence on the business case in favour of certain projects, as is illustrated by the following box.

45

Case study: the rise of unconventional gas

The production of 'unconventional gas' in the US has triggered big changes in the gas market over the past few years. In particular, there has been a tremendous increase in the output of 'shale gas' since 2001 (Energy Information Administration, US Department of Energy, 2008). This is gas produced from layers of shale instead of from 'conventional' gas fields. The US self-sufficiency in gas resulted in a surfeit of liquefied natural gas originally intended for the US market. This led to a decline in world prices of LNG, which in turn affected both the revenue earned by gas production companies and their willingness to invest. In the Netherlands, construction work was suspended on two of the three originally planned LNG terminals as it proved impossible to arrange the necessary funding.

In 2009, the Council of State was critical of the gas hub strategy: "*It would appear that the policy decision to convert this gas infrastructure into a gas hub has already been taken, which is why no information is available on the risks and opportunities associated with this strategy*" (Council of State, 2009).

In April 2010, the Minister of Economic Affairs, Agriculture and Innovation asked the Brattle Group, an international firm of consultants, to examine the economic effects of the gas hub and its impact on the country's energy security. The Brattle Group published its report in December 2010. It contained an analysis of the strengths and weaknesses of the Dutch gas industry and attempted to quantify the future revenue generated by the Dutch gas hub. Although the report supported the gas hub strategy, the Minister has said that it should not be seen as constituting an analysis of the social costs and benefits of the gas hub (Ministry of Economic Affairs, Agriculture and Innovation, 2010).

2.4 European developments

For the present, the European Union plays only a limited role in relation to energy security. The EU member states are themselves responsible for deciding their own energy mix and control the natural resources in their countries.



During the course of the 1990s, the EU member states decided to gradually open up their national gas and electricity markets. The thinking behind this move was that effective energy markets would guarantee energy security at competitive prices.

46

On 29 April 2009, the European Parliament adopted the Third Energy Package of directives and regulations. At the core of this package lies the 'unbundling' of networks and supply for national network operators. This sparked a debate in the Netherlands between the Minister of Finance and the Minister of Economic Affairs, Agriculture and Innovation on the issue of the ownership of the national gas network. This debate is discussed in more detail in the next chapter.

Writing in the first progress report on the gas hub, the Minister said that she regarded the facilities being built by other countries in northwest Europe as being complementary to the Dutch investments in the gas hub. The Minister emphasised the importance of cooperation and the interlinkages between the various national transmission systems and markets in northwest Europe (Ministry of Economic Affairs, 2009b).

In its recent study, the Brattle Group identified the plans devised by other countries as posing a potential threat to the gas hub. There is competition in relation to gas storage, primarily from the UK and Germany; the development of a Belgian market could divert some Russian traffic to Belgium; certain flows could be diverted to Germany; and there is competition from LNG terminals outside the Netherlands (Brattle Group, 2010).

2.5 The gas hub and energy security

One of the aims of the gas hub is to secure the country's energy supply (Ministry of Economic Affairs, 2010). While the infrastructure for gas, i.e. pipelines, storage facilities and LNG terminals, are major contributors to energy security, they do not provide any firm guarantees in this respect.

In a properly functioning gas market, the available gas goes to those countries where demand is the highest and the highest prices are paid. Alongside these factors, political and geopolitical relations also play a role. The gas flowing through the pipelines buried in Dutch soil is intended for customers many of whom have signed contracts for their gas supplies. These customers may be Dutch energy companies, but they may equally be foreign companies. Each company then decides (again on the



basis of contractual arrangements) to whom the gas is to be supplied. Again, these may be either Dutch or foreign energy consumers and they comprise both households and firms.

47

The same applies to gas stored underground in the Netherlands, as in the Bergermeer gas storage facility. This gas will in future be owned by companies who have signed contracts with the operator of the gas storage facility in question. Depending on the terms of the contracts, the end consumer of the gas will be either a Dutch or a foreign party. Neither the Dutch State nor EBN has any control over the destination of the gas.

The gas in the Bergermeer gas storage facility

When gas is stored in an underground facility, a huge quantity of gas needs to be stored in order to keep the field under sufficient pressure. This is known as 'cushion gas'. Although cushion gas is also a form of gas, it is not marketable as long as it remains in the storage facility. In other words, it is an expensive investment for the owners of the gas storage facility, such as EBN. In 2009, the Bergermeer gas storage facility signed a contract with Gazprom, the Russian gas company, for the supply of cushion gas. Under the terms of the contract, Gazprom supplies Bergermeer with the necessary cushion gas in exchange for access to some free storage. This means that a substantial part of the Bergermeer's capacity (albeit less than half) is now reserved for Gazprom.

2.6 Information supplied to the House of Representatives

The Minister of Economic Affairs, Agriculture and Innovation did not take account of the objections raised by the Netherlands Bureau for Economic Policy Analysis (CPB) in setting the conditions for the regulation of gas transmission tariffs charged by GTS, a Gasunie subsidiary, and in subsequently writing to the House of Representatives on this matter on 29 March 2007 (Ministry of Economic Affairs, 2007). The House of Representatives was not aware that the CPB had performed a quick scan; nor was it aware of the findings of the scan.¹⁹

In her letter to the House of Representatives, the Minister of Economic Affairs, Agriculture and Innovation described an alternative to the gas hub, i.e. the possibility of extending the gas transmission capacity only to

¹⁹ The Minister did, however, refer to another report the CPB had been asked to compile, viz. on the desired capital yield of investments in the national gas transmission network.



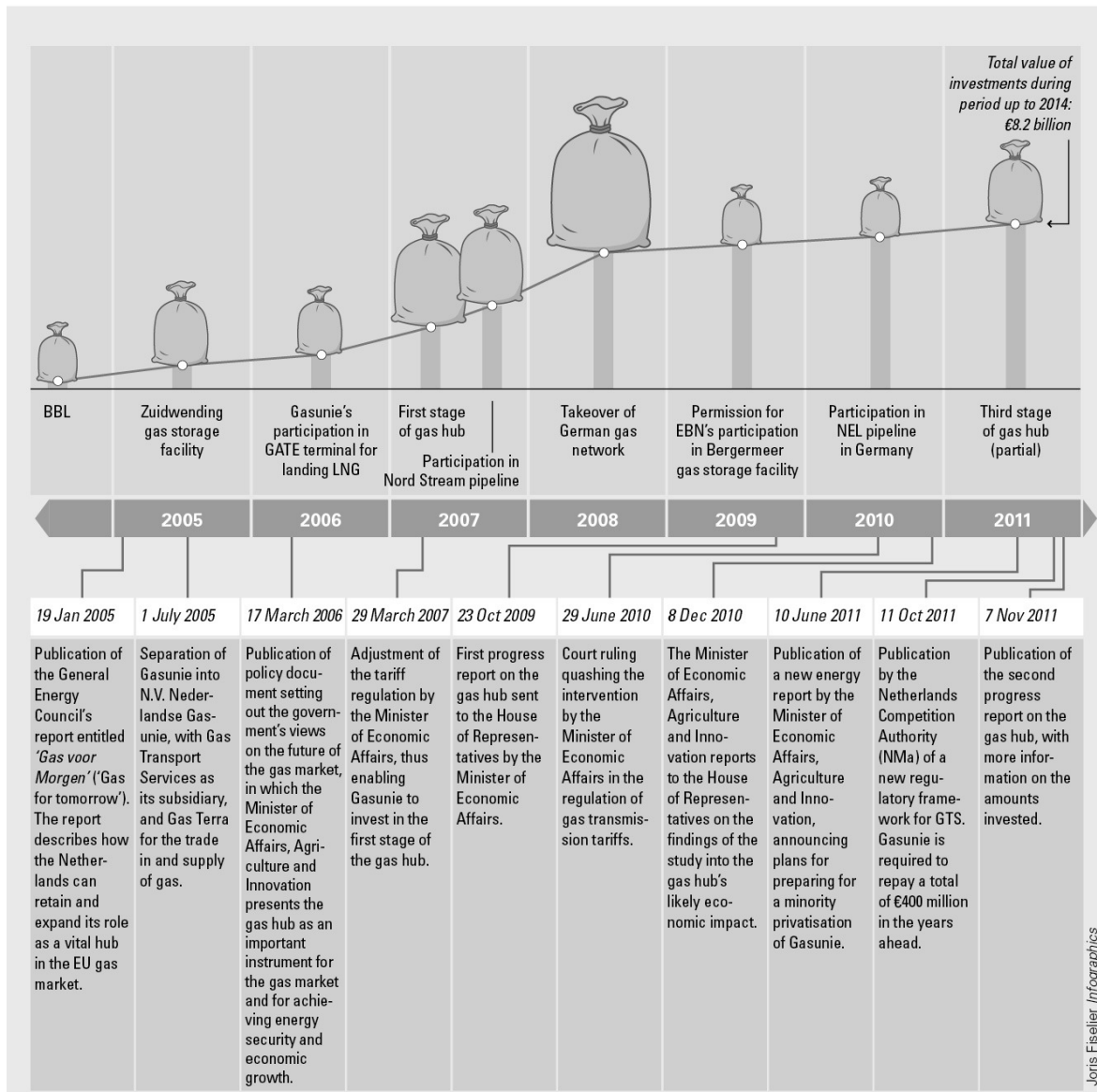
the extent that would be required to handle the additional imports needed to compensate for the exhaustion of the small gas fields and the Groningen field. The Minister rejected this alternative, on the grounds that it would prove more expensive on balance for Dutch customers. The Minister claimed that this alternative would not generate the same economies of scale as the gas hub would produce (Ministry of Economic Affairs, 2007). There was no detailed assessment of the alternative and its costs and benefits. **48**

The Minister informed the House of Representatives at a late stage: Gasunie was due to assume certain contractual obligations just two days after the date on which the Minister wrote to the House, i.e. 29 March 2007. If the House of Representatives had decided on a change of policy in the subsequent debate on the Minister's letter, the Minister would have had to break the undertaking she had given to Gasunie.

The following table shows the various stages in the process in chronological order.



Figure 3 Main decisions and investment dates





3 The implementation of the gas hub strategy

50

3.1 Introduction

The idea is for the gas hub strategy to be implemented by the private sector, *inter alia* by investing in the infrastructure. As far as investments are concerned, the Minister of Economic Affairs, Agriculture and Innovation is required to approve all investments above a given threshold made by one of the parties, i.e. EBN. The Minister of Finance has the same power vis-à-vis Gasunie. The articles of association of Gasunie and EBN contain provisions granting special powers to the shareholders acting on behalf of the State, i.e. the Minister of Finance and the Minister of Economic Affairs, Agriculture and Innovation respectively. These provisions give each minister an individual responsibility for the companies' investment decisions.

Investments may stem from certain statutory duties, on the part of either Gasunie (in which case these are termed 'regulated investments') or EBN. The statutory duties of Gasunie (and, more specifically, of GTS, its subsidiary) include maintaining and expanding the national gas transmission network in accordance with the terms of the Gas Act. Since July 2011, the Minister of Economic Affairs, Agriculture and Innovation has been able to provide Gasunie at an early stage with a clear picture of the future yield of its planned investments in the national gas network. The Minister is responsible for deciding whether the expansion of the national gas transmission network is both beneficial and necessary (Ministry of Economic Affairs, Agriculture and Innovation, 2011f). If he or she decides that expansion is indeed 'beneficial and necessary', Gasunie is entitled to use the transmission tariffs in order to recoup its expenditure. EBN's statutory duty is to take part in projects for exploring for and producing gas; these projects are based on the provisions of the Mining Act. Other investments undertaken by Gasunie and EBN are not based on these statutory duties and may therefore be regarded as being of a commercial nature.



In accordance with the principles set out in the government's 2007 policy document on State-owned corporations, the ministers should use their roles as shareholders (in part) in order to safeguard the public interest (Ministry of Finance, 2007). In this particular case, the public interest may be defined as securing a clean, affordable and reliable energy supply. In terms of

51

EBN's investments, it is the Minister of Economic Affairs, Agriculture and Innovation who bears this responsibility. In terms of Gasunie's investments, it is the Minister of Finance who is responsible. There is a standing procedure for the Minister of Finance to consult the Minister of Economic Affairs, Agriculture and Innovation, as the minister responsible for policy, if it is not clear whether or not a particular investment planned by Gasunie is in the public interest. This applies particularly to non-statutory investments.

In other words, the Minister of Economic Affairs, Agriculture and Innovation is involved in the implementation of the gas hub strategy: firstly, as EBN's shareholder, and secondly, as the policy-maker responsible for defining the nature of the public interest in relation to energy security, when asked to do so by the Minister of Finance. There is therefore a complex division of responsibilities between the State-owned corporations, the Minister of Economic Affairs, Agriculture and Innovation as being responsible for government policy and the two ministers, i.e. the Minister of Economic Affairs, Agriculture and Innovation and the Minister of Finance, as the shareholders representing the State.

We examined the involvement of the State-owned corporations in the gas hub strategy, sought to ascertain whether there is a clear picture of the financial risks associated with this involvement, and tried to define the nature of the role played by the ministers as the shareholders representing the State.

3.2 Investments by Gasunie and EBN

3.2.1 Aggregate investments of €8.2 billion

Gasunie, a State-owned corporation, is a major investor in the gas hub. Gasunie needs to obtain the approval of its shareholder, the Minister of Finance, for any investments in excess of €100 million.²⁰ The Minister of

²⁰ In the light of the arrangements between the Minister and Gasunie, as laid down in the latter's articles of association.



Finance, for his or her part, is entitled to ask the opinion of the Minister of Economic Affairs, Agriculture and Innovation about the public-interest implications of the proposed investments (i.e. whether they will help the government to achieve its policy objectives of a clean, affordable and reliable energy supply). This is the standing procedure where Gasunie's commercial investments are concerned (such as foreign investments), i.e. investments that do not ensue from the company's statutory duty. These investments indirectly entail certain risks for the Dutch treasury.

52

Gasunie had invested €7.2 billion in the gas hub as at the end of 2010. It was recently announced that further investments of €675 million are projected for the future. For its part, EBN will be contributing €326 million to the Bergermeer gas storage project. The table on the following page provides a complete breakdown of the investments by the State-owned corporations in the infrastructure for the gas hub.

The projects listed in section A of the table consist of investments in the national gas network: this is a statutory duty of GTS, a Gasunie subsidiary, which is subject to regulation by the Netherlands Competition Authority (NMa). The first round of Gasunie investments in the gas hub were mainly in a pipeline linking the northern with the southern Netherlands. In order to enable Gasunie to make these investments, the Minister of Economic Affairs, Agriculture and Innovation altered the system of regulation for the transmission tariffs charged by Gasunie (as described in section 2.1). This had the effect of adding an extra €4 per year to the average Dutch household's energy bill as from 2010 (Ministry of Economic Affairs, 2007). Gasunie decided not to assume any contractual obligations in this respect until the Minister had published the letter about the adjustments she was planning to make to the method of tariff regulation, which she did in March 2007. All subsequent Gasunie investments in the gas hub (i.e. both the first and the second round of investments) were based on the preconditions set out in this letter. This remained the case until a court overturned the Minister's earlier decision to alter the system of tariff regulation.

The projects listed in sections B and C consist mainly of projects performed by Gasunie as part of joint ventures with other parties. The investments are of a commercial nature and either are not subject to regulation or are subject to regulation by a foreign (i.e. German) regulator. The investments are targeted primarily at facilities for importing gas from, and exporting gas to, foreign countries (i.e. Russian gas with the Nord Stream pipeline, NEL and the German network, and the Balgzand-Bacton transit pipeline for transporting gas to the UK), for



landing liquefied natural gas (GATE) and for storing gas (Zuidwending). EBN's participation in the Bergermeer gas storage project is also as a member of a joint venture, which is why it is included in section C.

53

The projects listed in section D had not commenced when this report was written in August 2011. The remainder of the third stage (worth a total of €1.4 billion) consists of approximately €185 million in investments in the Dutch network and investments of approximately €1.2 billion in Germany.

Investments¹ by State-owned corporations in the gas hub²

Period ³	Project	Current value of participation by State-owned corporation (in millions of euros)
<i>Projects relating to the national gas network</i>		
2005-2011	1st round	1,070
2007-2013	2nd round	546
2011	3rd round (partial)	495
2004-2014	Total additional	874
Subtotal		2,985
<i>Projects relating to import and export pipelines</i>		
2004-2006	BBL	
2008-2010	Expansion of BBL	
2008-2012	Nord Stream	1,686
2010-2013	NEL	
2011	3rd stage (partial)	
2008	Purchase of German gas network	2,150
Subtotal		3,836
<i>Projects relating to gas storage and LNG</i>		
2007-2011	GATE, 1st and 2nd stages (LNG)	1,039
2006-2011	Zuidwending gas storage facility	
2009	Bergermeer gas storage facility	326
Subtotal		1,365
Total value of current projects		8,186
<i>Future projects</i>		
	Gasunie's investment plans for the national network	1,425
Total		9,611

¹ Sources: Gasunie statement showing the position as at January 2011, Gasunie's half-yearly report for 2011 (Gasunie, 2011a), correspondence between EBN and the Ministry of Economic Affairs, Agriculture and Innovation.

² The totals are indicative only, as we were not able to adjust them for inflation.

³ Period as quoted by Gasunie, covering all project stages from planning and needs assessment to implementation and completion.



Given that there are no clear start and end dates for the gas hub strategy, it is difficult to determine exactly how much money has been invested in total. The above figures suggest that the total amount invested in the gas hub during the period from 2004 to 2014 is €9.6 billion. Gasunie has stated that it is planning to invest a further €4 billion in the national transmission network alone during the next ten years.²¹ If this figure is added to the figures in the table, the aggregate value of the investments works out at approximately €12 billion. Of this total, some €7 billion relates to the national network. In 2007, at the time when the decision was taken on the first stage of the gas hub, Gasunie was banking on spending a *total* of €3 billion on the national network.²²

3.2.2 Risks for the State

Gasunie and EBN are exposed to certain financial risks as a result of their investments in the infrastructure for the gas hub. These risks may also affect their shareholder, i.e. the State of the Netherlands. This section describes the financial risks and their potential consequences.

3.2.2.1 *Gasunie's investment portfolio is squeezing dividends*

Gasunie has invested large sums in recent years in projects relating to the gas hub. The projects comprise both projects centring on the construction of domestic pipelines (these being performed by its subsidiary, GTS) and commercial and/or foreign projects, such as the company's contribution to the construction of Nord Stream pipeline (used for transporting gas from Russia to Germany), the construction of an LNG terminal, and the acquisition of part of the German gas network.

Many of Gasunie's investments are funded with bank loans. The presence of these loans tends to push up its debt ratio, i.e. the ratio of debt to total assets. The high funding costs put pressure on Gasunie's short-term profitability. This may affect the dividend payments made by Gasunie to the State. Between 2005 and 2009, the amount of dividend income received by the State fluctuated between €296 and €432 million per annum (Gasunie, 2006; 2007; 2008b; 2009, 2010).

As early as in 2007, the Ministry of Finance made clear that it expected that the annual dividend payments the State received from Gasunie would be lower than projected on account of the massive programme of

²¹ The figures are taken from a letter sent by Gasunie to the Ministry of Economic Affairs on 14 October 2010.

²² This is the figure quoted in a Gasunie report on the business case for the first stage of the gas hub.



investments that Gasunie was planning for the future. The Ministry does not rule out the possibility that an injection of capital from the State might be needed at some future point (Ministry of Finance, 2011). In 2009, Gasunie used €294 million of its equity capital in order to maintain its dividend payments (Gasunie, 2010). In 2010, the dividend declined to €182 million; 60% of the profit earned in 2010, i.e. a figure of €272 million, was transferred to the general reserve (Gasunie, 2011b). The half-yearly report published by Gasunie in 2011 shows that it suffered a loss of €548 million during the first six months of the year. The Managing Board forecast a loss of €370 million for the year as a whole (Gasunie, 2011a).

55

The uncertainty surrounding the return on investments in the gas hub is illustrated by the results of Gasunie's recent purchase of the German gas network (see box).

Gasunie's purchase of the German gas transmission network

In 2008, Gasunie bought part of the German gas transmission network for a price of €2.1 billion. The tariffs that Gasunie is entitled to charge customers for the use of this network are controlled by the German regulator. Shortly after the takeover, the German regulator decided to review gas transmission tariffs. These were then set lower than Gasunie and the Minister of Finance had expected. Due to the lower than expected revenue, Gasunie was forced to apply a capital charge of €570 million (after already writing-down the network's book value by €150 million). When Gasunie presented its half-yearly figures for 2011, it announced a €679 charge on the goodwill resulting from the purchase of the German network. This takes the aggregate value of the write-down applied to the German network to approximately €1.4 billion.

The resultant loss on the German network prompted Gasunie to adjust the profit and dividend projections for the Dutch State. At the time when the purchase was completed, Gasunie and the Ministry of Finance knew that the regulation of transmission tariffs in Germany posed a risk. When he assessed the investment proposal, the Minister of Finance assumed that the German network would generate a positive income in the short term, i.e. of €26 million in 2010, rising to €65 million in 2017, plus extra dividend. In the event, Gasunie Deutschland has made a loss during the first few years following the acquisition of the German network in 2008.



Gas network acts as collateral for investments

When undertaking investments, Gasunie benefits from the fact that it owns the national gas transmission network in the Netherlands and, by extension, from the boost this has given to its equity capital. What this means is that its debt ratio, i.e. the ratio of loan to equity capital,²³ is lower than it would have been had it not owned the gas network. Thanks to this relatively low debt ratio, Gasunie can borrow relatively cheaply and the national gas network forms the collateral for its investments.

In the run-up to the implementation in the Netherlands of the European Commission's Third Energy Package,²⁴ the government has found it hard to decide whether the Netherlands is currently acting in compliance with EU law. The problem is that, under this package of EU directives and regulations, a national network must be owned and operated by one and the same entity. The issue is whether the Dutch gas network fulfils this condition, given that it is owned by Gasunie but operated by GTS, a Gasunie subsidiary. Initially, the Ministry of Economic Affairs, Agriculture and Innovation wanted to transfer the ownership of the network to GTS, on the grounds that this would mitigate the risk of any adverse effects resulting from Gasunie's commercial activities being passed on to the network operator. However, Gasunie and the Minister of Finance believed that this entailed a financial risk. They were concerned that the transfer of the ownership of the network from Gasunie to its subsidiary, GTS, would affect Gasunie's cost of funding and hence make it more difficult to invest in the gas hub. In the end, the Minister of Economic Affairs, Agriculture and Innovation decided that the Netherlands was in compliance with EU law.

Doubts about tariff regulation

The gas transmission tariffs that Gasunie is allowed to charge its customers is a major determinant of the company's income. During the period up to 2010, Gasunie's investments were based largely on the projected level of income generated by the current transmission tariffs, in accordance with the conditions set by the Minister of Economic Affairs, Agriculture and Innovation.

²³ Loan, or debt, capital consists of debts and liabilities.

²⁴ The Third Energy Package is a set of EU directives and regulations aimed at fostering the internal energy market in Europe.

**Why are gas transmission tariffs regulated?**

57

The rationale for 'officially' regulating the tariffs paid by network users stems from the fact that gas networks are natural monopolies. Given this situation, it is the regulator's job to ensure that transmission tariffs are not too high. The regulators (i.e. the NMa and the German regulator in this case) set the tariffs that GTS (in the Netherlands) and Gasunie (in Germany) are allowed to charge their customers. The tariffs are set in such a way as not only to encourage network operators to operate more efficiently but also to leave sufficient scope for investments. The regulators are independent by law.

In June 2010, a Dutch court set aside the decisions taken by the NMa in relation to the regulation of transmission tariffs for the national gas network (Trade and Industry Appeals Tribunal, 2010). The reason given by the court for quashing these decisions was that the Minister of Economic Affairs, Agriculture and Innovation had overstepped her authority by setting the value of the national gas network used by the NMa as the basis for its regulatory decisions (Trade and Industry Appeals Tribunal, 2010).

In the spring of 2011, the NMa announced that the tariffs it had set for GTS during the past few years were too high (NMa, 2011c). In response to this announcement, Gasunie applied a €900 million capital charge, consisting of a write-down both in the value of the Dutch gas network and in goodwill (Gasunie, 2011a). It did so because lower tariffs meant less income, which would in turn affect Gasunie's investments in the construction of nationwide pipelines. In the autumn of 2011, it was announced that Gasunie would have to repay a sum of €400 million over the coming years (NMa, 2011a). Gasunie, EnergieNed (the association of energy producers) and VEMW (the association of bulk energy buyers) all lodged appeals with the Trade and Industry Appeals Tribunal against these decisions.

New plans announced by the Minister of Economic Affairs, Agriculture and Innovation

So as to provide additional opportunities for investments in energy security, the Minister announced in the 2011 Energy Report that he was planning to adjust the law on the regulation of gas transmission tariffs. He also made clear that 'a reasonable return' would henceforth be cited explicitly as one of the criteria applied in the system of tariff regulation (Ministry of Economic Affairs, Agriculture and Innovation, 2011b). It should be pointed out that the current law on gas transmission tariffs



already refers to the need for network operators to earn a reasonable return (NMa, 2011b).

58

The most recent edition of the Energy Report also states that the government is planning to amend the law in order to adjust the funding of investments in the operation of the national network. To quote from the Energy Report: *'In amending the law in this way, the government is paving the way for the operators of the national network to make use of private sources of finance and hence to make it easier for them to gain access to the capital market. This will also enable national network operators to raise additional finance without putting pressure on the national budget'* (Ministry of Economic Affairs, Agriculture and Innovation, 2011b).

Gasunie's CEO says he expects private investors will demand a higher rate of return, adding that this will not therefore solve the problem of the funding of Gasunie's investments (Persson, 2011). As a further complication, the State will also need to take account of third-party investors in exercising its rights as a shareholder.

3.2.2.2 Risks associated with EBN's role in the Bergermeer gas storage project
EBN, a State-owned corporation, is involved in the construction (and subsequent operation) of a gas storage facility in a former gas field known as Bergermeer. As EBN's sole shareholder, the Minister of Economic Affairs, Agriculture and Innovation has given her consent to this investment (see also the next section).²⁵ Under section 82 of the Mining Act, the storage of gas is one of EBN's commercial tasks. The Bergermeer gas storage project is currently EBN's only commercial activity.

²⁵ In the light of the arrangements between the Minister and EBN, as laid down in the latter's articles of association.

**The function of gas storage**

59

The demand for gas varies enormously. Logically, for example, there is more demand for gas in the winter than there is in the summer. But the level of demand can also fluctuate within a given season, for example as a result of price variations. A certain amount of flexibility needs to be built into the gas transmission network if it is to be able to cope with variations in the level of demand.

In the Netherlands, the Groningen gas field supplies the bulk of this flexibility. However, with the Groningen field slowly depleting, other forms of flexibility are now needed. Gas storage is one of the alternatives; a more efficient use of the gas transmission network is another. The NMa decided to adjust the system of tariff regulation in 2011 in order to facilitate the latter process. This change may affect the demand for gas storage capacity and hence the profitability of the Bergermeer gas storage facility.

Under the terms of the Mining Act, the money earned by EBN from its public duties (i.e. the exploration for and production of natural gas) may not be used for the purpose of funding commercial activities. The Minister of Economic Affairs, Agriculture and Innovation has insisted on the formation of a separate limited company to provide an additional guarantee that EBN's liability is limited to the value of its initial investment in the Bergermeer project. EBN is required to seek the Minister's prior consent for the incorporation of a separate company for this specific purpose. The company has yet to be set up. There is a risk of financial losses being incurred: for example, the demand for storage capacity could prove lower than previously estimated, or the supply of competitive capacity could prove greater than anticipated.

Postponement of decision on adjustment of tariff regulation entails risk of Bergermeer being underused

Once work on the Bergermeer gas storage facility has been completed, gas will be diverted from the network to the storage facility and then transported back to the network at a later stage. In return, the parties making use of the storage facility (i.e. Bergermeer's customers) will pay entry and exit tariffs to GTS as the network operator. These entry and exit tariffs form part of the transmission tariffs.

In order to create a better investment climate for gas storage, the Minister of Economic Affairs, Agriculture and Innovation has asked GTS to lower the entry and exit tariffs for the use of gas storage facilities (Ministry of Economic Affairs, 2009b). However, pending the



announcement of a fresh decision by the NMa on the regulation of gas transmission tariffs, GTS has decided to postpone the adjustment of these charges until further notice. It is worth noting, incidentally, that the NMa doubts whether it is possible only to adjust the entry and exit tariffs, as the law makes clear that the tariffs should be non-discriminatory.

60

In calculating the future return on their investments, the parties involved in the Bergermeer project assumed that the entry and exit tariffs would be lowered. If they are not lowered, the costs incurred by users of the gas storage facility will be higher than projected; in the worst case, this may lead to the facility not being used to its full capacity. This, in turn, will affect the amount of revenue generated by the project, and hence the income earned by EBN and the State.

3.2.2.3 *Doubts about the revenue generated by the gas hub*

Between 2005 and 2014, Gasunie and EBN invested a total of €8.2 billion in the gas hub. The question is: are there any benefits to set against the costs and risks? There is no clear information on the returns on the investments in the gas hub. Gas prices could fall if the supply of gas grows larger and more diversified, but this is difficult to predict. Energy prices are also dependent on other factors, including those of a geopolitical and economic nature.

The Ministry of Economic Affairs, Agriculture and Innovation asked the Brattle Group to calculate the future revenue generated by the gas hub (Brattle Group, 2010). The researchers concluded that the additional economic activity produced by the gas hub would be worth €21 billion and that it would generate 13,000 jobs on a yearly basis over a ten-year period. We would question the validity of these conclusions, though. A large proportion of the projected extra economic activity that the Brattle researchers attribute to the gas hub is in fact based on the current 'small fields policy'.²⁶ In other words, this activity may not be described as 'additional'. Moreover, the researchers' calculations do not take account of the possibility of a decline in Gasunie's revenue due to changes in the regulation of gas transmission tariffs.²⁷

All energy consumers in the Netherlands contribute, either directly or indirectly, towards GTS's investments by paying transmission tariffs,

²⁶ The 'small fields policy' is designed to encourage gas production from relatively small gas fields (outside the Groningen gas field).

²⁷ It was logical that the court ruling in June 2010, together with the fact that the NMa was responsible for setting the network's asset value, would lead to a decline in revenue. It was already clear that the NMa favoured a lower asset value than the Minister did.



which are listed on their energy bills. The NMa estimates that the average consumer pays between €30 and €50 per annum for the national gas network. This represents between 3% and 5% of the gas bill.²⁸

61

3.3 Assessing the public-interest implications of the investments

We sought to ascertain whether the ministries concerned performed a systematic and verifiable assessment of whether the investments by Gasunie and EBN (as State-owned corporations) contributed to the public interest represented by the government's energy policy of securing a clean, affordable and reliable energy supply. Our audit concentrated on those investments which did not form part of the statutory duties of State-owned corporations.²⁹ The assessment of the public-interest implications (by the Minister of Finance in relation to Gasunie – if necessary after consulting the Minister of Economic Affairs, Agriculture and Innovation – and by the Minister of Economic Affairs, Agriculture and Innovation in relation to EBN) is an important aspect given that these are activities performed by State-owned corporations. The ownership of the share capital of these corporations is one of the means of safeguarding the public interest (Ministry of Finance, 2007).

In assessing the public-interest implications of these investments, the ministers need to decide whether they are conducive to the public interest. The conclusions they draw have no bearing on the cost-effectiveness of the gas hub strategy.

Role of the internal supervisor: the Supervisory Board

The way in which ministers assess investments is not the same as the way in which major investments are usually appraised by the Supervisory Boards of State-owned corporations. The ministers decide whether the plans are in the public interest, whereas the Supervisory Boards primarily seek to ascertain whether they are in the interests of the corporation and its business activities. The Minister of Economic Affairs, Agriculture and Innovation gave a clear explanation of this distinction in the most recent progress report on the gas hub: Gasunie is an independent company with a Supervisory Board that appraises the business merits of investments plans; the same applies to EBN, whose Supervisory Board approves a

²⁸ Bulk consumers such as heavy industry pay much more than this.

²⁹ The benefits of and the need for investments made to discharge the corporations' statutory duties are assessed in advance by the Minister of Economic Affairs, Agriculture and Innovation.



given investment only if it is in the company's interests (Ministry of Economic Affairs, Agriculture and Innovation, 2011g).

62

In relation to investments proposals submitted by both Gasunie and EBN, the approval of the minister as the corporation's shareholder follows after the Supervisory Board has given its own approval. Once the plans have been approved by the Supervisory Board, they are submitted to the minister, together with all relevant documents such as business cases. As the sole shareholder, the State is the company's supreme governing body.

The Supervisory Boards of both Gasunie and EBN are required to give their consent to investments of more than €50 million. In Gasunie's case, the Supervisory Board has formed a special committee, known as the Strategic Investment Committee (SIC), for this specific purpose. The SIC advises the Supervisory Board and prepares decisions on investment proposals. The SIC assesses investment proposals, advises the Supervisory Board on their financial viability, and decides whether the plans are in accordance with the company's strategic policy. The SIC was formed in 2005 in response to the changes in the ownership structure around that time.³⁰

Meetings between the Supervisory Board and the shareholder are held at least once a year. Gasunie's Supervisory Board provides the shareholder with any information it requests, unless vital company interests or statutory regulations prevent it from doing so, in which case it must explain why it has decided not to provide the requested information. Gasunie's quarterly financial reports are discussed with the Ministry of Finance every quarter. These reports consists of a set of financial statements and a progress report on current projects. Gasunie also sends the Ministry of Finance an updated business plan every year, plus a investment programme for the coming ten years.

EBN's Supervisory Board holds routine meetings with the Ministry of Economic Affairs, Agriculture and Innovation at least four times a year. The Ministry also receives quarterly reports, a long-term strategic plan and an annual report. Strategic consultations are held once a year between the Ministry of Economic Affairs, Agriculture and Innovation and the chair of EBN's Supervisory Board.

³⁰ Gasunie was split in the same year into a transmission business and a trading business, later known as GasTerra. The Minister of Finance became the owner of Gasunie's transmission business, while the Minister of Economic Affairs, Agriculture and Innovation retained control of Gasunie's trading activities.



Division of responsibilities between ministers

63

The Minister of Finance is responsible for assessing major investment plans prepared by Gasunie, i.e. the value of which is greater than €100 million.³¹ Where Gasunie's investments are concerned, the Minister of Economic Affairs, Agriculture and Innovation is the specialist minister responsible for government policy. Writing in the government's policy document on State-owned corporations (Ministry of Finance, 2007), the Minister of Finance explains that the specialist ministers have a specific role to play in *'...deciding whether the company's strategy is sufficiently aligned with the relevant public interest, and whether major investment proposals may be regarded as being conducive to the public interest'*.

In practice, the Minister of Economic Affairs, Agriculture and Innovation is consulted mainly where it is not immediately clear whether the investments that Gasunie is proposing to make are in the public interest. These are commercial and/or foreign investments, i.e. investments that are not required in order for GTS, Gasunie's subsidiary, to discharge its statutory duty. Where the plans relate to investments that do ensue from GTS's statutory duty (such as investments in the national gas network), the Minister of Finance regards their public interest as being self-evident.

If the Minister of Economic Affairs, Agriculture and Innovation is involved in assessing the public-interest implications of a given investment, he or she takes his or her lead from the three pillars of the government's energy policy, i.e. the need for the energy supply to be affordable, reliable and clean. The Ministry of Economic Affairs, Agriculture and Innovation does not use a fixed assessment framework consisting of a set of clearly defined criteria for assessing the public-interest implications. The Minister of Economic Affairs, Agriculture and Innovation has claimed that all investments by Gasunie (and by EBN, in so far as these are gas-related) are in line with the gas hub strategy (Ministry of Economic Affairs, Agriculture and Innovation, 2011e).

EBN is a 'policy-based affiliate'³² set up by the Minister of Economic Affairs, Agriculture and Innovation. In other words, as the sole shareholder, the Minister of Economic Affairs, Agriculture and Innovation is empowered to approve EBN's investment plans. In assessing the latter,

³¹ See article 24.7 (d) of Gasunie's articles of association (July 2008).

³² A 'policy-based affiliate' is a state-owned corporation whose management has not been transferred to the Minister of Finance. This is because there are so many links, in terms of operational policy, between the state-owned corporation and a specialist ministry (in this case the Ministry of Economic Affairs, Agriculture and Innovation) that it is impossible to make an effective distinction between the operations of an independent entity on the one hand and the policy aspects on the other.



the Minister is required to examine both the expected returns and the safeguards for protecting the public interest. These requirements are set out in the government's policy document on State-owned corporations (Ministry of Finance, 2007).³³ In terms of internal organisational structure, the Ministry of Economic Affairs, Agriculture and Innovation distinguishes between its roles as a shareholder and as a policy-maker by distributing these roles over two separate organisational units, i.e. the Enterprise & Innovation Division and the Energy, Telecom and Competition Division respectively.

64

The Minister of Economic Affairs, Agriculture and Innovation laid down EBN's public tasks in the 2008 amendment to the Mining Act, clearly defining the scope available to EBN for performing commercial activities. In the first progress report on the gas hub strategy (Ministry of Economic Affairs, 2009b), the Minister described the role that EBN was capable of playing in relation to gas storage. EBN has been involved in the Bergermeer gas storage project on a commercial basis since 2009, taking a 40% share of the project (EBN, 2010).

If EBN wishes to perform a commercial activity, it must first ask for permission from the Minister of Economic Affairs, Agriculture and Innovation.³⁴ In deciding whether to give permission for such activities, the Minister is required to apply certain statutory criteria set out in the Mining Act. These state that these activities:

- must be closely related to the performance of EBN's statutory public duties;
- may not impede or interfere with the performance of these public duties;
- must serve the general interests of the government's energy policy.

Under EBN's articles of association, the shareholder must be asked to approve all investments worth €200 million or more.³⁵

We examined the way in which the public-interest implications were assessed in two specific cases, i.e. Gasunie's acquisition of part of the

³³ 'In exercising its rights as a shareholder in order to protect the public interest, the State will focus more actively on the company's strategic plans and on assessing major investment proposals that have a bearing on these plans. In this light, the State will no longer assess the company's strategy and related major investment decisions solely in terms of their projected return' (Ministry of Finance, 2007).

³⁴ Under article 82 (3) of the Mining Act.

³⁵ See article 10.7 (c) of EBN's articles of association.



German gas network and EBN's participation in the Bergermeer gas storage project.³⁶

65

Case study: Gasunie's purchase of part of the German gas network

Gasunie acquired part of the German gas network in 2008. The proposal for this investment was submitted to the responsible shareholder, the Minister of Finance, in 2007. Prior to this, Gasunie's Supervisory Board had already agreed to the proposal. One of the main issues debated by the Supervisory Board was how to set the best price to offer for the network. The Supervisory Board made emphatically clear that it regarded the purchase as forming part of the gas hub strategy formulated by the Minister of Economic Affairs, Agriculture and Innovation. The Supervisory Board took the view that it was up to the company's shareholder to decide on the strategy's political and financial consequences for the Netherlands.

After assessing the proposal, the Minister of Finance concluded that the purchase was in line both with Gasunie's strategy and with the energy policy formulated by the Minister of Economic Affairs, Agriculture and Innovation.³⁷ There is a note in the file stating that the Minister of Economic Affairs, Agriculture and Innovation had given her approval. As no records are available, it is not clear how the Minister arrived at the conclusion that the purchase would be conducive to the government's energy policy. The Ministry of Economic Affairs, Agriculture and Innovation does not have a file on the assessment of the investment in the German gas network.

The conclusion drawn by the Minister of Finance, on the basis of his assessment, was that, while there were reasonable grounds to justify the purchase of the gas network in Germany, a great deal of uncertainty continued to surround such aspects as the projected offer price, the calculation of the net cash value, and the strategic benefits that the purchase would generate for both Gasunie and the State. The thinking was that the purchase could help the formation of the gas hub and hence raise the country's energy security. Another advantage of the acquisition

³⁶ Our examination of the way in which the public-interest implications were assessed was conducted as we described at the beginning of this section, i.e. we sought to ascertain whether there was a systematic and verifiable assessment of the way in which the investments in the gas hub planned by Gasunie and EBN, two State-owned corporations, contributed to the public interest of the government's energy policy.

³⁷ The criteria set out by the Minister of Finance in his letter to the House of Representatives in 2009 (Parliamentary paper 28 165, no. 97) had not been published at the time of this assessment.



was that it would expand the market for gas from the Groningen gas field, thus generating extra income for the State.³⁸

66

The assessment report stated that Gasunie depended on various external parties and factors in order to realise these strategic benefits. Moreover, additional investments would be required. Although the purchase of the German network would make it easier to link up with the Nord Stream pipeline, the report claimed, the link still needed to be made. Moreover, the same benefits could be obtained without Gasunie having to acquire the German network.

Shortly after the deal was completed, a sum of €720 million was written-off the book value of the German gas network. This consists of a write-down of €150 million in 2008 in the light of the lower tariffs charged by Gasunie's competitors, plus a supplementary capital charge of €570 million in 2009. The latter write-down was the result of the lower transmission tariffs that the German regulator set for the German network as of 1 January 2009. A further €679 million was recently deducted from the goodwill resulting from the purchase of the German network. As things stand at present, therefore, the network's original value of €2.1 billion has been reduced by a total of around €1.4 billion.

At the time the decision was taken on the purchase of the German network, the Minister of Finance was aware of the doubts surrounding the regulation of transmission tariffs in Germany. He therefore realised that tariff regulation posed the main risk in this respect. The Minister of Finance decided that the potential benefits of the acquisition as described above outweighed the risk of an unfavourable decision by the regulator. The Minister assumed that the German network would boost Gasunie's revenue and would generate additional dividend income for the State.³⁹

Gasunie's purchase of the German network was not in itself sufficient to achieve the link-up with the Nord Stream pipeline landing gas in the north of Germany. A further investment was needed in order to bring this about. To this end, Gasunie acquired a 20% stake in the northern European gas pipeline (NEL) in April 2010. This pipeline should be able to link Gasunie's German network with Nord Stream's European landing point in Lubmin, Germany.

³⁸ This is confirmed by an internal memorandum from the Ministry of Finance dated 7 November 2007.

³⁹ Ibid.



Gasunie's Supervisory Board also consented to the acquisition of this interest before the Minister of Finance gave his own approval. The Minister of Finance regards Gasunie's participation in the NEL pipeline as forming part of the government's policy on the gas hub. We were not able to reconstruct, on the basis of information supplied by the Ministry of Finance, how the Ministry came to adopt this position and whether the Minister of Economic Affairs, Agriculture and Innovation was consulted about the public-interest implications of this 20% stake.

Case study: EBN's participation in the Bergermeer gas storage project

In September 2009, EBN's Supervisory Board gave the go-ahead to a proposal to take part in the Bergermeer gas storage project. The proposal was subsequently presented to the Minister of Economic Affairs, Agriculture and Innovation in October 2009, accompanied by the same supporting documents as had previously been submitted to EBN's Supervisory Board. As the responsible shareholder representing the Dutch State, the Minister of Economic Affairs, Agriculture and Innovation examined the anticipated return generated by, and the risks associated with, the gas storage facility, as well as the public-interest implications of EBN's involvement in the project. The Minister concluded that EBN's contribution to the project would assist the development of the Dutch gas hub and would improve the security of supply on the northwest European gas market.

In reaching this conclusion, the Minister took her lead from the statutory criteria: the project is closely related to the performance of EBN's statutory public duties; does not impede the performance of these duties; and serves the general interests of the government's energy policy. Nonetheless, it remains unclear *how* the Minister arrived at this conclusion. The Minister did not perform a verifiable assessment of the public-interest implications.

The Minister asked a number of critical questions about EBN's plans for joining the project, which EBN then answered. However, it is not clear what action was taken in response to EBN's answers, i.e. whether the ministry regarded them as sufficient or whether the investment plan was adjusted as a result.

On the basis of the projects encompassed by our audit, i.e. Gasunie's purchase of part of the German gas network, including its participation in the NEL pipeline, and EBN's involvement in the Bergermeer project, our conclusion is that no verifiable assessments were made of the public-interest implications of all the investment plans.



The Minister's plans for undertaking a minority privatisation of Gasunie should also be seen in the context of the need to safeguard the public interest. In the case of corporations in which the State is not the sole shareholder, the State needs to take account of the legitimate interests of its fellow-shareholders (Ministry of Finance, 2007).

3.4 Information supplied to the House of Representatives

The Minister of Economic Affairs, Agriculture and Innovation informed the House of Representatives about the gas hub, by sending it the customary energy reports, two progress reports in 2009 (Ministry of Economic Affairs, 2009b) and 2011 (Ministry of Economic Affairs, Agriculture and Innovation, 2011g), and a study on the economic impact of the gas hub strategy (Brattle Group, 2010). These publications contained clear information on the Minister's responsibility for government policy on the gas hub strategy. The Minister described the various facets of government policy and how he or she set about creating the necessary preconditions for the creation of the gas hub.

In the most recent progress report, published in November 2011 (Ministry of Economic Affairs, Agriculture and Innovation, 2011g), the Minister discussed the various lines of policy formulated for the gas hub strategy, and the results achieved to date. Regarding the investments made in the infrastructure (which form the subject matter of this report), the Minister made clear exactly how much Gasunie and EBN have invested in the gas hub. This she did not do in the previous progress report (even though Gasunie had already invested billions of euros at the time). In divulging these figures, the Minister supplied the House of Representatives with a more complete picture.

In addition to the improvements seen in the progress reports, there are also areas in which further improvements can be made. For example, the information given on the involvement of the Minister of Finance and the Minister of Economic Affairs, Agriculture and Innovation in the implementation of the gas hub strategy (through the investments made by State-owned corporations) is not transparent. Similarly, the risks and potential financial consequences for the State are not discussed. The Minister of Economic Affairs, Agriculture and Innovation did recently provide some information on these aspects in response to requests from the Senate (Ministry of Economic Affairs, Agriculture and Innovation,



2011f). Another area in which there is scope for improvement relates to the information provided on whether, and how, the public-interest implications of major commercial investments in the gas hub undertaken by Gasunie or EBN were assessed.

69

Although the Minister of Economic Affairs, Agriculture and Innovation did refer to the government's involvement in investments by State-owned corporations, in responding on the government's behalf to the Brattle Group study (Ministry of Economic Affairs, Agriculture and Innovation, 2011c), he did not discuss the State's role in these investment decisions.

A gas hub: benefits, need and risks



App

70



Appendix 1 List of abbreviations

BBL	Balgzand-Bacton Line (gas pipeline between the Netherlands and the UK)
CPB	Netherlands Bureau for Economic Policy Analysis
EBN	Energie Beheer Nederland
GTS	Gas Transport Services
LNG	Liquefied natural gas
NEL	Nordeuropäische Erdgasleitung (northern European gas pipeline)
NMa	Netherlands Competition Authority
VEMW	Dutch Association of bulk energy buyers



Appendix 2 Audit methods

We adopted the project proposal for this audit on 9 September 2010. Shortly afterwards, the external versions of the proposal were sent to the Ministry of Economic Affairs, Agriculture and Innovation, the Ministry of Finance and the Ministry of Foreign Affairs. Meetings were then held with the first two of the above ministries to discuss the audit procedure and scope. We also discussed the proposed audit with the management of Gasunie and the Governing Board of the Netherlands Competition Authority (NMa).

Further meetings were held with the two ministries, Gasunie and the NMA with a view to obtaining information for the audit. We also examined archives at the ministries and Gasunie to the same end. We held meetings with various European bodies, i.e. the permanent representative and DG Energy at the European Commission, firms (GasTerra, TAQA and 4Gas) and other relevant organisations, such as EnergieNed and TNO (the Netherlands Organisation for Applied Scientific Research).

Financial and other risks to which the State is exposed

Having already obtained information, during the course of our conversations with the Ministry of Economic Affairs, Agriculture and Innovation, the Ministry of Finance and Gasunie, on the financial risks associated with the gas hub to which the State is exposed, we examined files kept on the investments by the entities in question in order to gather further information for the relevant section of our audit report.

Evidence provided in support of the gas hub strategy

For the purpose of the section on the planning of, and the evidence provided in support of, government policy, we held meetings with representatives of the Ministry of Economic Affairs, Agriculture and Innovation and consulted the Ministry's archives on the gas hub. We also analysed the parliamentary documents on the gas hub in order to form a picture of what the House of Representatives was and was not told at the inception of the gas hub project.

Assessment of public-interest implications

For the purpose of preparing the section of the report on the assessment of the public-interest implications of investments in the gas hub by State-owned corporations, we asked the parties involved to send us certain files. We conducted a detailed examination of the files in relation to three specific aspects, viz. Gasunie's purchase of part of the German gas



network, Gasunie's participation in the NEL pipeline, and EBN's participation in the Bergermeer gas storage project.

73

The role of Supervisory Boards

We studied the role played by Supervisory Boards with the aid of information on the basic nature of their role, i.e. the wording of relevant acts of law, articles of association and company by-laws, and on the basis of the minutes of Supervisory Board meetings at the State-owned corporations in question (in so far as investment plans were discussed at these meetings).

Information supplied to the House of Representatives

We examined the way in which the House of Representatives was informed about the policy, both during the start-up stage and during its implementation, on the basis of parliamentary documents and files supplied by the Ministry of Economic Affairs, Agriculture and Innovation.

We submitted our audit findings to the Ministry of Economic Affairs, Agriculture and Innovation and the Ministry of Finance, and asked them to check these for any factual inaccuracies. Our report is based on the findings as verified by the ministries.

This report was presented to the Minister of Economic Affairs, Agriculture and Innovation and the Minister of Finance, both of whom were invited to respond to its contents. The text of their response is included in this report.



Appendix 3 Audit criteria

The criteria used as the basis for our audit are set out below, broken down according to the relevant section of the report.

Policy planning, and evidence provided in support of policy

Our general criteria for policy planning are that the government should first clearly define its objectives before formulating policies in response to demands from society (i.e. adopt demand-driven policies), that the government should determine which policy forms the best means of achieving its objective, and that it should have ascertained whether the policies it decides to adopt are potentially effective or have proven to be effective in the past. We applied the following specific criteria for the purpose of this audit:

- The policy objective must be 'smart', i.e. specific, measurable, attainable (as agreed with parliament), realistic and time-bound.
- The Minister should have verified whether the objectives can be attained within the agreed time limit and with the aid of the available manpower and resources. Reliable studies must be available showing that the gas hub is a policy tool that can achieve the desired objective; if not, the Minister must have shown this to be a plausible assumption.
- The Minister must be in possession of reliable scenario analyses for the future energy mix and the role of gas in this connection. The Minister should have used these analyses to adopt a position on the energy mix of the future and the role played by gas in this connection.
- The Minister must understand whether or not the government's objectives are consistent with EU plans and the plans devised by neighbouring countries. It must be clear how these plans can potentially affect the creation and operation of the gas hub.
- The Minister must have verified how the creation of a gas hub can help the government achieve the main aims of its energy policy, i.e. securing a clean, affordable and reliable energy supply.

Financial and other risks to which the State is exposed

We applied the following criteria to identify the financial and other risks to which the State is exposed as a result of the gas hub strategy:

- It must be clear how the costs are divided among the various entities (involved in the implementation of the strategy) and which entities are responsible for meeting any losses.



- The Minister must be aware of the financial risks assumed by State-owned corporations in order to create the gas hub, in so far as these may affect the Minister's policy aims.

75

Those provisions of the articles of association of EBN and Gasunie which state that the approval of the State is required for investments in excess of a given threshold also acted as audit criteria in this respect.

- Article 10.7 of EBN's articles of association: *The management needs to obtain the approval of the general meeting of shareholders for decisions to [...] (c) make investments or disinvestments or to perform transactions other than those described above in this paragraph, if the value of these transactions to the company is in excess of two hundred million euros (€200,000,000) or a higher amount set by the general meeting of shareholders and communicated to the management;* Article 24.7 of Gasunie's articles of association: *The approval of the general meeting of shareholders is required for decisions taken by the managing board to make a significant change in the identity or character of the company or its business, including in any event:*
- *[...] (d) a decision for the company or an independent entity to make an investment or disinvestment of at least one hundred million euros (€100,000,000), or a higher amount set by the general meeting of shareholders and communicated to the managing board, in another company's capital, and also a decision to make a drastic increase or reduction in such a shareholding.*

Assessment of public-interest implications

Our audit of the assessment of the public-interest implications of investments is based on our general criteria for policy information, i.e. that the ministry in question must gather such information in a systematic, verifiable and thorough manner. More specifically,

- The shareholder representing the State must have performed a systematic and verifiable assessment, either independently or in conjunction with the minister responsible for the relevant field of policy, of whether the proposed investment is conducive to the attainment of the government's energy policy objectives of securing a clean, affordable and reliable energy supply.
- With a view to those State-owned corporations making these investments, the ministries concerned must have drawn a functional distinction between the specific interests of the shareholder or shareholders and the general interests of energy security.



Information supplied to the House of Representatives

76

We looked at the information given to the House of Representatives both when the policy was adopted and when it was implemented. We applied the following criteria for this purpose:

- At the inception of the strategy, the House of Representatives must have received relevant information in good time concerning all the advantages and disadvantages of the proposed policy tool of which the minister was aware at the time. In particular, the House must have been informed about the consideration given to alternative means of achieving the same aim; the anticipated costs, benefits and risks; the proposed means of funding and budgeting; and the strategy's effects on other aspects of energy policy.
- The Minister should report to the House of Representatives on a regular basis, providing information on the method of risk management, the progress made in implementing the strategy (in terms of both financial and other milestones) as compared with the timetable, and any changes in the policy setting that could affect the attainment of the policy aims.



Bibliography

Brattle Group (2010). *Economic Impact of the Dutch Gas Hub Strategy on the Netherlands*. House of Representatives, 2010–2011 session. Appendix to Parliamentary Paper 29 023, no. 78. The Hague: Ministry of Economic Affairs, Agriculture and Innovation.

Council of State (2009). *Wijziging van de Gaswet en de Elektriciteitswet 1998, tot versterking van de werking van de gasmarkt, verbetering van de voorzieningszekerheid en houdende regels met betrekking tot de voorrang voor duurzame elektriciteit, alsmede enkele andere wijzigingen van deze wetten*. Council of State report. House of Representatives, 2008–2009 session, 31 904, no. 4. The Hague: Sdu.

EBN (2008). Articles of Association of Energie Beheer Nederland BV. Reference no. 80 047 591 RTD C 605 961/3. Utrecht: Energie Beheer Nederland BV.

EBN (2010). List of shareholdings of Energie Beheer Nederland B.V. http://www.ebn.nl/files/lijt_deelnemingen.xls, consulted on 19 January 2011.

Energy Information Administration, US Department of Energy (2008). *Annual Energy Outlook 2008; With Projections to 2030*. DOE/EIA-0383(2008). June 2008. Washington: Energy Information Administration.

Gasunie (2006). *Jaarverslag 2005 NV Nederlandse Gasunie*. Groningen: Gasunie publication.

Gasunie (2007). *Jaarverslag 2006 NV Nederlandse Gasunie*. Groningen: Gasunie publication.

Gasunie (2008a). *Akte van Statutenwijziging NV Nederlandse Gasunie*. Version 9 adopted on 28 July 2008. Groningen: Gasunie publication.

Gasunie (2008b). *Jaarverslag 2007 NV Nederlandse Gasunie*. Groningen: Gasunie publication.

Gasunie (2009). *Jaarverslag 2008 NV Nederlandse Gasunie*. Groningen: Gasunie publication.



Gasunie (2010). *Jaarverslag 2009 NV Nederlandse Gasunie*. Groningen: Gasunie publication.

78

Gasunie (2011a). *Halfjaarbericht 2011 NV Nederlandse Gasunie*. Groningen: Gasunie publication.

Gasunie (2011b). *Jaarverslag 2010 NV Nederlandse Gasunie*. Groningen: Gasunie publication.

Ministry of Economic Affairs (2005). *Voorzienings- en leveringszekerheid energie*. Letter from the Minister of Economic Affairs to the House of Representatives in response to report entitled 'Gas voor Morgen' ('Gas for tomorrow'). House of Representatives, 2004–2005 session, 29 023, no. 10. The Hague: Sdu.

Ministry of Economic Affairs (2007). *Voorzienings- en leveringszekerheid energie*. Letter from the Minister of Economic Affairs to the House of Representatives outlining a new regulatory framework for gas transmission tariffs. House of Representatives, 2006–2007 session, 29 023, no. 37. The Hague: Sdu.

Ministry of Economic Affairs (2008). *Energierapport 2008*. House of Representatives, session 2007–2008. Appendix to Parliamentary Paper 31 510, no. 1. The Hague: Ministry of Economic Affairs, Energy and Telecom Division.

Ministry of Economic Affairs (2009a). *Vaststelling van de begrotingsstaten van het ministerie van Economische Zaken (XIII) voor het jaar 2010; Memorie van Toelichting*. House of Representatives, 2009–2010 session, 32 123 XIII, no. 2. The Hague: Sdu.

Ministry of Economic Affairs (2009b). *Voorzienings- en leveringszekerheid energie*. Letter from the Minister of Economic Affairs to the House of Representatives containing a progress report on the government's strategy for turning the Netherlands into a gas hub. House of Representatives, 2009–2010 session, 29 023, no. 73. The Hague: Sdu.

Ministry of Economic Affairs (2010). *Vaststelling van de begrotingsstaten van het ministerie van Economische Zaken (XIII) voor het jaar 2011; Memorie van Toelichting*. House of Representatives, 2010–2011 session, 32 500 XII, no. 2. The Hague: Sdu.



Ministry of Economic Affairs, Agriculture and Innovation (2010). *Voorzienings- en leveringszekerheid energie*. Letter from the Minister of Economic Affairs, Agriculture and Innovation to the House of Representatives accompanying a study of the contribution of the gas hub to the Dutch economy. House of Representatives, 2010–2011 session, 29 023, no. 78. The Hague: Sdu.

Ministry of Economic Affairs, Agriculture and Innovation (2011a). *Vragen van het lid Paulus Jansen (SP) aan de ministers van Economische Zaken, Landbouw en Innovatie en van Financiën over het verlagen van de nettarieven voor Gasunie door de NMa (ingezonden 3 augustus 2011)*. Reply. House of Representatives, Parliamentary questions with replies 2010–2011, no. 3559. The Hague: Sdu.

Ministry of Economic Affairs, Agriculture and Innovation (2011b). *Energierapport*. Letter from the Minister accompanying the 2011 Energy Report. House of Representatives, 2010–2011 session, 31 510, no. 45. The Hague: Sdu.

Ministry of Economic Affairs, Agriculture and Innovation (2011c). *Voorzienings- en leveringszekerheid energie*. Government response to study of the economic impact of the gas hub strategy. House of Representatives, 2010–2011 session, 29 023, no. 79. The Hague: Sdu.

Ministry of Economic Affairs, Agriculture and Innovation (2011d). Letter of 14 October 2011 from the Minister of Economic Affairs, Agriculture and Innovation in reply to questions asked in the Senate. *Voorzienings- en leveringszekerheid energie. Verslag schriftelijk overleg over de Gasrotonde*. Senate, 2011–2012 session, 29 023, E. The Hague: Sdu.

Ministry of Economic Affairs, Agriculture and Innovation (2011e). Letter of 1 June 2011 from the Minister of Economic Affairs, Agriculture and Innovation in reply to questions asked in the Senate. *Voorzienings- en leveringszekerheid energie. Verslag schriftelijk overleg over de studie 'Economic Impact of the Dutch Gas Hub Strategy'*. Senate, 2011–2012 session, 29 023, C. The Hague: Sdu.

Ministry of Economic Affairs, Agriculture and Innovation (2011f). Letter of 5 December 2011 from the Minister of Economic Affairs, Agriculture and Innovation in reply to questions asked in the Senate. *Voorzienings- en leveringszekerheid energie. Verslag schriftelijk overleg met nadere vragen over het Gasrotondeproject*. Senate, 2011–2012 session, 29 023, F. The Hague: Sdu.



Ministry of Economic Affairs, Agriculture and Innovation (2011g). *Voortgangsrapportage Gasrotonde 2011*. House of Representatives, 2011–2012 session. Appendix to Parliamentary Paper 29 023, no. 112. The Hague: Sdu.

Ministry of Finance (2007). *Deelnemingenbeleid Rijksoverheid*. Policy document setting out government policy on State-owned corporations. House of Representatives, 2007–2008 session, 28 165, no. 69. The Hague: Sdu.

Netherlands Court of Audit (2009). *Tariefregulering Energienetbeheer*. House of Representatives, 2008–2009 session, 31 901, no. 2. The Hague: Sdu.

NMa (2011a). 'NMa: GTS moet 400 miljoen euro terugbetalen aan afnemers.' News item published on 12 October 2011.
http://www.nma.nl/documenten_en_publicaties/archiefpagina_nieuwsberichten/nieuwsberichten/2011/49_11_nma_gts_moet_400_miljoen_euro_terugbetalen_aan_afnemers.aspx, consulted on 16 November 2011.

NMa (2011b). Jaap de Keijzer: 'Goed dat minderheidsprivatisering in energiesector mogelijk wordt'. Weblog published on 16 June 2011.
http://www.nma.nl/documenten_en_publicaties/opinie/reacties_lezingen_en_speeches/jaap_de_keijzer__goed_dat_minderheidsprivatisering_in_energiesector_mogelijk_wordt.aspx, consulted on 14 May 2011.

NMa (2011c). 'NMa legt ontwerp-methodebesluiten GTS ter inzage'. Press release issued on 17 May 2011.
http://www.nma.nl/documenten_en_publicaties/archiefpagina_nieuwsberichten/nieuwsberichten/2011/21_11_nma_legt_ontwerp_methodebesluiten_gts_ter_inzage.aspx, consulted on 11 May 2012.

Persson, M. (2011). *Staatsbedrijven met geldgebrek*. Article published in *De Volkskrant* on 16 June 2011, p. 22.

Trade and Industry Appeals Tribunal (2010). *Uitspraak inzake methodebesluiten landelijk gastransportnet*. Case no. BM9470. Date of ruling: 29 June 2010. The Hague: Trade and Industry Appeals Tribunal.