

# Use of natural gas revenues: facts, figures and scenarios

The original report *Besteding van aardgasbaten: feiten, cijfers en scenario's* was adopted on 6 October 2014 and presented to the House of Representatives on 7 October 2014.



# Contents

<b>Report in brief</b>	<b>5</b>
<b>1 About this audit</b>	<b>9</b>
1.1 Background	9
1.2 Topic and audit questions	10
1.3 Summary	10
<b>2 Facts and figures on natural gas: extraction, revenues and spending</b>	<b>11</b>
2.1 Development of natural gas extraction in the Netherlands	11
2.2 Development of natural gas revenues in the Netherlands	14
2.2.1 Important source of revenue	14
2.2.2 Fluctuations in natural gas revenues between 1966 and 2013	14
2.2.3 Natural gas revenues from Groningen field compared to those from small fields	15
2.3 Use of natural gas revenues	16
<b>3 Economic Structure Enhancement Fund (FES)</b>	<b>18</b>
3.1 FES: history of origin, goals and organisation	18
3.1.1 Award procedure for FES projects	18
3.1.2 Accountability procedure for FES projects	21
3.2 FES income and expenditure	21
3.2.1 FES income	22
3.2.2 FES expenditure	23
3.3 FES policy changes	23
3.3.1 Explanation and interpretation of key changes	24
3.3.2 Uncertainty about the regularity of expenditure after termination of the FES	25
3.3.3 Criticism of guiding principles and handling of the FES	26
<b>4 Creation of a State capital fund</b>	<b>27</b>
4.1 What is a State capital fund?	27
4.2 Model-based calculation: What if the Netherlands had followed the Norwegian strategy?	28
4.3 Model-based calculation: What if the FES had been a capital fund?	29
4.4 Model-based calculation: What if the Netherlands follows the Norwegian strategy in future?	30
<b>5 Scenarios for the future</b>	<b>32</b>
5.1 Scenario 1: Spend natural gas revenues through the general budget	32
5.2 Scenario 2: Place natural gas revenues in a fund	32
5.2.1 Scenario 2A: Allocation fund	33
5.2.2 Scenario 2B: State capital fund	33
5.3 Lessons related to fund creation	34
<b>6 Response of the Minister and Afterword by the Netherlands Court of Audit</b>	<b>36</b>
6.1 Response of the Minister of Economic Affairs	36
6.2 Afterword by the Netherlands Court of Audit	37
<b>Appendix Organisation of natural gas extraction in the Netherlands</b>	<b>39</b>
<b>Literature</b>	<b>41</b>



## Report in brief

In 1959, a natural gas field was discovered in Slochteren in the province of Groningen. Since then, revenues from the extraction of natural gas have become an important source of income for the Dutch State. In this report, the Netherlands Court of Audit (Algemene Rekenkamer) has listed certain facts and figures on Dutch natural gas. We have investigated the size of natural gas revenues since 1960. We have also looked into how these revenues have been used. For this, we have focused extensively on the Economic Structure Enhancing Fund (Fonds Economische Structuurversterking, FES), into which a part of the natural gas revenues were deposited during the 1995-2010 period.

The government is currently working on the creation of a fund that will once again (partially) be fed by natural gas revenues. In view of the plans for the creation of this 'Future Fund', as it will be called, in this report we offer the parliament insight into how our country has used natural gas revenues in the past via funds, we examine possible scenarios for fund creation in the future, and we put forward certain lessons that can be drawn from the past.

### Findings

#### *Size of natural gas revenues since 1960*

The total State revenue from Dutch natural gas revenues in the period 1960-2013 amounted to approximately €265 billion.<sup>1</sup> Therefore, for more than fifty years, natural gas revenues have constituted a substantial source of revenue for the State. However, the relative importance of natural gas revenues as part of central government revenues has declined over the years. As a result of the oil crisis in the seventies of the last century, natural gas revenues amounted to nearly 20% of central government revenues in the early eighties.<sup>2</sup> At present, they comprise barely 10% of central government revenues. This is not because these natural gas revenues are less than in the past, but because other, chiefly tax-based, sources of central government revenues have increased sharply in the meantime.

#### *Exact use of majority of natural gas revenues not traceable*

Natural gas revenues have flowed into the treasury for the major part of the period between 1960 till today. This money has been used for the various budgetary targets of the ministries. However, except for the part deposited into the FES between 1995 and 2010, these funds cannot be traced to specific heads of expenditure.

#### *1995-2010 period: part of natural gas revenues deposited in the FES*

Between 1995 and 2010, a part of the natural gas revenues was deposited into the FES. Via this fund, a part of the natural gas revenues was allocated in the 1995-2010 period to expenditures that can be traced down to the project level. At the time, the purpose of the FES was to convert 'below-ground capital' into 'above-ground capital'. The intention was to achieve this via additional investment projects of national importance that would strengthen the economic structure. With this in view, amounts from the FES were provided to specialist departments. Hence, the FES served as an 'allocation fund'.

A total of €33 billion flowed into the FES, of which €26 billion came from natural gas revenues. About 80% of these funds were spent on investment projects in the area of traffic and transport, such as the Betuwe rail line and the High-Speed Line. In addition,

<sup>1</sup> These are the revenues without any adjustments for inflation.

<sup>2</sup> See Figure 4. This refers to revenues of the central government, exclusive of premium income.

projects in the field of knowledge infrastructure, spatial planning, soil remediation, nature, environment and sustainability were also financed.

The sources of FES funding and what the funds could be spent on was laid down in the FES Act when the fund was established. However, regular changes were made in this policy. A major change was the decision taken by the second Kok government in 1998 to transfer a number of existing projects from the Infrastructure Fund (*Infrastructuurfonds*) to the FES, from which they would henceforth be financed. This so-called ‘FES bridge’ signified a departure from the original guiding principle that only additional projects could be financed from the FES. The FES bridge was applied for the first time in the 2000 budget. Another significant change was that, from 2008 onwards, FES expenditure had to compete with current expenditure. The FES was ultimately terminated in 2010.

*Model-based calculation: What if the Netherlands had followed the Norwegian strategy?*

Unlike Norway and a number of other countries that also have large supplies of natural energy sources, the Netherlands has never opted to place its natural gas revenues in a State capital fund. If it had done so from the outset, in the same way as Norway,<sup>3</sup> the fund balance in the Netherlands on 1 January 2014 would have amounted to almost €350 billion.

In addition, in this scenario, 4% of the capital from the fund would have been added to the general budget annually. In 2013, this ‘withdrawal’ from the fund would have amounted to approximately €13 billion.

We have also calculated the potential size of a fund if, instead of following the ‘Norwegian model’ from the outset, the Netherlands had only followed this from 1995 onwards, when the FES was established. In this case, the FES funds would not have been used for the above-mentioned goals, but would have been invested in a State capital fund. In such a scenario, the FES would have amounted to almost €40 billion at the end of 2013.

However, as there would have been no allocation fund in this scenario, considerably less money would have been invested during the initial period.

It should be noted that the amounts mentioned here are the result of a purely mathematical exercise. We have not taken into account the (social) return of public expenditure financed via the central government budget from natural gas revenues.

We describe three ways in which the Netherlands could handle its natural gas revenues in the future.

### Three scenarios for the future use of natural gas revenues

#### *Spend natural gas revenues through the general budget*

A first possible future scenario is that natural gas revenues are spent entirely via the general budget, as is happening at present. Here, it is not possible to establish a relationship between the natural gas revenues and what they are used for.

The major benefit of this scenario is that there will be no additional financial shortfalls in the near future, which would have been the case if natural gas revenues were set aside in a separate fund. A disadvantage of this scenario is that the inevitable decrease in natural gas revenues (since our gas reserves will be exhausted within the foreseeable future) will not be offset by permanent revenues from, for example, a capital fund.

#### 3

Since 1996, Norway has been depositing its oil and gas revenues in a State capital fund. The average return of the fund is 5.6%. Each year, 4% of the capital from this fund is added to the general budget. The rest remains in the fund.

#### *Spend natural gas revenues through an allocation fund*

A second possible scenario is that the natural gas revenues are (partially) deposited into an allocation fund, similar to the now-defunct FES. An important advantage of an allocation fund is that this can help guarantee certain types of expenditure (e.g. investments) to give effect to the principle of ‘capital for capital’. Moreover, an allocation fund can be used to carry forward unutilised revenues to the next year. Depositing all the natural gas revenues into an allocation fund also has certain disadvantages. Since the revenues are earmarked for specific goals, these policy goals are not fully weighed up against other policy goals of the central government. Another disadvantage is that, in this scenario, just as in the scenario described above, an additional financing shortfall will be created in the short term.<sup>4</sup> Also, in case of an allocation fund, the decrease in natural gas revenues is not offset by the permanent income on the accumulated capital, as the case would have been if the revenues had been deposited into a capital fund.

#### *Spend natural gas revenues through a State capital fund*

A third possible scenario occurs if the Netherlands would take a decision to place its natural gas revenues in a State capital fund, based on the Norwegian example. If such a fund is established in the near future, this could lead to a capital accumulation of approximately €150 billion in 2035, as shown by our calculations. A disadvantage of this scenario is that it will lead to an additional budget deficit in the initial years, since the natural gas revenues will no longer be added to the general budget. The advantage of this scenario is that, after 2027, the return from the capital fund would exceed the expected annual natural gas revenues. In this way, the decrease in natural gas revenues will be (at least partially) offset by the permanent income on the capital accumulated, even when the natural gas revenues are completely exhausted.

### Lessons for future fund creation

The last two scenarios involve the creation of a fund. Based on our findings on the handling of the FES in the 1995-2010 period, in this report we put forward certain lessons to the parliament for future fund creation. We also do this with a view to the creation of the ‘Future Fund’, which will be funded with windfalls in natural gas revenues.

We distinguish three ‘lessons for the future’:

- When creating a fund, make a well-considered decision for a specific type of fund (capital fund/allocation fund) and ensure that the goals of the fund are clearly formulated and appropriate to the type of fund. Set up a clear set of procedures and criteria.
- Ensure that management of the fund and the advice provided on the award of funds occur independently.
- Make clear agreements on the provision of information and accountability for fund management and take the consequences of the outcomes of project evaluations.

<sup>4</sup>

There is one exception to this: an additional financing shortfall will not be created if the expenditure currently outgoing from the general budget is henceforth made out of the allocation fund.

### Response of the Minister of Economic Affairs

On 3 October 2014, the Minister of Economic Affairs responded to our audit. The Minister feels that our report suggests that it would be wise for the Netherlands to follow the Norwegian model and place its natural gas revenues in a State capital fund. The Minister endorses the importance of handling natural gas revenues in a prudent manner and refers to the plans for the Future Fund.

In his response, the Minister places three caveats on our model-based calculations and indicates that the fundamental considerations required to be made in our audit have not been sufficiently elucidated. In this context, he points out that a large amount is already being saved in the Netherlands via pension funds.

In the second part of his response, the Minister elaborates further on the lessons learnt and responds to these based on the plans for the Future Fund.

In our afterword to this report, we have pointed out that, unlike what the Minister suggests, we have not expressed any preference for the creation of a State capital fund. How natural gas revenues are used is a political decision. The fact that the Minister, in his response, weighs the lessons learnt against the plans for the Future Fund, indicates that he is using our report as intended: namely, as an aid for democratic decision-making on the future use of natural gas revenues.



# I About this audit

Since the thirties of the last century, there have been ongoing attempts in several places in the Netherlands to locate oil and gas fields. Initially only small fields were discovered, but in July 1959, the Nederlandse Aardolie Maatschappij (NAM) discovered the largest natural gas field in Europe beneath Slochteren in the province of Groningen. This field contained billions of cubic metres of natural gas that was very easily extractable. This discovery had (and continues to have) major consequences for Dutch government finances and has been a major influence on the development of the post-war welfare state.

## I.1 Background

The recent increase in the number of earthquakes in the province of Groningen and the resulting social discussion on natural gas extraction have prompted us to list certain facts and figures on natural gas extraction in the Netherlands and the use of natural gas revenues.

The use of natural gas revenues has also been a recurring topic of discussion in the parliament. One of the questions considered here is whether natural gas revenues should flow into the general budget or whether they should be earmarked for specific goals. In this context, the Norwegian State capital fund has been regularly referred to in the parliament and the media. This is an investment fund in which Norwegian oil revenues are deposited and through which the oil revenues are used for guaranteeing certain long-term interests, such as the national pension scheme.

In this report, we have included a number of model-based calculations on fund creation based on the ‘Norwegian model’. We have also examined the lessons that can be learned from the way in which the Economic Structure Enhancing Fund (FES), into which a part of the Dutch natural gas revenues have flowed, was managed.

The FES was in existence for a relatively short period, from 1995 to 2010. At present, a desire has been expressed within the House of Representatives to establish a new fund using a part of the natural gas revenues. On 24 June 2014<sup>5</sup>, the Pechtold motion was adopted to this end. In this motion, the government was requested to submit, at the latest by Budget Day 2014, a proposal for a fund that will be “aimed at sustainable economic growth, partially funded by a part of the gas revenues and that will be deployed, without affecting the principal sum of gas revenues, to finance innovative SMEs and the return from which will be earmarked for (basic) research” (House of Representatives, 2014).

Against the background of these plans for a new fund – to be called the ‘Future Fund’ – we offer the parliament insight into how our country has used natural gas revenues in the past. We also want to outline possible scenarios for the use of future natural gas revenues and the ‘lessons for future fund creation’ that can be drawn from these. In this way, we hope to contribute to the decision-making on the future use of natural gas revenues.

5

This took place during the debate in the House of Representatives on the report entitled *Naar een lerende economie (Towards a Learning Economy)* of the Scientific Council for Government Policy (WRR, 2013).

## 1.2 Topic and audit questions

In this audit, we have investigated the size of natural gas revenues earned by the central government since 1960 and how these revenues have been used.

We have focused on answering the following questions:

- What was the size of natural gas revenues for central government over the years and what has the money been spent on?
- What was the income and expenditure of the FES in the 1995-2010 period and how has this fund been handled over the years?
- What would be the size of the fund if the Netherlands had decided, like Norway, to place its natural gas revenues in a State capital fund, and how much capital could we potentially accumulate if we would henceforth deposit our natural gas revenues in a State capital fund?
- What lessons can we learn from the FES?

In answering these questions, we revert in part to our previous publications on this subject. In this context, we make a special reference to our audit entitled *Aardgasbaten* (Natural Gas Revenues) (Netherlands Court of Audit, 1999) and our reports accompanying the annual reports from 2008-2013 of the Ministry of Economic Affairs (EA) and the FES (Netherlands Court of Audit, 2009; 2011; 2012).

## 1.3 Summary

Chapter 2 of this report lists certain facts and figures on Dutch natural gas extraction and revenues. We also offer insight into the use of natural gas revenues over the years.

Chapter 3 focuses on the FES. We discuss the background to the creation of this fund and its original aims. We provide insight into the income and expenditure of the FES and describe some of the projects for which FES funds have been used. We also examine the policy changes implemented with respect to the FES and the significance of these changes.

In Chapter 4, we focus our attention on the alternative chosen by Norway: namely, to place its natural gas revenues in a State capital fund. We also describe the possible implications for the Netherlands if it would create a future fund based on the Norwegian model.

In Chapter 5, we formulate a number of scenarios for the use of future natural gas revenues. We also put forward certain lessons that we believe deserve attention in relation to future fund creation with natural gas revenues.

Chapter 6 contains a summary of the response of the Minister of Economic Affairs and an afterword from us.

## 2 Facts and figures on natural gas: extraction, revenues and spending

In this chapter, with the help of graphs, we outline the development of natural gas revenues since 1960, the size of these revenues and the relationship between natural gas revenues and State revenues. We also offer insight into the use of natural gas revenues over the years.

### 2.1 Development of natural gas extraction in the Netherlands

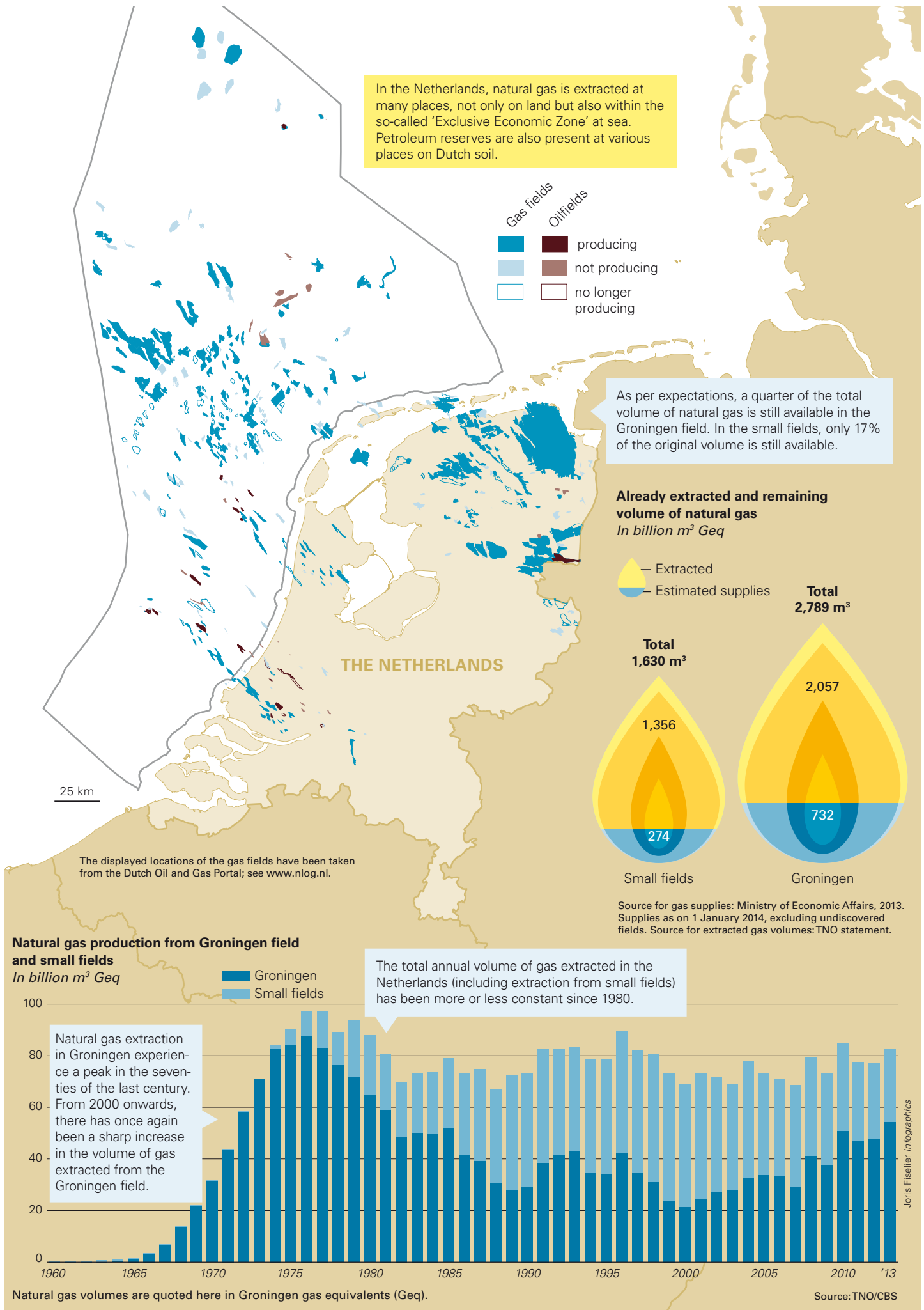
In 1959, the gas field known as the Groningen field was discovered in Slochteren. This discovery led to a search for more gas and oil, but no more fields as large as the Groningen field were found.

Natural gas extraction from the Groningen field started from the mid-sixties. The prevailing idea at the time was that the field had to be exploited quickly due to the rise of other types of energy, such as nuclear energy. Therefore, as much gas as possible was extracted from the Groningen field at first. However, subsequently greater emphasis was laid on extraction from the smaller fields, in order to maintain the natural gas reserves of the Groningen field as a buffer against occasional peaks in natural gas demand (also see §2.2.3).

#### Small Fields Policy

Since the extraction of gas from small fields entailed relatively high costs and the potential markets were uncertain, there was little interest initially from oil companies to exploit these small fields. To ensure the exploitation of these fields, so that the Groningen field could be spared, the government introduced the ‘Small Fields Policy’ (*Kleineveldenbeleid*) in 1974. An essential part of the Small Fields Policy was (and is) the certainty of being able to sell the output. To guarantee this, Gasunie (later GasTerra) was obliged to give priority to the natural gas extracted from small fields when purchasing gas. As a result, the small fields supplied a greater proportion of the annual gas production than the Groningen field (see Figure 1) for many consecutive years. Figure 1 also shows the locations of the small fields.

Figure 1 Natural gas extraction in the Netherlands 1960-2013: locations, supplies and production



### Parties involved in the extraction of natural gas

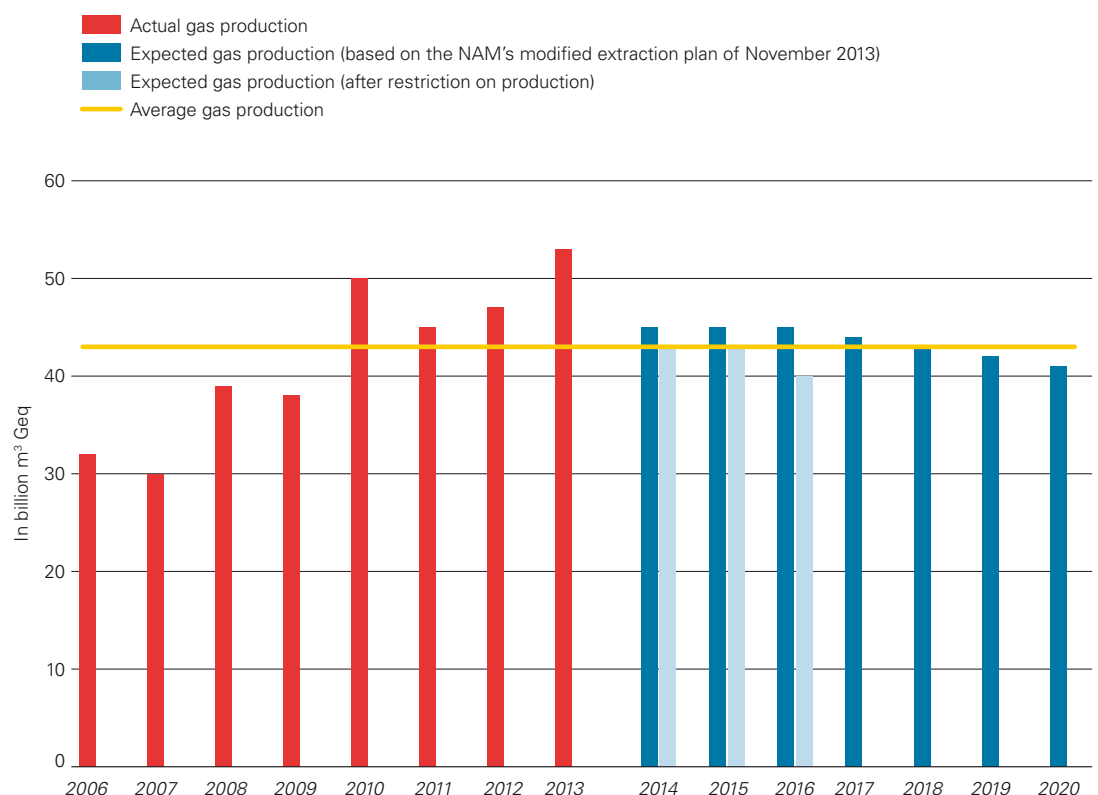
Natural gas extraction is done by private companies, such as Royal Dutch Shell and ExxonMobil. At present, the Dutch State participates in natural gas extraction via the State enterprise Energie Beheer Netherlands b.v. (EBN). The Appendix to this report includes a description of how the production and marketing of natural gas is organised.

### Earthquakes: natural gas extraction from the Groningen field partially restricted

Since 1986, several hundred earthquakes have occurred in the provinces of Groningen and Drenthe as a result of natural gas extraction activities in the area. The number of tremors in and around the Groningen field has increased in recent years. The tremors have also become stronger. The worst earthquake to date was that of 16 August 2012, measuring 3.6 on the Richter scale. The earthquakes have caused a great deal of damage to houses and buildings.

In January 2013, it was announced that the possibility of the occurrence of earthquakes with a magnitude of as high as 5.0 on the Richter scale could not be ruled out in the near future. Following further research conducted in 2013, on 17 January 2014, the government decided to restrict natural gas production from the Groningen field for the 2014-2016 period. It was also decided that gas extraction around Loppersum, the most high-risk area, will be reduced by 80%. The impact of this decision on natural gas extraction from the Groningen field is shown in Figure 2.

Figure 2 **Actual and expected gas extraction from the Groningen field in the 2006-2020 period**  
Including impact of restriction on production for 2014-2016



Source: Ministry of Economic Affairs, 2014a

Natural gas volumes are quoted here in Groningen gas equivalents (Geq).

It can be seen that the expected production gradually decreases from 2014 onwards. Moreover, even without the agreed production restriction, production had to be scaled back in order to fulfil the agreements regarding maximum production from the Groningen field, as laid down in the extraction plans for 2006-2015 and 2011-2020.

## 2.2 Development of natural gas revenues in the Netherlands

### 2.2.1 Important source of income

The organisation of the extraction and sale of natural gas in the Netherlands is set out in broad terms in the Gas Act (*Gaswet*), the Mining Act (*Mijnbouwwet*) and in private law contracts. Natural gas extraction is done by oil companies, for which they pay concession rights to the State. The State holds a 40% participation in the exploitation of the fields via the government participation EBN. EBN passes on its profits to the State in the form of dividends.

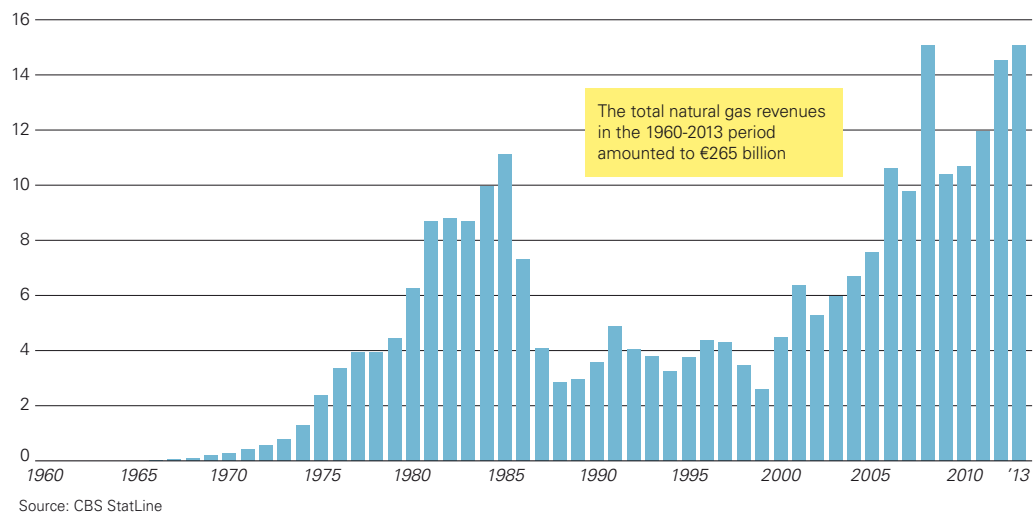
Natural gas revenues are an important source of revenue for the State and consist of three components:

1. revenues from concession rights granted by the State to oil companies, such as Royal Dutch Shell and ExxonMobil, for the exploitation of the natural gas fields and petroleum fields;<sup>6</sup>
2. revenues from dividends of companies (partially) owned by the State: EBN (100% State participation) and GasTerra (10% State participation);<sup>7</sup>
3. revenues from corporate income tax collected by the State from oil companies and public companies involved in the extraction, distribution and sale of natural gas.

### 2.2.2 Fluctuations in natural gas revenues between 1966 and 2013

In the period from 1960 to 2013, the total Dutch natural gas revenues amounted to approximately €265 billion; see Figure 3.<sup>8</sup>

Figure 3 **Natural gas revenues 1960-2013**  
In billion euros



6

Natural gas revenues include not only State revenues from the natural gas fields, but also revenues from the petroleum fields (which are small).

7

GasTerra was created as a result of the splitting up of Gasunie. Since 1 July 2005, Gasunie is involved in the transport and storage of natural gas, while GasTerra focuses on supply and trading.

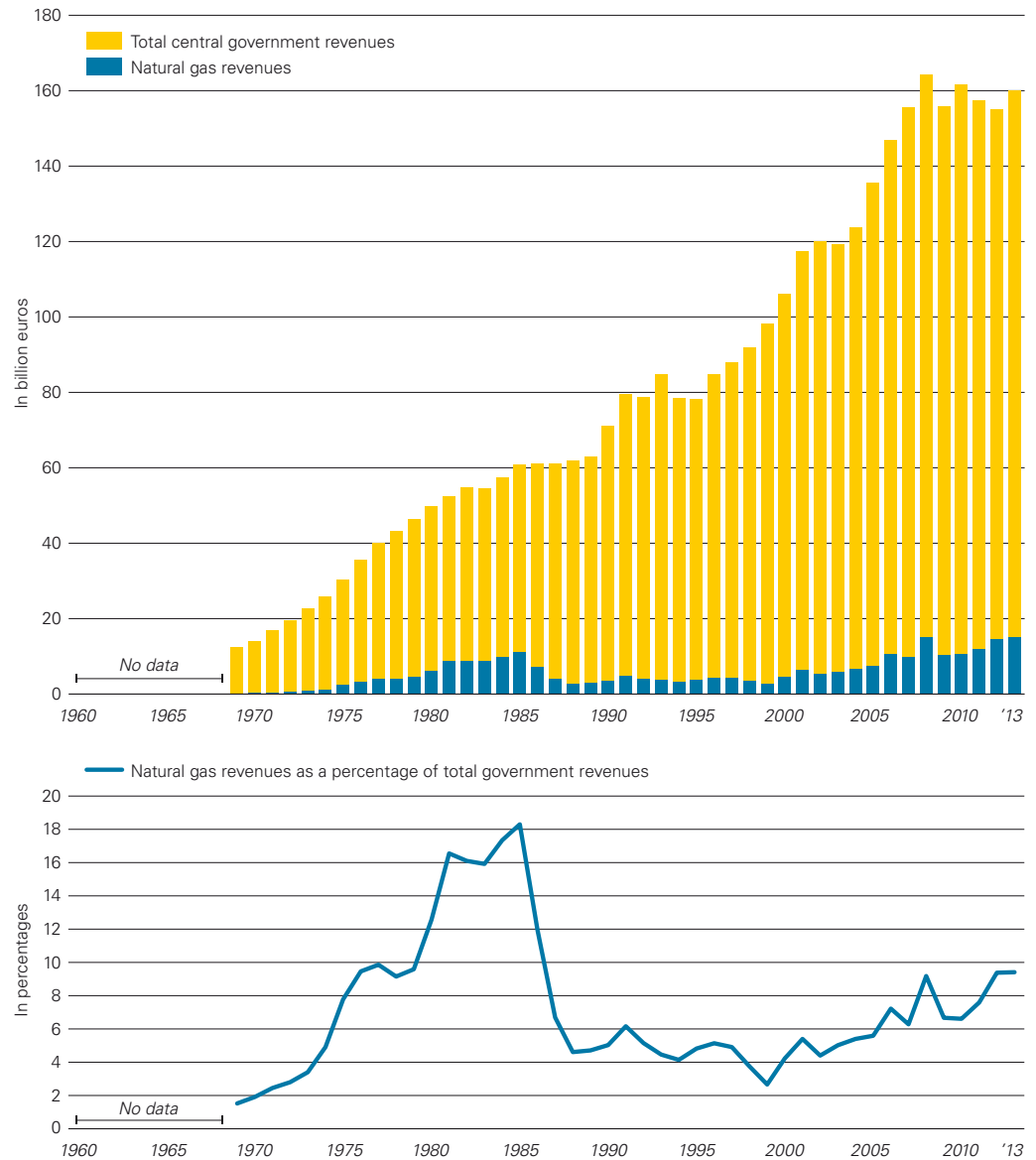
8

Source: [www.cbs.nl](http://www.cbs.nl). These figures are based on the revenues to which the State is entitled (including corporate income tax) when the natural gas and oil is extracted (transaction basis). However, this does not mean that these natural gas revenues were transferred to the State in that same year.

Figure 3 shows that, from the mid-seventies, there was a sharp increase in natural gas revenues until 1985, followed by a sharp decrease in the subsequent period, followed again by a gradual increase. This is because the price at which the Netherlands sold its natural gas was linked to the price of oil. Oil prices rose sharply after the oil crisis in 1973, but were almost halved in 1986. Since at present there is a global market for natural gas where the pricing is determined, the development of the price of oil has a much lower impact on natural gas prices today than in the past.

Figure 4 shows that the *relative importance* of natural gas revenues as a part of the revenues of the central government has declined over the years.<sup>9</sup> This is because other - chiefly tax-based - central government revenues have increased sharply in the meantime.

Figure 4 **Share of gas revenues in the total revenue of the central government, 1960-2013**  
In billion euros and in percentages



Source: CBS StatLine

From the graph, it can be seen that after the oil crisis in the seventies, the share of natural gas revenues rapidly increased in the early eighties to almost 20% of the central government revenues. At present, this is lower than 10%, while natural gas revenues are higher now than in the past. Since the end of the eighties, the State has become less dependent on natural gas revenues.

9

Here, by 'central government', we refer to the definition provided by Statistics Netherlands (CBS) (StatLine). This excludes the premium sector.

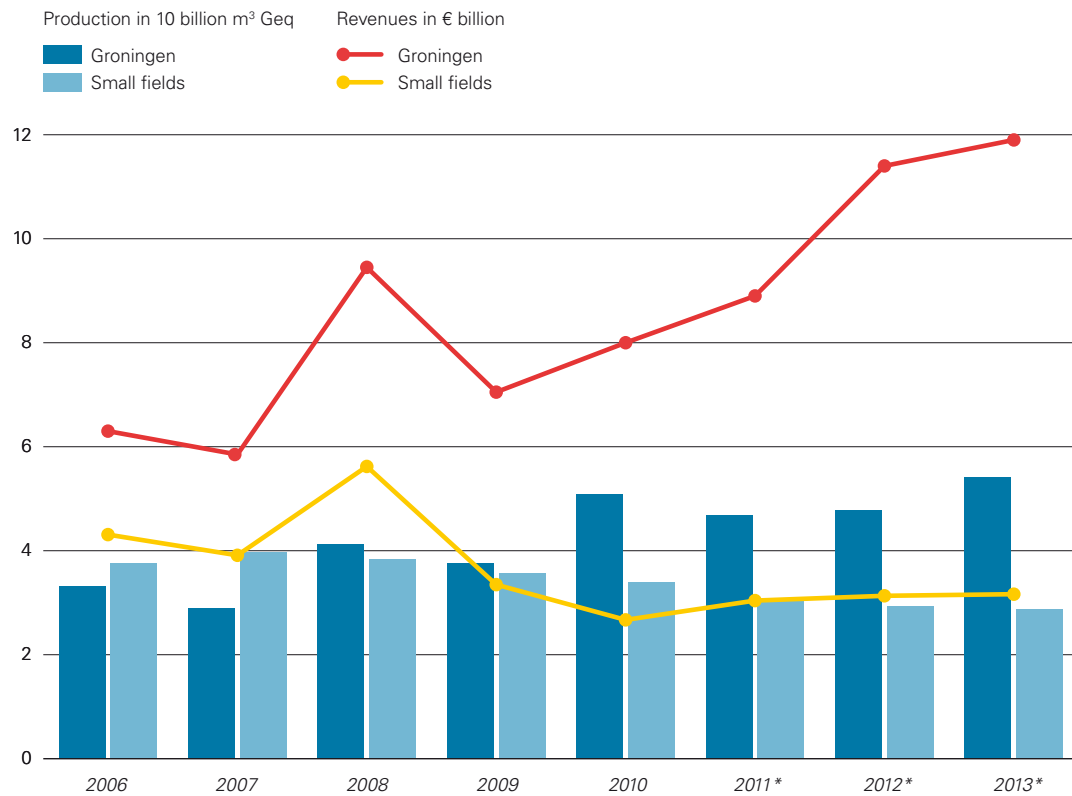
### 2.2.3

#### Natural gas revenues from Groningen field compared to those from small fields

Just like the natural gas revenues from the Groningen field, those from the small fields are also partially transferred to the State. The Ministry of Economic Affairs does not keep a record of which part of the natural gas revenues comes from the small fields, because the Ministry feels that it is not possible to arrive at an exact breakdown.

Nevertheless, the Minister has recently informed the House of Representatives regarding the revenues from the Groningen field in the 2006-2013 period (EA, 2014b). Based on these data, it is possible to deduce the revenues accruing from the small fields for this period (see Figure 5).

Figure 5 Development of gas revenues in relation to the gas extracted from the Groningen field and the small fields



Source: EZ, 2014b

\* Provisional figures

The figure shows that, since 2008, natural gas revenues from small fields have been lower than those from the Groningen field. This can be best seen in 2008 and 2009, when production from the small fields and production from the Groningen field were approximately equal, but the revenues for the State from the small fields were half of those from the Groningen field. The difference is related to the fact that extraction from small fields is a relatively expensive process. In order to maintain the Groningen field as a buffer for as long as possible, the State has given high priority to the extraction of natural gas from the small fields. The State is therefore prepared to be satisfied with a lower share of the revenues from the small fields. Whereas 85 to 90% of the revenues from the Groningen field accrues to the State, this percentage is much smaller for the small fields, at 65 to 70%.

### 2.3 Use of natural gas revenues

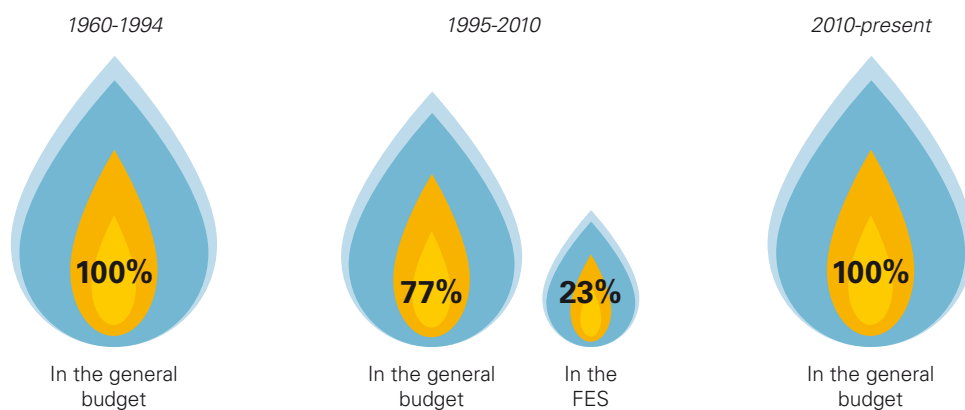
Natural gas revenues that flowed into the State treasury in the period between 1960 and the present were used, for the most part of the time, for budgetary targets via the general budget. Hence, this money cannot be traced to specific heads of expenditure. Also, it is not possible to determine what expenditure would or would not have been made without the natural gas revenues. But it is clear, given the size of the natural gas revenues, both in relative and absolute terms, that these revenues have undoubtedly influenced the decision-making regarding budgetary targets.



Only the specific use of the natural gas revenues that flowed into the FES can be indicated.<sup>10</sup> Figure 6 shows the part of the natural gas revenues deposited in the FES.

Figure 6 **Allocation of natural gas revenues over the years**

How much of the gas revenues have been deposited in the FES and how much in the general budget?



Source: EA, 2014c

Of the total amount of €265 billion of natural gas revenues in the 1960-2013 period, €26 billion flowed into the FES.

In the next chapter, we will discuss the type of projects financed from the FES and how much money was invested in such projects.

## 3 Economic Structure Enhancing Fund (FES)

This chapter focuses on the FES. We discuss the background to the creation of this fund and what the original intentions were. We outline the income and expenditure of the FES and describe some of the projects for which FES funds have been used. We also examine the policy changes implemented with respect to the FES and the significance of these changes.

### 3.1 FES: history of origin, goals and organisation

The FES was created in the mid-nineties. In 1993, the initial intention of the government was to establish a natural gas revenues fund. However, the relevant bill did not receive any support in the House of Representatives. The coalition agreement of the first Kok government decided that the bill would be reviewed “with respect to the funding of the fund and the criteria for the projects to be financed” (House of Representatives, 1994).

Two years later, the bill, with a few amendments, was passed in the form of the FES Act. This Act entered into force in December 1995, with retroactive effect from 1 January 1993.

The FES was established with the intention of setting aside a part of the revenues from the extraction of natural gas and the sale of State participations, for investment projects of national importance. Moreover, these had to be projects that would strengthen the economic structure of the country. The purpose of the FES was to convert ‘below-ground capital’ into ‘above-ground capital’.

In essence, natural gas revenues could also be invested via the regular budget process in ‘above-ground capital’; but in times of budget deficits, there is a risk that investments will be suspended or deferred to avert cuts in current spending or avoid tax increases. To prevent this, the parliament decided, at the time, to establish a budget fund which could be used solely for the purpose of making investments. The Explanatory Memorandum to the bill explicitly states that a budget fund has been opted for because this would create the certainty “that the funds referred to are not used for anything other than specified goals” (House of Representatives, 1993).<sup>11</sup>

It was also important that the projects financed should be ‘additional’ investment projects. In the Explanatory Memorandum, this is expressed as follows:

“The funds [...] are not intended for supplementing possible budget deficits in the financing of regular investments of the central government or local governments. They should be used for additional, large-scale projects (including investments aimed at accelerating existing projects) that are significant for the national economy or for the removal of bottlenecks for the development of the national economy. Small-scale investment projects that are only relevant for the local economy should be financed by the local government itself and/or from departmental budgets”.

#### 3.1.1 Award procedure for FES projects

The FES was an allocation fund that provided earmarked contributions for projects to specialist departments. Available FES funds were first allocated to the various policy areas. Subsequently, they were deployed for specific projects. When the FES was established, the policy areas that were eligible for receiving funds from the FES were:

<sup>11</sup>

This refers to the Explanatory Memorandum to the ‘Natural Gas Revenues Fund’ (Aardgasbatenfonds), as the FES was initially intended to be called.

- traffic and transport infrastructure, including costs related to environmental measures;
- soil remediation, insofar as there was a functional relationship with the aforementioned traffic and transport infrastructure projects;
- urban main structure, insofar as there was a functional relationship with the aforementioned traffic and transport infrastructure projects;
- ecological main structure, insofar as there was a functional relationship with the aforementioned traffic and transport infrastructure projects;
- technology, telecommunications and knowledge infrastructure.

#### General outline of the award process

In June 1995, the fund managers, i.e. the Ministers of Economic Affairs and Finance, broadly outlined the procedure for the awarding of FES funds for projects (EA & Finance, 1995):

“According to this procedure, the budget management departments shall suggest projects to the fund managers. Based on these suggestions and the outcome of the project review based on the fund criteria, the fund managers shall present proposals to the government. Finally, the Council of Ministers shall decide regarding the award of a FES contribution. [...]

The official preparation for the awarding of FES contributions shall take place within the framework of the Interdepartmental Committee for Economic Structural Policy (*Interdepartementale Commissie voor het Economisch Structuurbeleid*). These decisions of the government shall be presented to the House of Representatives during the budget debate. Hence, the House of Representatives has its own specific responsibility with regard to the use of FES funds”.

Figure 7 displays the award process schematically.

The figure shows that the Council of Ministers took the decision about whether a project would be financed with FES funds after the projects had been officially prepared and assessed. In this preparatory phase, an official committee had to determine whether the project met the fund criteria. For projects in the spatial domain, this was done by the Interdepartmental Committee for Strengthening Economic Structures (*Interdepartementale Commissie Economische Structuuraangelegenheden*, ICES). Projects in the knowledge domain were assessed by the Committee for the Economy, Knowledge and Innovation (*Commissie voor Economie, Kennis en Innovatie*, CEKI). The assessment took into consideration whether the project:

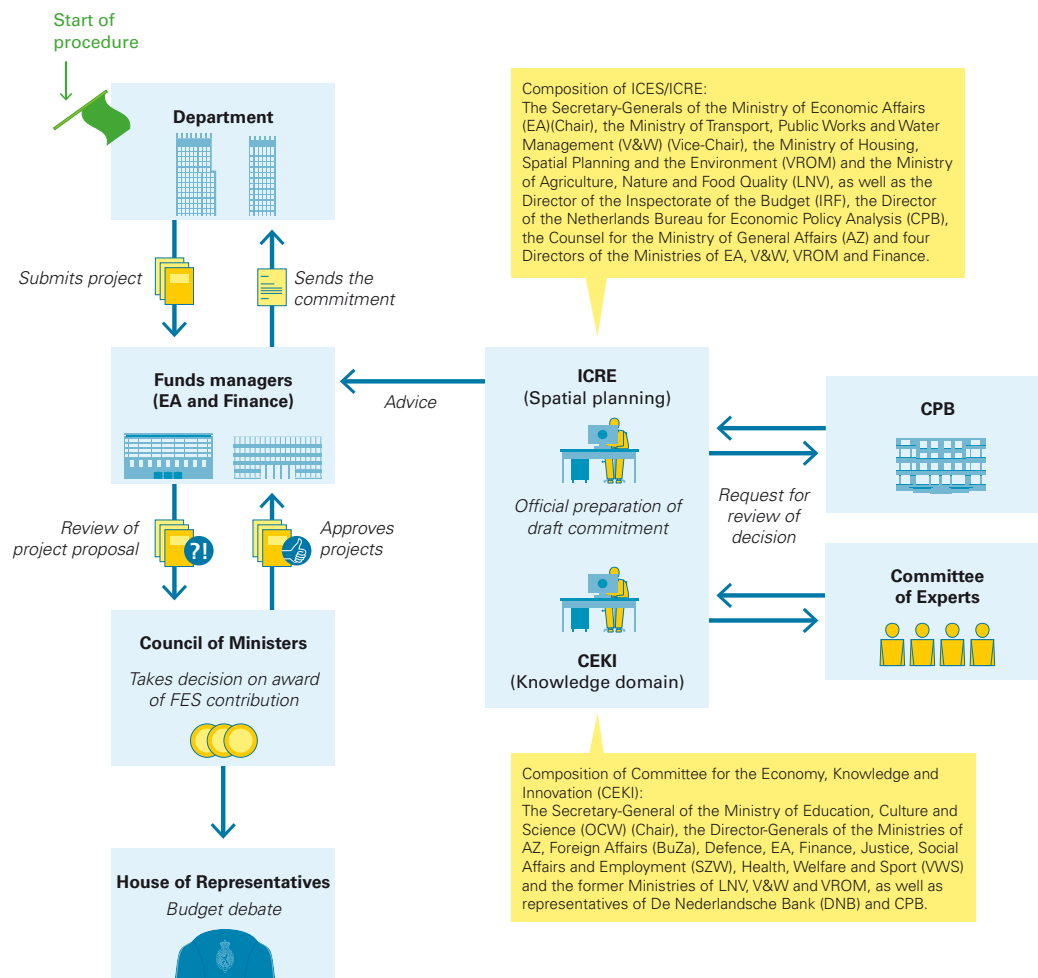
- was of national importance;
- strengthened the economic structure;
- represented an additional investment, which was not and had never been part of the budget of the department in question.<sup>12</sup>

These criteria were not implemented in detail.

<sup>12</sup>

For projects in the knowledge domain, additional criteria were applicable, such as the social and economic relevance of the project, consistency with the knowledge investment agenda and positive impact studies.

Figure 7 Procedure for awarding FES funds  
General outline



Joris Fissler/Infographics

Explanation of abbreviations used:

ICES: Interdepartmental Committee for Strengthening Economic Structures (Interdepartementale Commissie Economische Structuuraangelegenheden)  
ICRE: Interdepartmental Committee on Spatial Economics (Interdepartementale Commissie Ruimtelijke Economie)

ICES (later renamed ICRE<sup>13</sup>) and CEKI could seek advice from the Netherlands Bureau for Economic Policy Analysis (CPB) and/or from a Committee of Experts. CPB was responsible for assessing the projects for effectiveness and efficiency and for verifying whether the government interventions were reasonable (CPB, 2005; 2006; 2009a; 2009b; 2009c). The Committee of Experts reviewed projects in the knowledge domain with respect to their academic, social and economic relevance, funding and organisational structure.

Since the ICRE was a preparatory body of the Council of Ministers, its recommendations were not part of the public domain and were not communicated to the House of Representatives. This was also applicable to the commitment letters. Therefore, the House of Representative's 'own responsibility' regarding the use of FES funds in the form of the power of the purse, as referred to in the quotation displayed above, was difficult to fulfil – especially since the (FES) budgets included little or no substantive information about projects.

<sup>13</sup>

ICRE: Interdepartmental Committee on Spatial Economics (Interdepartementale Commissie Ruimtelijke Economie).

*Evaluation of the decision-making procedure: spatial domain*

The VROM Council described ICRE and its activities in 2002 as “... a generous, if somewhat unpredictable parallel policy world serving as a substitute for formal policy planning. (...) The result is a long list of large and small-scale investment proposals without a clear status, a qualitative judgement about which provides no insight into their significance for strategic government policy (...)” (VROM Council, 2002).

In 2004, the Temporary Committee on Infrastructure Projects (*Tijdelijke Commissie Infrastructuurprojecten*) (Duivesteijn Committee) also referred to the weak information position of the House of Representatives with respect to matters related to the FES. The report of the Committee stated that the government based its decision-making on the recommendations of ICRE and rarely deviated from these recommendations. In so far the House of Representatives was informed via underlying documents, this occurred only after repeated requests and in a barely accessible form, according to the Duivesteijn Committee (House of Representatives, 2004).

*Evaluation of the decision-making procedure: knowledge domain*

The impression formed on the basis of the evaluations in the spatial domain was further confirmed in a review of FES projects in the area of knowledge infrastructure (Meijerink et al., 2010). This states that the unpredictability of the rounds, changing themes and alterations in the procedure meant that the parties could not prepare themselves adequately. Moreover, during the assignment of FES projects, the departments could make tactical use of the fact that they were performing various roles. The departments were not only involved in designing the project proposals but also, for example, in reviewing them, while they were stakeholders in these projects.

### 3.1.2 Accountability procedure for FES projects

No direct payments were made from the FES for projects. Amounts withdrawn from the fund were added - as earmarked - from the FES budget to the relevant departmental budget chapters. For example, FES funds for infrastructure projects in the area of traffic and transport were added to the budgets of the Ministry of Transport, Public Works and Water Management and the Infrastructure Fund. Thereafter, the relevant specialist departments accounted for the projects in their annual reports.<sup>14</sup> I.e., this was not done through the FES Annual Report. The departments were responsible for ensuring the regularity and effectiveness of the expenditure financed from FES contributions.

Until 2003, the House of Representatives received an annual monitoring report from ICRE, containing the latest update on projects financed from the FES. From 2003 onwards, this report was provided every two years to the House of Representatives (EA, 2004).

## 3.2 FES income and expenditure

Figure 8 shows the origin of the income (the ‘funding’) of the FES and the purpose of the expenditure (the ‘withdrawals’) from the FES. The figure covers the entire period during which the fund was in existence (1995-2010).

<sup>14</sup>

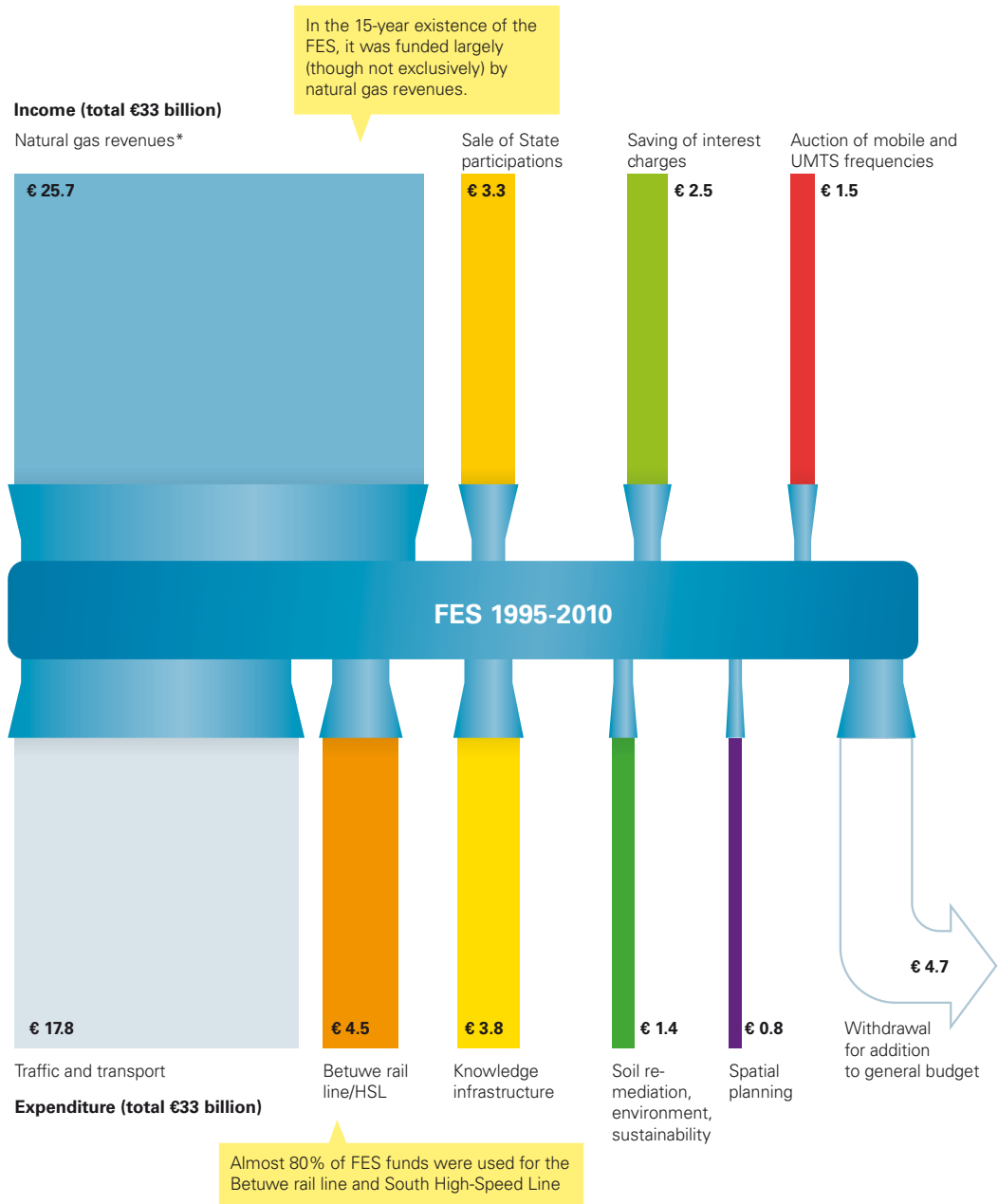
Also see our report accompanying the FES Annual Report 2008 (Netherlands Court of Audit, 2009).

### 3.2.1 FES income

The income of the FES consisted broadly of the following components:

- a part of the natural gas revenues;
- revenues from the sale of State participations;
- revenues from the auction of airwave and UMTS frequencies.

Figure 8 **Economic Structure Enhancing Fund (FES): income and expenditure**  
In billion euros



\* The total natural gas revenues in the 1995-2010 period amounted to €111 billion, of which 23% flowed into the FES.

Initially, the revenues from the sale of State participations and frequencies flowed into the FES. Subsequently, this flow of funds changed to net interest charges saved on the national debt as a result of the above-mentioned sale (adjusted for missed dividend income). The sale proceeds themselves were no longer fed into the FES.<sup>15</sup>

In § 3.3, we discuss the major policy changes implemented with respect to the funding of and the spending from the FES.

### 3.2.2 FES expenditure

Expenditure from the FES was used for financing investment projects compliant with criteria specified in §3.1.1 and which fell under the ‘domains’ mentioned in the FES Act.

#### Examples of FES projects in the earmarked policy areas

Examples of FES projects in the category of transport infrastructure are the construction of the High-Speed Line (HSL) and the Betuwe rail line. In total, about 80% of FES funds were used for traffic and transport projects.

Examples of FES projects in the category of soil remediation are the ‘Traffic & Transport/Vinex Soil’ (Bodem Verkeer & Vervoer/Vinex) project and the ‘NS Station Locations Soil’ (Bodem NS stationslocaties) project, aimed at cleaning up the contaminated soil at VINEX locations (i.e. locations falling under the VROM spatial planning memorandum) and NS (Dutch Railways) station locations.

Examples of FES projects in the area of urban main structure are the so-called ‘Key Projects’ (Sleutelprojecten), aimed at integrated urban planning development in and around the HSL stations in Amsterdam, Rotterdam, The Hague and Breda.

An example of a FES project related to the ecological main structure is ‘Beautiful and Vital Delfland’ (Mooi en vitaal Delfland), aimed at restructuring greenhouse farming in Delfland and constructing recreational infrastructure.

An example of a FES project in the category of knowledge infrastructure is the ‘Modernisation of Pre-vocational Secondary School Infrastructure’ (Modernisering VMBO-scholen) project, aimed at the renovation of pre-vocational secondary school buildings in poor condition.

Ultimately, not all of the FES funds awarded were actually spent. In some projects, only a part of the awarded FES funds were used. For example, in the above-mentioned Key Projects for HSL stations, €336 million was awarded from the FES, of which ultimately only €147 million was spent.

Over the years, the categories of expenditure within which FES funds could be used have been adjusted frequently. The most important policy changes are discussed in §3.3.

## 3.3 FES policy changes

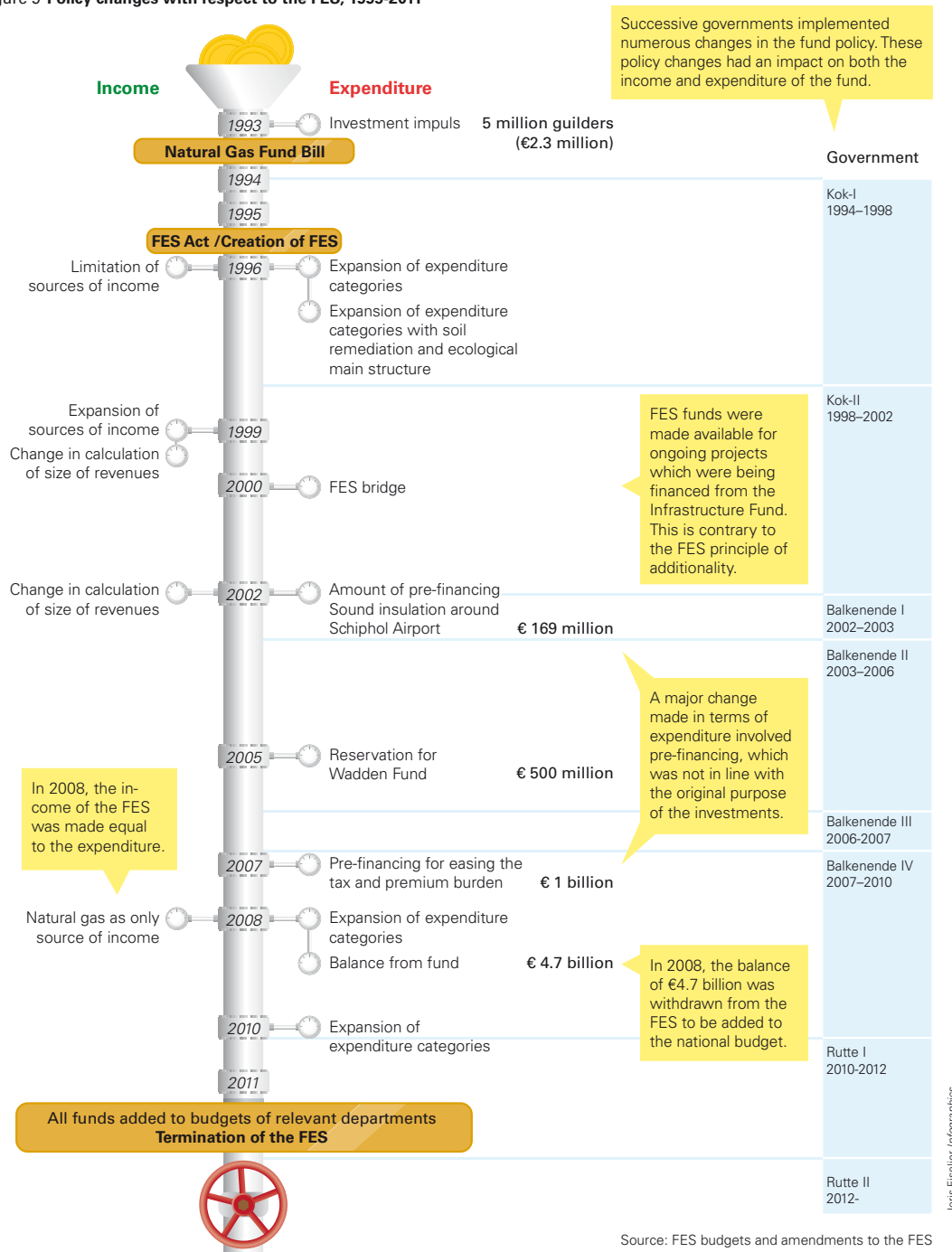
The sources of FES funding and what the funds could be spent on were laid down in the FES Act when the fund was established. However, policy changes were regularly implemented in this respect. These changes were implemented either by amending the FES Act itself or through amendments made outside the FES Act to, e.g., the Budget Act (*Begrotingswet*).

<sup>15</sup>

As far as the revenues from the sale of frequencies were concerned, this funding of the FES was later changed to an annuity. A fixed amount, consisting of the revenues plus interest, was deposited annually into the FES. The term of the annuity was equal to the term of the sold frequency rights.

Figure 9 shows the main changes that have been implemented under various governments. In §3.3.1, we discuss the various changes and their effects.

Figure 9 Policy changes with respect to the FES, 1995-2011



### 3.3.1 Explanation and interpretation of key changes

The income and expenditure categories of the FES (or the criteria for this) have been modified several times over the years. Figure 9 shows that the policy categories applicable to FES projects have been expanded on three occasions. However, on two other occasions, the scope of these policy categories have been curtailed.

In the coalition agreement of the second Kok government (House of Representatives, 1998), it was established that a number of existing projects from the Infrastructure Fund would henceforth be financed from the FES:



“Windfalls in the funding of the FES will be used for additional expenditure that meets FES criteria and/or for bringing more of the planned infrastructure expenditure under the FES. In the latter case, there will be room within the budget for incurring additional expenditure.”

With this, one of the original guiding principles of the FES was abandoned, namely the principle that only additional projects could be financed from the FES. In 2000, this possibility - the so-called ‘FES bridge’ - was used for the first time. In total, an amount of €1.5 billion was spent in 2000-2006 under the FES bridge. In 2007, the FES bridge was terminated. One of the reasons cited for this in the 2008 FES budget is that it primarily involved a structural financing, which was not the intention of the FES.

In 2002, natural gas revenues that were actually intended for the FES were used for the first time to finance other expenditure of the central government. These pre-financing amounts would also later be added to the FES. This amounted to, as it were, a ‘borrowing’ from the FES. The largest pre-financing took place in 2007, for the purpose of easing the tax and premium burden. For this, Article 5a was added to the FES Act at the end of 2006. This Article ensured that, for 2007, the income of the fund was reduced by €1 billion, with the intention of being increased in 2009 by €1 billion + interest. However, due to changes in the system of funding the FES, hardly any of the planned repayments were actually made to the FES. A total amount of €1,268 million was pre-financed, of which €99 million was re-deposited before the termination of the FES at the end of 2010.

In 2008, a third original guiding principle of the FES was abandoned. At this time, the government decided to equate the funding of the FES with the amount of expenditure from the FES. Hence, no more funds were fed into the FES annually than were spent from it. The idea behind this was that, in this way, the funding of the FES would no longer be dependent on the fluctuating price of oil. “This avoids”, as stated in the Explanatory Memorandum to the FES 2008 budget, “the risk of too short a run-up to the decision-making in case of large windfalls and the risk of cuts on current projects in case of setbacks”.

However, with this adjustment in the funding of the FES, investment expenditure again had to compete with current expenditure, while the FES had been created precisely to prevent this. Since, due to this policy change, there was no longer any purpose served by a fund surplus, the balance of €4.7 billion in the FES was transferred to the general budget.

Due to successive adjustments, the FES was deprived of its function, which resulted in its being made inactive in 2010. With this, the FES was terminated de facto.

### 3.3.2 **Uncertainty about the regularity of expenditure after termination of the FES**

The FES was terminated with effect from 2011. With respect to the settlement of the FES, we have included a critical remark in our report accompanying the 2011 Annual Report of the Ministry of Economic Affairs, Agriculture and Innovation (EL&I) (Netherlands Court of Audit, 2012). We found that, due to the manner in which the fund was terminated, there was subsequent uncertainty about the ‘FES-worthiness’ of the FES expenditure incurred in 2010. This concerned an amount of €2.3 billion. The ‘FES-worthiness’ of FES projects was at the time reviewed by the departmental audit services. They were responsible for checking whether the FES expenditure declared by specialist departments met the criteria for the projects proposed in the commitment letters.

However, in 2011, the Minister of Economic Affairs, Agriculture and Innovation decided that there was no need for an audit of the ‘FES-worthiness’ of FES expenditure made in 2010, as, since the FES was terminated from 2011 onwards, no FES annual report was prepared in 2011.

The Minister informed the House of Representatives regarding this but he disregarded his duty of accountability in the way in which he handled this matter. It was the case that the accountability for FES expenditure was spread across two annual reports and, due to the discontinuation of the FES, this cycle could not be fully completed.

### 3.3.3 Criticism of guiding principles and handling of the FES

The guiding principles and the handling of the FES were the subject of much criticism over the years. This involved, inter alia, the following aspects:<sup>16</sup>

- criticism of the lack of comprehensive deliberations on the use of natural gas revenues and as a result of this, the lack of transparency regarding this in the budget and accountability process;
- discussion on whether or not the investments being made should be linked to the (fluctuating) natural gas revenues;
- criticism of the non-transparent decision-making on investment proposals;
- doubt regarding the social return of the investments financed from the FES.

Some of these points of criticism recur in the ‘lessons for future fund creation’ that we discuss in Chapter 5.

## 4 Creation of a State capital fund

The FES can be characterised as an allocation fund: the money put into the fund was distributed over the budgets of the various ministries. This means that the natural gas revenues flowing into the fund were not used for investing in future generations, but were directly invested in what is described in Chapter 3 as ‘above-ground capital’.

The Netherlands could have made different decisions with regard to the use of natural gas revenues. Natural gas revenues could have been deposited into a so-called *State capital fund*, instead of in an allocation fund, such as the FES. It could also have been decided to allow a larger part of the revenues to flow into such a fund, rather than what occurred in case of the FES.

In this context, there have been regular references in the media and in politics to the way in which Norway has invested its natural gas and petroleum revenues. Norwegian oil and gas revenues are deposited in their entirety in a State capital fund and in this way capital is accumulated for present as well as future generations.

We begin this chapter with an explanation of the concept of a ‘State capital fund’.

Subsequently, we focus on three questions:

- What would be the size of the fund if the Netherlands had followed the ‘Norwegian model’ from 1960 onwards and deployed all its natural gas revenues for this?
- What would be the current size of the fund if the FES had been a capital fund instead of an allocation fund?
- What could be the size of the fund in 2035 if the Netherlands opts for the ‘Norwegian model’ from today?

The exercise performed in answering these questions is purely a mathematical one. We have not taken into account the (social) return that is and will be obtained via the national budget thanks to the use of natural gas revenues for social goals.

### 4.1 What is a State capital fund?

A State capital fund, also known as a ‘sovereign wealth fund’, is an investment fund managed by the government of a country over which the government has a large degree of control, particularly with respect to the investment policy. The resources of such a fund are mostly generated from revenues from the extraction of minerals or tax revenues related to the extraction of these minerals, or from budget surpluses. An important difference with an allocation fund is that a capital fund is aimed at capital accumulation; in other words, the money put into the fund is invested. In principle, there is no capital accumulation in the case of an allocation fund, because the money put in is reallocated.

There is an international forum of countries that own and manage a State capital fund. Norway is among the 27 countries that are members of this International Forum of Sovereign Wealth Funds (IFSWF). The IFSWF follows a number of principles for managing and accounting for the investment policy, including (IFSWF, 2008):

- There must be a clear and public set of rules, legislation and procedures regulating the income, expenditure and use of the fund.
- The framework within which the fund operates must be designed with a separation of roles and responsibilities, so that the managers of the fund can act independently in implementing the specified goals and accounting for actions taken.
- The framework within which the fund operates, the goals to be striven for and independence of the management from the holder of the fund must be made public.
- The investment policy of the fund must be clear and in line with the goals and the investment strategy should be based on a sound portfolio strategy.
- The investment decisions of the fund should aim at achieving a maximum return that corresponds to the investment strategy, based on economic and financial principles.

## 4.2 Model-based calculation: What if the Netherlands had followed the Norwegian strategy?

Oil was discovered in Norway for the first time in 1969. It took several years before the extent of the oil reserves was fully known. In 1983, it was proposed for the first time to form a fund for oil revenues. In 1990, the Norwegian parliament adopted a law enabling the creation of the Government Pension Fund. The Government Pension Fund is an investment fund in which money has been deposited since 1996. Over the years, this fund has become an important source of financing for public expenditure.

### Norwegian Government Pension Fund

#### *Purpose*

The idea behind the Government Pension Fund established in 1990 was to regularly deposit oil revenues into this fund. The purpose of the fund is to safeguard long-term interests when using oil revenues.

#### *Management*

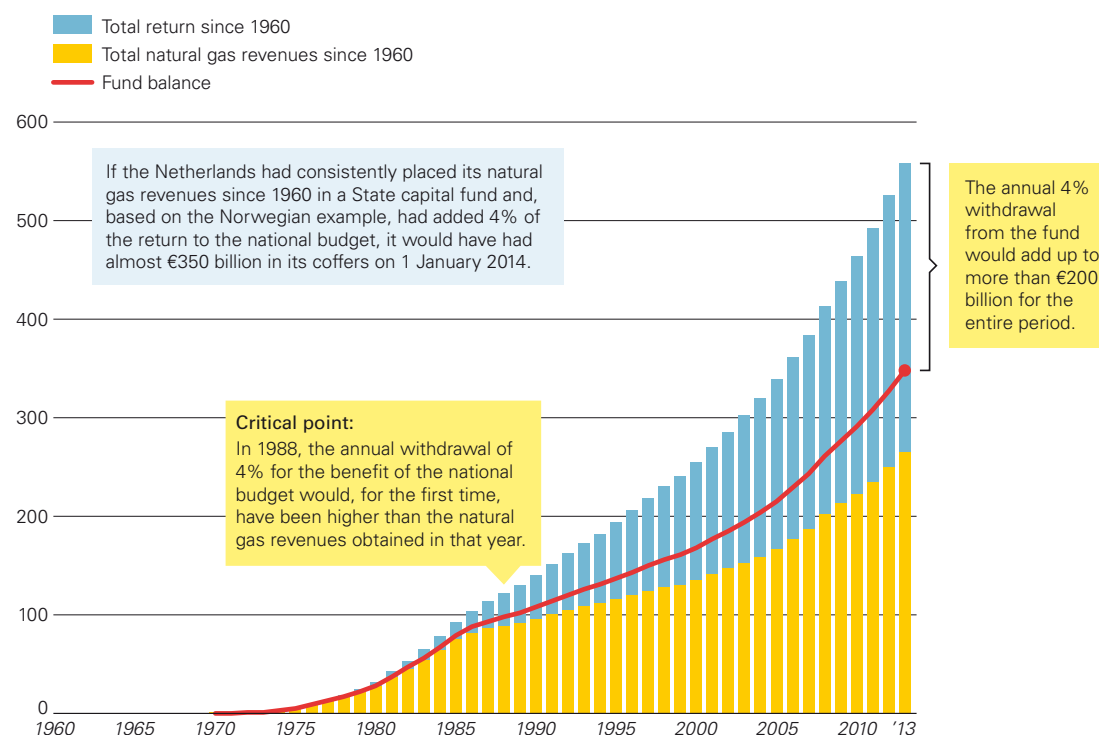
The fund is managed by Norges Bank Investment Management (NIBM), a part of Norway's central bank. NIBM manages the fund by order of the Norwegian Ministry of Finance, which holds the fund on behalf of the Norwegian population. The Ministry determines the investment strategy of the fund, based on the advice of NIBM and partly based on the outcome of discussions in the parliament.

#### *Return*

The Norwegian Government Pension Fund achieved an average return of 5.7% over the 1998-2013 period. The cost of managing the fund amount to approximately 0.07%. Each year, 4% of the capital from this fund is added to the general budget. The rest remains in the fund.

If the Netherlands had chosen, from the outset, to place all its natural gas revenues in a State capital fund and had handled the fund in the same way as the Norwegians, the fund balance on 1 January 2014 could have amounted to almost €350 billion; see Figure 10.

Figure 10 **What if the Netherlands had deposited its natural gas revenues in a State capital fund from the outset?**  
In billion euros



Calculation based on the natural gas revenues obtained, an annual return of 5.6% and an annual withdrawal of 4%.

As Figure 10 shows, in this scenario, the annual withdrawals from the fund over the entire period (up to 2013) would have amounted to more than €200 billion. This amount is lower than the €265 billion in natural gas revenues that actually flowed into the national budget. The annual withdrawal of 4% would have amounted to approximately €13 billion in 2013, which is less than the actually obtained natural gas revenues of €15 billion.

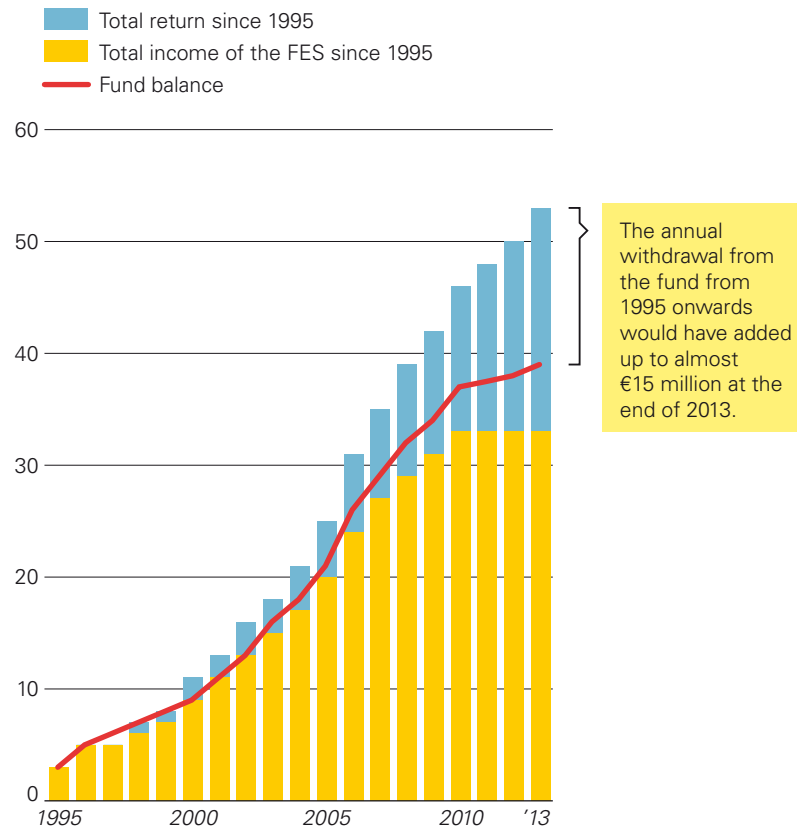
### 4.3 Model-based calculation: What if the FES had been a capital fund?

In Figure 11, we indicate the amount of capital that the Netherlands could have accumulated if a capital fund had been created at the time.

For this, we have used the basic principles of the Norwegian model. Despite no more money being deposited into the FES since 2011, the FES capital would have continued to grow in this scenario, thanks to the returns. In 2013, the withdrawal of 4% from the fund capital would have amounted to €1.5 billion. In 2022, the total withdrawal would amount to more than €28 billion, i.e. the total amount of withdrawals made from the FES.

**Figure 11 What if the FES had been a State capital fund instead of an allocation fund?**  
In billion euros

If the Netherlands had placed all the FES funds in a State capital fund and, based on the Norwegian example, had added 4% of the return each year the national budget, it would have had almost €40 billion in its coffers on 1 January 2014.



Calculation based on the income earned by the FES (source: FES Annual Reports), an annual return of 5.6% and an annual withdrawal of 4%.

#### 4.4 Model-based calculation: What if the Netherlands follows the Norwegian strategy in future?

It is possible that the Netherlands will follow the 'Norwegian model' in future. We have calculated the potential size of a fund in which the Netherlands would place all natural gas revenues received by the State from 2015 onwards.

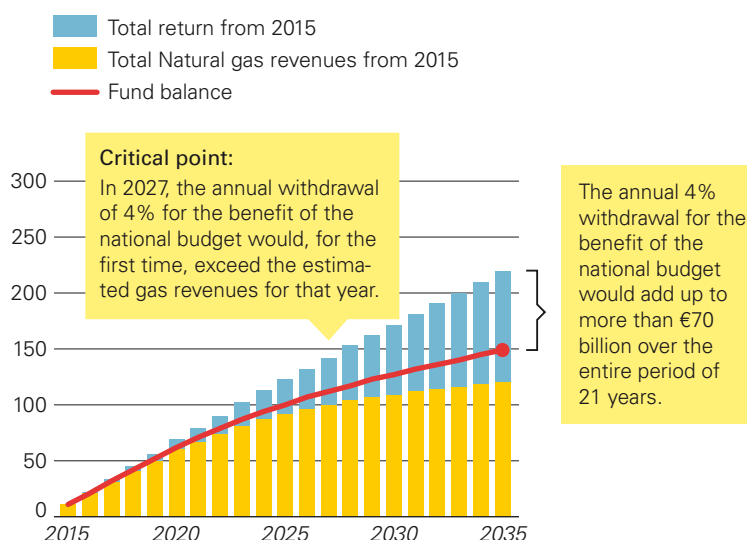
Our calculations show that, in such a scenario, the central government could accumulate a capital of more than €150 billion in 2035; see Figure 12.

The expected annual natural gas revenues will gradually decrease. This is due to the depletion of our natural gas and oil reserves. The expected natural gas revenues will decrease from approximately €10 billion in 2015 to approximately €2 billion in 2035. If a capital fund were to be formed, the withdrawal would amount to almost €6 billion in 2035.

If Dutch natural gas revenues were deposited into a fund from 2015 onwards, this would mean that, from then on, these revenues would no longer be added to the general budget. This would temporarily lead to an additional deficit in the national budget. In 2027, a critical point would be reached in this scenario. Thanks to the investment revenues and the effect of ‘return on return’, the Netherlands would, for the first time in that year, be able to withdraw more from the fund than the estimated natural gas revenues for that year.

**Figure 12 What if the Netherlands would build a natural gas revenues fund based on the Norwegian model from now on?**  
In billion euros

If, starting from 2015 and based on the Norwegian model, the Netherlands would deposit its natural gas revenues into a State capital fund (with an annual withdrawal of 4%), this could generate nearly €150 billion in 2035.



Calculation based on the expected natural gas revenues (source: Ministry of Economic Affairs in collaboration with the Netherlands Court of Audit), an annual return of 5.6% and an annual withdrawal of 4%.

## 5 Scenarios for the future

In the previous chapters, we outlined the reasons for the creation of the FES and the goals striven for. We have also described the process of decision-making and accountability with respect to FES projects and how the fund has been handled over the years. Finally, for the sake of comparison, we have looked into the way in which Norway has handled its natural gas and oil revenues. Based on this knowledge and in view of the plans for the ‘Future Fund’, we are now able to put forward certain lessons to parliament for future fund creation.

In this chapter, we outline some possible scenarios for the use of future natural gas revenues. These scenarios range from spending the revenues via the general budget to depositing the revenues in a fund, including a combination of the two. For each scenario, we briefly describe the advantages and disadvantages. Finally, in this chapter we will also discuss the lessons we can learn from the past and which of these lessons we feel are relevant to the creation of a (new) fund.

### 5.1 Scenario 1: Spend natural gas revenues through the general budget

In the first scenario, natural gas revenues will be spent entirely via the general budget, as is currently the case. Investment expenditure must compete with current expenditure and other possible needs of the parliament. It is not possible to establish a relationship between the natural gas revenues and what they have been used for.

The main advantage of this scenario is that there is no additional financing shortfall in the short term, as there would be if the gas revenues were placed in a separate (capital) fund (see §5.2). However, this advantage is temporary, as the natural gas revenues will decrease in the medium term as the natural gas reserves run out.

A disadvantage of this scenario is that the decrease in natural gas revenues is not offset by permanent income from accumulated capital, as would be the case if a State capital fund would be opted for (see §5.2.2). However, according to CPB, the increase in taxes and premiums will be more than enough to offset the impact of the decrease in natural gas revenues (CPB, 2014).

### 5.2 Scenario 2: Place natural gas revenues in a fund

In the second scenario, natural gas revenues will flow into a fund. Here, essentially two options are conceivable: an allocation fund of which the money put in is spent (as was the case with the FES), or a State capital fund of which the money put in is used to accumulate capital (as in the case of the Norwegian Government Pension Fund).

When considering the creation of a fund, we feel that it is important to explicitly specify the advantages and disadvantages of fund creation. Considerations that play a role in this decision are:

- the desire to use the available money for accumulating capital or to earmark it for specific expenditure, instead of spending it annually on budgetary targets;
- the administrative system used by the central government. In an administration based on an accrual accounting system, the need to create a fund for the sake of



ensuring budgetary discipline is probably less because, in this case, investment decisions are, by definition, fully weighed up against other current budgetary expenditure; and

- the desired degree of democratic influence on the management of the fund, the funding of the fund, and withdrawals from the fund, both at the level of expenditure categories as at the project level (i.e. the right to approve and amend budgetary policy).

A fund may be placed within or outside the scope of authority of the central government. In both cases, the parliament has the right to approve and amend budgetary policy in respect of the funding of the fund. If the fund is placed outside the scope of authority of the central government, the parliament does not, in principle, have the right to approve and amend budgetary policy in respect of the expenditure from the fund. If a capital fund is established, it is conceivable that a periodic payment is made to the general budget of the central government from the return on the capital of the fund, as is the case in the 'Norwegian model'. If so, the parliament shall decide on the spending thereof.

#### 5.2.1 Scenario 2A: Allocation fund

In case of an allocation fund, the money put into the fund is, in principle, fully utilised. An important advantage of an allocation fund is that it can be used to guarantee certain types of expenditure, e.g. investments, by earmarking the deposits for specific goals. Moreover, an allocation fund can be used to carry forward unutilised revenues to the next year. Depositing all the natural gas revenues in an allocation fund may have the disadvantage in that an additional financing shortfall may occur in the short term, because returns from the natural gas revenues have already been entered for the coming years.<sup>17</sup> Also, when opting for an allocation fund, the decrease in natural gas revenues is not offset by the capital returns, as is the case for a State capital fund (see below).

#### 5.2.2 Scenario 2B: State capital fund

If a State capital fund is established, the money put into the fund will be invested for capital accumulation. The advantage of this is that a capital fund continues to generate returns, even if natural gas revenues dry up. By not withdrawing any more than the real return from the fund,<sup>18</sup> the principal sum of such a fund remains intact. The money that is withdrawn annually from the fund could be used for certain types of expenditure (e.g. investments) falling within or outside the scope of the national budget. One advantage of spending this money within the scope of the national budget is that this safeguards the parliament's right to approve and amend budgetary policy. A disadvantage of depositing the natural gas revenues in a State capital fund is that this leads to an additional financing shortfall in the short term. Returns from natural gas revenues have already been entered for the coming years and the loss of these amounts should be offset.

### 5.3 Lessons related to fund creation

The last two scenarios involve the creation of a fund. Based on our findings from this audit and in view of the plans for the 'Future Fund', which will be (partially) funded with windfalls in natural gas revenues, we are now able to put forward certain lessons to parliament for future fund creation.

<sup>17</sup>

The effect is limited or even absent if ongoing expenditure from the general budget is henceforth made from the allocation fund.

<sup>18</sup>

By 'real return' is meant the actual return, adjusted for inflation.

We distinguish three ‘lessons for the future’:

- When creating a fund, make a well-considered decision for a specific type of fund (capital fund/allocation fund) and ensure that the goals of the fund are clearly formulated and appropriate to the type of fund. Set up a clear set of procedures and criteria.
- Ensure that management of the fund and the advice provided on the award of funds occur independently.
- Make clear agreements on the provision of information and accountability for fund management, ensure independent evaluations and take the consequences of the outcomes of such evaluations.

Below we explain these lessons in brief.

*When creating a fund, make a well-considered decision for a specific type of fund (capital fund/allocation fund) and ensure that the goals of the fund are clearly formulated and appropriate to the type of fund. Set up a clear set of procedures and criteria.*

When the FES was established, the goal of the fund - i.e. using ‘below-ground capital’ to strengthen the economic structure - was formulated in very general terms. A more detailed and clear elaboration was lacking, as a result of which the goal of the FES provided ample room for interpretation.

Hence, numerous policy changes with regard to the funding of and withdrawals from the FES were made during its existence. In itself, these policy changes were legitimate, but a lesson for the future is that the broader picture and the original goal should not be lost sight of when making such changes.

When creating a new fund, it is advisable to not only define rules, procedures and goals in a clear and unambiguous manner, but also to strive for a high degree of transparency with respect to the parliament. Moreover, it is important to be clear about the targeted size of the fund.

In the case of an allocation fund, transparency on spending is of even greater importance, in order for the parliament to be able to properly exercise its right to approve and amend budgetary policy. This is also true when the return from a State capital fund is not spent via the general budget, as seems to be the case in the plans for the Future Fund.

As far as the plans for the Future Fund are concerned, we would like to note that the government intends to fund the Future Fund with the windfalls in natural gas revenues. This means that the size of the funding will only become clear at the time of preparing the accountability statements of the central government, when the actual natural gas revenues will become known. Since the funding is dependent on windfalls in natural gas revenues, the accuracy of the estimate is of crucial importance. After all, the estimate is one of the two determining factors for the funding, and hence the size, of the Future Fund.

*Ensure that management of the fund and the advice provided on the award of funds occur independently.*

If a State capital fund is opted for, it is important to ensure an independent fund management. A clear demarcation of roles is essential.

In order to avoid conflicts of interest or the appearance thereof, advice on the spending of funds should not originate from the parties that submit the spending proposals, as happened in some cases with the FES.

*Make clear agreements on the provision of information and accountability for fund management, ensure independent evaluations and take the consequences of the outcomes of such evaluations.*

Finally, we would like to point out that it is necessary to ensure proper accountability to the parliament regarding the use of the funds. Especially when a fund is operated at arm's length from the central government, clear agreements must be made regarding the provision of information relating to fund management, income and expenditure and, in the case of an allocation fund, the use of the funds.

Consider in advance what information is necessary for assessing whether any adjustments are necessary. It is important to regularly evaluate the functioning of the chosen system.

Using the money in the fund in a proper manner, with a specific goal determined on the basis of a meaningful and substantive analysis, is a considerably difficult task. It is therefore important to take care of independent evaluations and to make those public. CPB performed ex-ante evaluations of the FES projects. Although most of the FES projects assessed by the CPB did not receive a positive assessment, we only came across additional conditions in the commitment letter of the FES manager in one of the eight projects assessed. This is why we emphasise the importance of taking the consequences of the outcomes of ex-ante evaluations of projects financed with money from the fund. Moreover, to gradually improve the award policy of the fund, it would be advisable also to carry out ex-post assessments of projects financed with money from the fund.

## 6 Response of the Minister and Afterword by the Netherlands Court of Audit

### 6.1 Response of the Minister of Economic Affairs

The Minister of Economic Affairs responded to our report on 3 October 2014. Below, we summarise his response. The full response of the Minister is available on our website: [www.rekenkamer.nl](http://www.rekenkamer.nl).

The Minister feels that our report suggests that it would be wise for the Netherlands to follow the Norwegian model and place its natural gas revenues in a State capital fund. He points out that the government does not choose to do this. The Minister acknowledges that it is, of course, important to handle natural gas revenues in a prudent manner.

Gas revenues are temporary income that will gradually become a diminishing part of the national budget. This is why, according to the Minister, it would be wise to anticipate this and use a part of the revenues to create savings. It is also important to invest in projects from which we want to earn money in the future. The Minister states that both these objectives are served by the Future Fund.

The Minister has placed three caveats on the model-based calculations made in our report.

Firstly, he finds that the report too easily bypasses the consequences for the national budget that would arise if it were decided to place the natural gas revenues in a State capital Fund. He indicates that, in this case, a cost-cutting operation of more than €10 billion a year would become necessary, whose impact would be felt on the Dutch economy within the short term.

Secondly, the Minister points out that, in our calculations, the social return on the expenditure of the government has been disregarded. To arrive at a fair comparison, the Minister feels that this should be taken into account.

Thirdly, in the opinion of the Minister, our report has been too quick to assume that a capital fund will generate an annual return of 5.7%. It is uncertain whether such returns from the past can also be achieved in future, according to the Minister. In addition, he points out the risks associated with a high return, indicating that he would find it safer to consider a risk-free return. The Minister also notes that the average inflation over the period for which the model-based calculation has been made was (significantly) higher than the 1.6% considered by the Norwegian fund. This means that an annual withdrawal of 4% will diminish the capital, thus affecting the principal.

The Minister points out that the necessary and comprehensive assessment of a further increase in savings through a large gas revenues fund is lacking in our report. The Minister believes that a note should be included to the effect that a large amount is already being saved in the Netherlands via pension funds.

In the second part of his response, the Minister discusses the lessons for future fund creation we have put forward in our report. He indicates that these lessons are consistent with those learnt earlier by the government based on the FES. He also states that the government shall apply these lessons, where relevant, to the Future Fund. In

his response, the Minister has gone through the lessons and responded to them in the light of the plans for the Future Fund.

## 6.2 Afterword by the Netherlands Court of Audit

Unlike what the Minister suggests in his response, we have not expressed a preference for the creation of a State capital fund in our report. How natural gas revenues are used is a political decision, after all. In this report, we translate the past into the future and outline possible directions to be taken based on three scenarios, along with their associated advantages and disadvantages. The creation of a State capital fund is a part of these scenarios.

The Minister has placed certain caveats on the basic principles used by us in the model-based calculations. We would like to point out that, in case of a State capital fund, the choice of the investment risk profile is a political decision. This also applies to the size of the annual withdrawals. A possible point of departure is not to withdraw more than the real return from the fund, in order to leave the principal intact.

Furthermore, the Minister has pointed out the adverse short-term consequences of the creation of a State capital fund. We have acknowledged these consequences in our report. Unfortunately, the Minister has not referred to the possible advantages in the long(er) term, which are also mentioned in the report.

Finally, in his response, the Minister has listed some of the issues concerning the Future Fund. He has done so in the light of lessons drawn by us from the way in which the FES has been handled in the past. The response of the Minister indicates that he wishes to use our report as we had intended: namely, as an aid for democratic decision-making on the future use of natural gas revenues. We assume that this discussion will be continued in consultations between the Minister and the House of Representatives.

## Appendix      Organisation of natural gas extraction in the Netherlands

Till the early sixties of the last century, the State took over all the (at that time, still very limited) supplies of extracted natural gas and petroleum from the concession holder Nederlandse Aardolie Maatschappij (NAM). This company, half owned by the Anglo-Dutch company Royal Dutch Shell and half owned by the American company ExxonMobil, was obliged to sell its unutilised extracted natural gas at a reasonable price to the Dutch state. The sale of the natural gas took place via the State gas company.

However, with the volumes of natural gas that became available after the discovery of the Groningen field, this system was no longer sustainable. The need to coordinate the extraction and sale of the natural gas became unavoidable. Hence, the State tried to get involved in the production, to ensure that production and sales kept pace with one another.

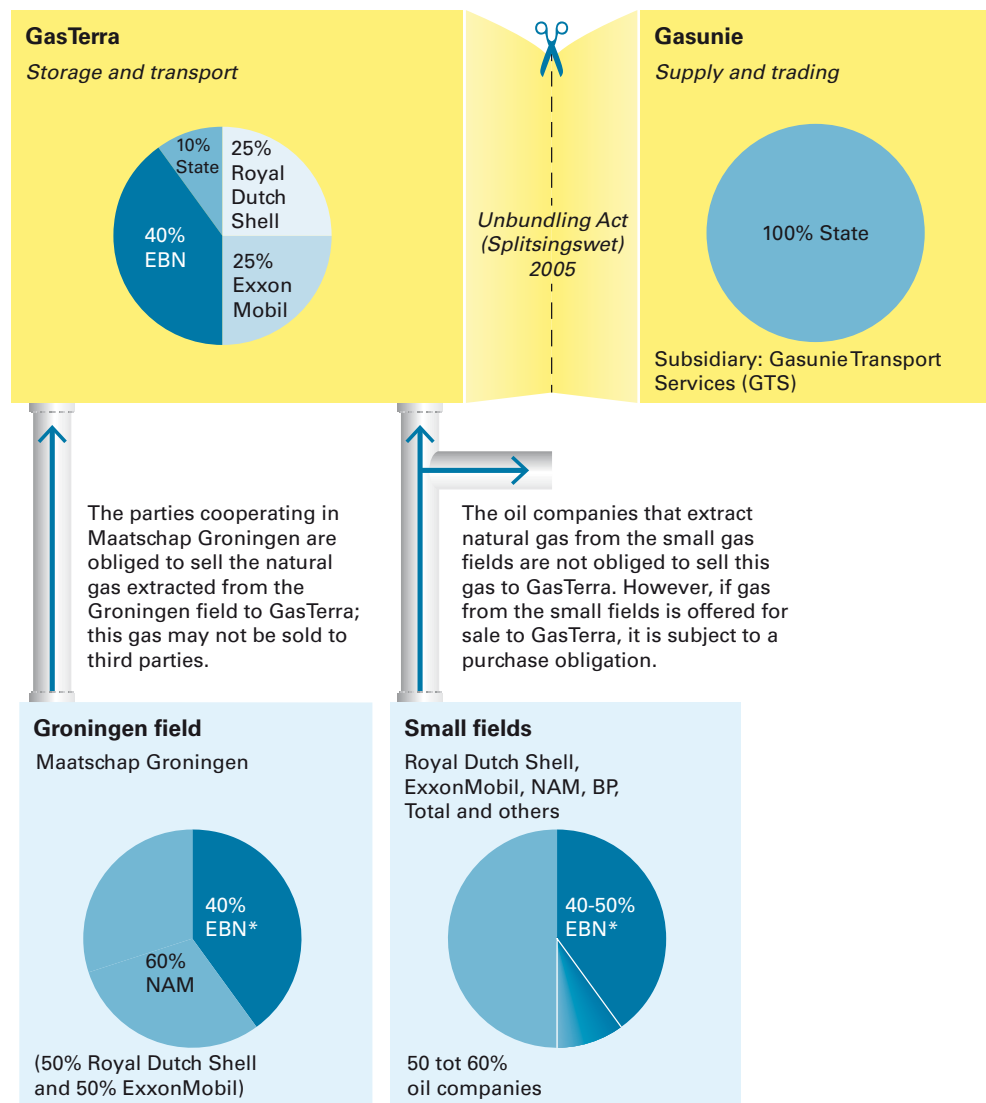
In 1962, it was decided that the exploitation of the Groningen field would be entrusted to a partnership, Maatschap Groningen, in which both the State and NAM held participations. The economic interest of the State in the partnership was fixed at 40% and State control of the partnership at 50%.

In addition, the Dutch company Gasunie was set up as a marketing organisation for Dutch natural gas.

A cooperation agreement concluded between the State and all concerned parties laid down regulations for the coordination of the extraction, transport and sale of natural gas from the Groningen field, as well as the transport and sale of natural gas extracted elsewhere in the Netherlands. The economic relationships and control structures within Maatschap Groningen and Gasunie were also laid down.

In 2005, Gasunie was split up. Since then, Gasunie is engaged in the transport and storage of natural gas, while GasTerra focuses on supply and trading.

Figure 13 **Organisation of extraction, transport and sale of the Dutch natural gas**  
*Situation since 2005*



\* Energie Beheer Nederland (EBN) is a 100% State participation.

## Literature

Netherlands Court of Audit (1999). *Aardgasbaten*. House of Representatives, session 1999-2000, 26 811, nr. 2. The Hague: Sdu.

Netherlands Court of Audit (2009). *Rapport bij het Jaarverslag 2008 van het Fonds Economische Structuurversterking*. House of Representatives, 2008-2009, session 31 924 D, nr. 2. The Hague: Sdu.

Netherlands Court of Audit (2011). *Rapport bij het Jaarverslag 2010 van het Fonds Economische Structuurversterking*. House of Representatives, session 2011-2012, 32 710 D, nr. 2. The Hague: Sdu.

Netherlands Court of Audit (2012). *Rapport bij het Jaarverslag 2011 van het Ministerie van Economische Zaken, Landbouw en Innovatie*. House of Representatives, session 2011-2012, 33 240 XIII, nr. 2. The Hague: Sdu.

CBS (2014). *Overheid; inkomsten en uitgaven 1969-2013*. The Hague /Heerlen: StatLine databank. Statistics Netherlands (CBS).

CPB (2005). *Leren van investeren; Analyse van investeringsvoorstellen in kennis, milieu en ruimtelijke economie*. CPB-document no. 86. The Hague: Netherlands bureau for Economic Policy Analysis (Centraal Planbureau).

CPB (2006). *Beoordeling projecten ruimtelijke economie, innovatie en onderwijs; Analyse ten behoeve van de fcs-meevaller 2006*. CPB-document no. 130. The Hague: Netherlands bureau for Economic Policy Analysis (Centraal Planbureau).

CPB (2009a). *Beoordeling projecten innovatie en onderwijs 2008; Analyse ten behoeve van toewijzing fcs-gelden*. CPB-document no. 183. The Hague: Netherlands bureau for Economic Policy Analysis (Centraal Planbureau).

CPB (2009b). *Beoordeling projecten icre 2007-2008*. CPB-document no. 185. The Hague: Netherlands bureau for Economic Policy Analysis (Centraal Planbureau).

CPB (2009c). *Beoordeling cpb fcs-ronde Selectieve Continuering*. CPB-document no. 188. The Hague: Netherlands bureau for Economic Policy Analysis (Centraal Planbureau).

CPB (2014). *Overheidsfinanciën houdbaar. Minder profijt op hogere leeftijd. Minder zorg om vergrijzing*. CPB Boek 12. The Hague: Netherlands bureau for Economic Policy Analysis (Centraal Planbureau).

CPB, RIVM, RPB & SCP (2002). *Selectief investeren; ices-maatregelen tegen het licht*. The Hague: Netherlands bureau for Economic Policy Analysis (Centraal Planbureau).

DNB (2008). *De Nederlandse gasbaten en het begrotingsbeleid: theorie versus praktijk*. Occasional Studies, vol. 6, no. 5. Amsterdam: De Nederlandse Bank NV.



EA (Ministry of Economic Affairs) (2004). *Jaarverslagen over het jaar 2003; Jaarverslag van het Fonds Economische Structuur- versterking* (D). House of Representatives, 2003-2004, session 29 540, nr. 42. The Hague: Sdu.

EA (Ministry of Economic Affairs) (2007). *Memorie van toelichting van de begrotingsstaat van het Fonds economische structuurversterking voor het jaar 2008*. House of Representatives, 2007-2008, session 31 200 D, nr. 2. The Hague: Sdu.

EA (Ministry of Economic Affairs) (2008). *Jaarverslagen over het jaar 2007; Jaarverslag van het Fonds Economische Structuur- versterking* (D). House of Representatives, 2007-2008, session 31444 D, nr. 1. The Hague: Sdu.

EA (Ministry of Economic Affairs) (2014a). *Brief van de minister van Economische Zaken over Gaswinning in Groningen*. House of Representatives, 2013-2014, session 33 529, nr. 30. The Hague: Sdu.

EA (Ministry of Economic Affairs) (2014b). *Brief van de minister van Economische Zaken over Inkomsten uit Groningengas*. House of Representatives, 2013-2014, session 33 529, nr. 31. The Hague: Sdu.

EA (Ministry of Economic Affairs) (2014c). *Delfstoffen en aardwarmte in Nederland. Jaarverslag 2013*. The Hague.

EA & Finance (1995). *Wijziging van de Wet Fonds economische structuurversterking; nota van de ministers van ez en Financiën naar aanleiding van het verslag van de vergadering van de vaste commissie voor Economische Zaken*. House of Representatives, 1994-1995, session 24 146, nr. 5. The Hague: Sdu.

EA & Finance (1999). *Wijziging van de Wet Fonds economische structuurversterking; nota van de ministers van EZ en Financiën naar aanleiding van het verslag van de vergadering van de vaste commissie voor Economische Zaken over het voorstel voor wijziging van de wet Fonds Economische Structuurversterking*. House of Representatives, 1999-2000, session 26 842, nr. 5. The Hague: Sdu.

IFSWF (2008). *Sovereign Wealth Funds; Generally Accepted Principles and Practices 'Santiago Principles'*. W/o pl.: International Working Group of Sovereign Wealth Funds.

Koedijk, K. (2009). 'Afscheid van het fes?' ('Goodbye to FES?') In: *Tijdschrift voor Openbare Financiën*, Vol. 41, 2009, nr. 1, p. 15-22.

Meijerink, R., Kwant, P. & M. van Twist (2010). *Evaluatie procedure Fonds Economische Structuurversterking; Domein Kennis, Innovatie en Onderwijs*. Annex to: House of Representatives, 2010-2011, 32 500 D, nr. 10. The Hague: Sdu.

Ros, A.P. (2009). 'De historie van het Fonds Economische Structuurversterking' ('The history of the Fund for Economic Strengthening'). In: *Tijdschrift voor Openbare Financiën*, Vol. 41, 2009, nr. 1, p. 2-14.

House of Representatives (1993). *Instelling van een Aardgasbatenfonds (Wet Aardgasbatenfonds); Memorie van toelichting*. House of Representatives, 1992-1993, session 23 002, nr. 3. The Hague: Sdu.

House of Representatives (1994). *Kabinetsformatie 1994; Brief van de formateur*. House of Representatives, 1993-1994, session 23 715, nr. 11 (reprint). The Hague: Sdu.

House of Representatives (1998). *Kabinetsformatie 1998; Brief van de formateur*. House of Representatives, 1997-1998, session 26 024, nr. 10. The Hague: Sdu.

House of Representatives (2014). *Motie van het lid Pechtold c.s. over een samenhangende toekomststrategie en een voorstel voor een Toekomstfonds*. House of Representatives, 2013-2014, session 27 406, nr. 210. The Hague: Sdu.

VROM Council (2002). *Impuls voor ruimtelijke investeringspolitiek; Advies naar aanleiding van de (ices-) investeringsimpuls 2002*. Advies 033. The Hague: VROM.

WRR (Scientific Council for Government Policy) (2013). *Naar een lerende overheid; Investeren in het verdienvermogen van Nederland*. Amsterdam: Amsterdam University Press.



