

# Annual Report 2017

Connection in the energy transition



ebn



# Index

<b>1. Foreword</b>	<b>1</b>	<b>4.3 Results: Return to Nature</b>	<b>43</b>	<b>9.3 Governance table</b>	<b>160</b>
<b>2. About EBN</b>	<b>2</b>	<b>4.4 Results: New Energy</b>	<b>45</b>	<b>9.4 Remuneration report</b>	<b>162</b>
2.1 Profile	7	<b>4.5 Financial results</b>	<b>48</b>	<b>9.5 GRI Index 2017</b>	<b>166</b>
2.2 Organisational structure	9	<b>4.6 Social results</b>	<b>50</b>	<b>9.6 10-year key figures</b>	<b>174</b>
2.3 Business model	11	<b>4.7 Prospects 2018</b>	<b>57</b>	<b>9.7 Glossary and reference list</b>	<b>175</b>
2.4 Our position in the energy chain	13	<b>5. Governance and Risk</b>	<b>61</b>	<b>9.8 Contact information</b>	<b>177</b>
2.5 The development of a geological resource	15	5.1 Risk management	61		
<b>3. Strategy</b>	<b>21</b>	5.2 Risk appetite	66	<b>Interviews</b>	
3.1 Trends	22	5.3 Main strategic risks	67	Maarten Camps (EZ) and	
3.2 SWOT and dilemmas	23	5.4 Corporate Governance	74	Jan Willem van Hoogstraten (EBN)	18
3.3 Vision, mission and strategy	25	<b>6. Report from the Supervisory Board</b>	<b>84</b>	Chris de Ruyter van Steveninck (ONE) and	
3.4 Organisational change	26	<b>7. About this report</b>	<b>92</b>	Thijs Starink (EBN)	32
3.5 Material themes	27	<b>8. Financial Statements</b>	<b>100</b>	Pieter van Oord (IRO) en Eric Kreft (EBN)	58
3.6 SDGs	29	<b>9. Annexes</b>	<b>154</b>	Saskia Hagendoorn (Hydreco) and	
3.7 Connectivity matrix	29	9.1 Interaction with our stakeholders	155	Eveline Rosendaal (EBN)	81
<b>4. Results for 2017</b>	<b>35</b>	9.2 The people of EBN	158		
4.1 General objectives	37				
4.2 Results: Our Dutch Gas	37				

# 1. Foreword

A decorative background consisting of several thin, light gray lines connecting circular nodes of varying sizes. The nodes are positioned at various points across the page, creating a network-like structure. One node is at the top right, another is in the middle left, and others are scattered in the lower half of the page.

The Paris climate agreements are now more than two years old. A lot has been said and written about global warming during this period. The need to reduce the global CO<sub>2</sub> emissions has sunk in for almost everyone. EBN is also expected to take major steps. Although 2030, and 2050 in particular, still seem far away, we do not have to wait until tomorrow or the day after tomorrow to take action. We are not only going to talk and write about the climate problem, but also actually make and execute concrete plans to prevent it.

In this respect, the ambition expressed in the coalition agreement to realise a 49 per cent CO<sub>2</sub> reduction by 2030 greatly appeals to us. This would enable the Netherlands to become a leader within Europe; the European targets for 2030 are now still at 40 per cent CO<sub>2</sub> reduction. Together, we must provide a framework for this important ambition of this government in the years to come. We can only move forward with this big challenge with genuine cooperation and real use of each other's strength.

It should be clear that the role of fossil fuels and therefore of natural gas in our energy system will change enormously in the coming years and decades. It is therefore important that the gas sector also asks itself what the target of 49 per cent CO<sub>2</sub> reduction for gas extraction and supply in the Netherlands means – both in the sense of its own operational actions and in the entire chain from detection to use. Can the gas sector reach a credible reduction of 49 per cent in 2030 with this supply chain approach? And what is needed to do so? These are challenges that the sector will and must be working on every day. This does not mean that the sector has been quiet in recent years. Steps have been taken in areas such as Power2Gas, Green Gas, Geothermics, CCS and (blue) hydrogen. Each and every one of them is a sustainable example, which,

to a greater or lesser extent, can and must contribute to the 49 per cent objective.

We will also make our contribution to the climate objectives in the Coalition Agreement visible in the coming years. Traditionally, EBN invests in the exploration, production and storage of gas and oil. That is our statutory task. But with our knowledge of the Dutch subsurface, we also want to help accelerate the energy transition. Not by standing on the sidelines, but as an active and involved player. Our revised strategy reflects our ambitions in this area: in addition to our traditional role, we are also an important player when it comes to reuse and decommissioning of obsolete oil and gas infrastructure including CO<sub>2</sub> storage, and in addition we encourage the use of sustainable forms of energy from the subsurface such as geothermal energy. Geothermal energy has great potential in the Netherlands and can play a major role in the transition to a more sustainable heat supply. I expect this heat transition to be an important part of the new Climate Agreement.

In order to take geothermal energy to the next level, EBN is crafting a so-called Geothermal Master Plan. This project plan shows how geothermal energy can be organised in the Netherlands, and can be used in order to make it a success.

At the end of 2016, we made a similar Master Plan for the activities concerning reuse and decommissioning of obsolete gas and oil infrastructure. One of the recommendations in this plan was the creation of a national platform. I am very pleased that we now have that platform as of 1 January of this year in the form of Nexstep. Nexstep will use the coming years to organise the reuse and decommissioning of gas and oil infrastructure in an efficient and safe manner.

Quakes are still occurring in Groningen. On 8 January of this year, the most powerful quake in five years was measured at 3.4 on the Richter scale in Zeerijp. The inhabitants of Groningen are rightly experiencing a sense of insecurity. EBN developed activities in 2017 in a variety of ways to contribute to a safer and better production of the Groningen field, in line with its mission and the policy of the Minister of Economic Affairs and Climate Policy.

We have commenced several studies that should contribute to better insights into the subsurface models. This work is supportive and adds to the research carried out by NAM, but also by other parties such as SSM and KNMI.

This year, EBN created an infographic about the energy system in the Netherlands for the second time. Under



the heading 'Energy in the Netherlands', we provide a clear overview of how the energy system is structured, how it is used for extraction and consumption, and also which sectors cause most CO<sub>2</sub> emissions. The infographic provides a good insight into how both electrons (electricity) and molecules (including natural gas) form our energy system, and the influence that the heat demand has on seasonal fluctuations. It is our aim to give as many Dutch people as possible insight into the system and thus initiate an informed dialogue. That also fits with our role to 'give energy to the transition'. One of EBN's core values is to create a connection. This core value is a recurrent theme in this report. In concrete terms, this is reflected in the four interviews in the report. Each of our strategic pillars ('Our Dutch Gas', 'Return to Nature' and 'New Energy') is reflected, and there is an interview about the urgency of the energy transition with Secretary General Maarten Camps of the Ministry of Economic Affairs and Climate Policy.

**Jan Willem van Hoogstraten**  
CEO



*From left to right: Jan Boekelman, Jan Willem van Hoogstraten en Berend Scheffers.*

<b>Key figures</b>	<b>2017</b>	<b>2016</b>
<b>Number of joint ventures</b>	197	198
<b>Of which exploration</b>	44	46
<b>Sales EBN part (bln. N3)</b>	17.5	20
<b>Sales (EUR million)</b>	3,015	3,094
<b>Net profit (EUR million)</b>	556	333
<b>Payments to the State (EUR million)</b>	1,497	1,277
<b>Investments (EUR million)</b>	156	281
<b>Depreciation and impairment (EUR million)</b>	469	789
<b>Social</b>		
<b>Number of employees</b>	82	81
<b>Absenteeism through illness</b>	4.0%	4,9 %
<b>Environment<sup>1</sup></b>		
<b>CO<sub>2</sub> emissions</b>		655 Kton
<b>Methane emissions</b>		5,0 Kton
<b>Energy consumption</b>		18,2 PJ

<sup>1</sup>Operational performance indicators are reported based on statements by operators and consolidated by the Netherlands Enterprise Agency. These figures relate to the calculated EBN share in Dutch gas production and annual drilling activities.

The 2017 figures will only be available later this year and will be published in the EBN sustainability report 2017/2018.



# 2. About EBN

## 2.1 Profile

Energie Beheer Nederland (EBN) is a policy participation in which the shares are one hundred per cent owned by the Dutch State and are managed by the Ministry of Economic Affairs and Climate Policy. EBN implements the energy policy of the Ministry of Economic Affairs and Climate Policy.





EBN uses its knowledge and experience in the area of the subsurface, the oil and gas sector and long-term, capital-intensive projects for a reliable and future-proof supply of energy. We want to make a constructive contribution to the acceleration of the energy transition. This transition must ensure that the Dutch energy supply in 2050 is CO<sub>2</sub> neutral. Our energy supply will change dramatically to achieve the goals of the 2015 Paris climate agreement. The developments in the climate and energy field mean that EBN no longer exclusively focuses on the exploration, production and storage of gas and oil.

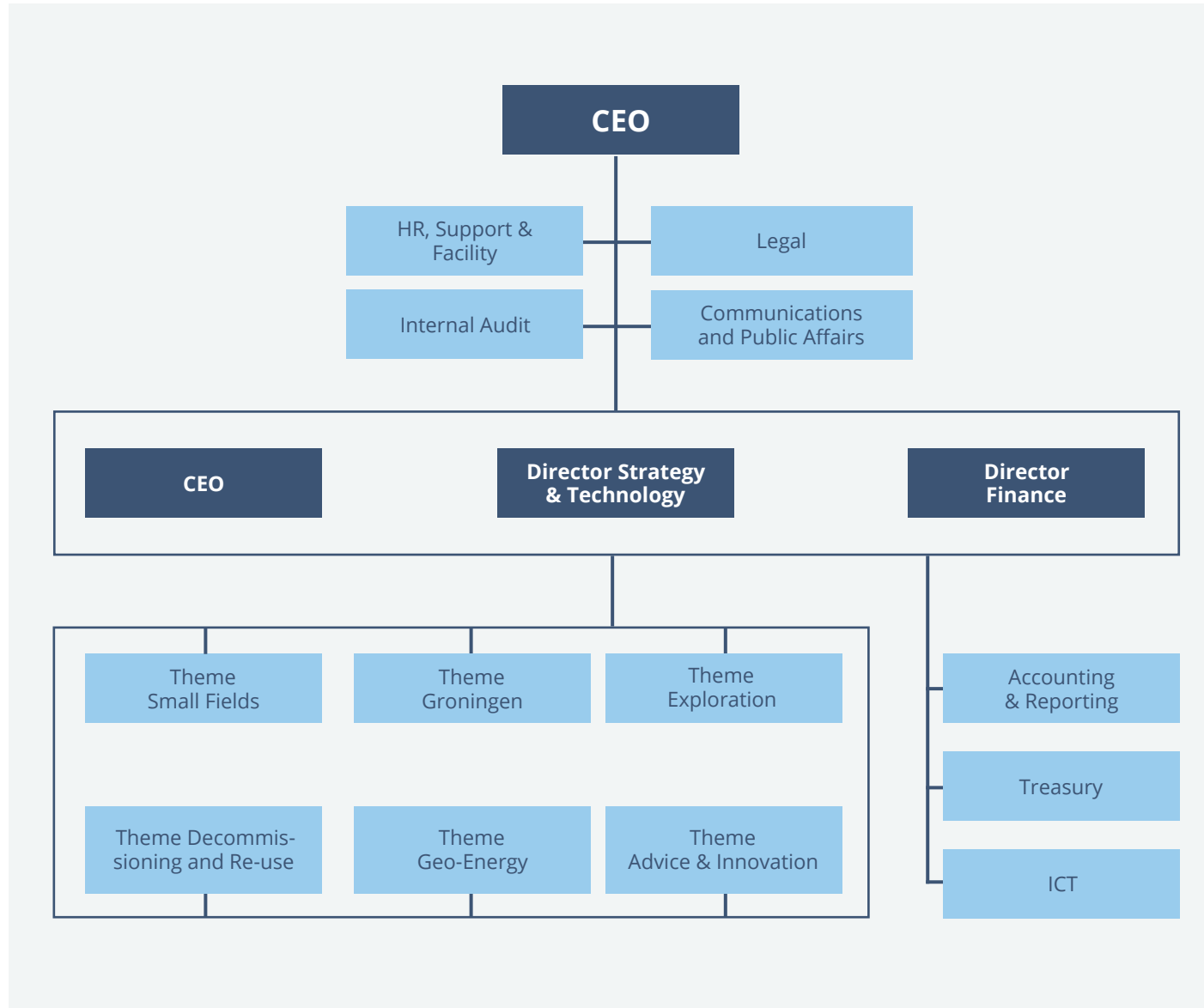
We have reviewed our strategic priorities in 2016. Under the heading 'energising the transition' we are now focusing on: the sustainable and safe development of natural gas and oil reserves in the Netherlands, safe and sustainable reuse and decommissioning of disused infrastructure, and the use of sustainable forms of energy from the subsurface such as geothermal energy. Finally, we want to contribute to the development of knowledge about new applications of the Dutch subsurface such as the storage of energy and CO<sub>2</sub>.

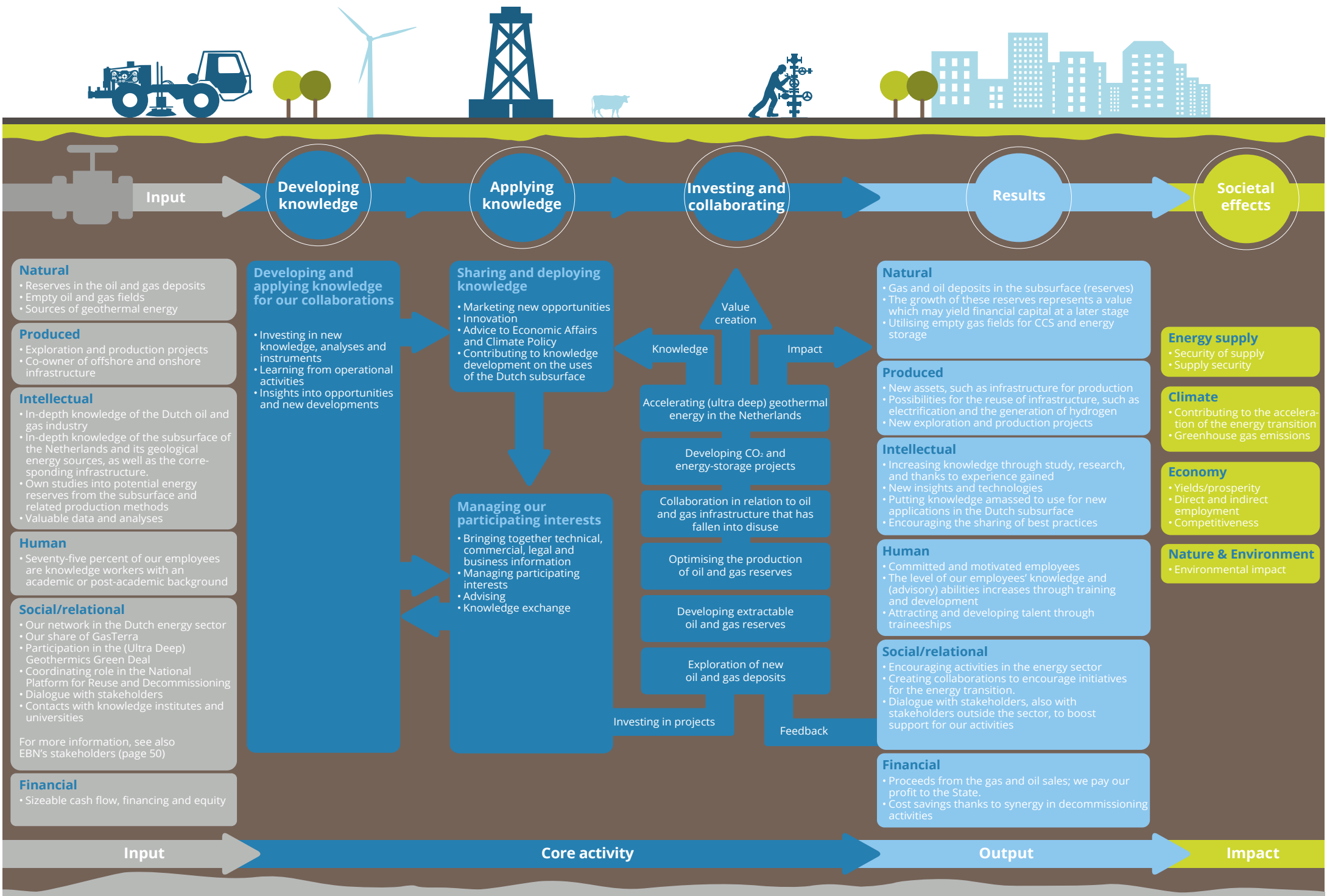
We are active as a non-operating partner in almost two hundred joint ventures with oil and gas companies, where we generally invest forty per cent. In this role, we put the Mining Act into effect. This is further explained in the business model on page 10. EBN also has interests in infrastructure: offshore pipeline systems and gas storage. In addition, we have a forty per cent interest in GasTerra B.V., in which the State and we have partnered with Shell and ExxonMobil. We sell our gas through this gas wholesaler.



## 2.2 Organisational structure

EBN has over eighty employees, all of whom are working in Utrecht. We have an Executive Board and a Supervisory Board. EBN has been organised in six multidisciplinary thematic teams since September 2017: Small Fields, Groningen, Exploration, Decommissioning & Reuse, Geo-energy and Advice & Innovation. EBN also has a number of support departments: HR & Facility, Legal, Communications & Public Affairs, Internal Audit, Accounting & Reporting, Treasury and ICT. Specialist disciplines come together in departments at EBN. Read more about our organisational change on page 54.







## 2.3 Business model

Our business model is based on the six ‘capitals’ from the framework of the International Integrated Reporting Council (IIRC): natural capital, manufactured capital, intellectual capital, human capital, social and relationship capital, and financial capital. These capitals are the input of our core activities with which we create economic and social value.

### 2.3.1 The input: Our six capitals

The reserves of geological energy sources in the Dutch subsurface, as well as our knowledge of and collaborations within the energy sector,

are the main elements of the input for EBN.

See figure on page 10.

### 2.3.2 Core activities

The core of our business model consists of three activities: investing and collaborating both in our current partnerships and in future, managing our participations and developing and applying knowledge for our participations and new applications of the Dutch subsurface.

### Investing and collaborating

We invest in the safe, sustainable and optimal use of (existing) gas and oil fields. Where infrastructure (pipelines, platforms) has come to the end of its life cycle, we invest in effective reuse and/or decommissioning. We take a leading role in the decommissioning issue through the National Platform for Reuse and Decommissioning, Nexstep. We are a driving force behind improving sustainability performance and have an active approach to consolidating public backing for our activities. We work together with various parties to accelerate the development of (ultra-deep) geothermal energy in the Netherlands.





### **Knowledge development and application**

The backbone in the business model of EBN is knowledge of resources in the subsurface. We use this knowledge for our participations and partnerships. Thanks to the continuous and structural cooperation, the (mutual) knowledge exchange remains guaranteed. We invest in our own studies and are involved in studies of partners or third parties. We generate insights into possibilities and opportunities for new developments in the Dutch subsurface such as geothermal energy and the storage of energy and CO<sub>2</sub>. We create value by using our knowledge in the entire Dutch energy sector. We also advise the Ministry of Economic Affairs and Climate Policy.

### **Managing our oil and gas participations**

With knowledge and analyses, EBN can directly influence operators (the oil and gas companies) in their choices and decisions. Based on our insights, we advise operators to continue investing in the exploration and production of Dutch natural gas and oil offshore wherever possible. During this government's term of office, operators cannot apply for exploration licences for new onshore gas fields.

We closely monitor the performance of our participations. This means we can make adjustments where necessary and possible. We use a bi-annual standardised analysis that includes operational costs and rates. This helps us monitor how the participations offshore are performing compared to other explorations and extractions. We encourage the sharing of Best Practices where possible, so that operators can learn from each other's knowledge and analysis.

### **2.3.3 The output: What is the result?**

To EBN, knowledge and economic value are the most important elements of the output. Both are used as investment to safeguard the continuity of energy production in the Netherlands.

See figure page 10.

Our activities, and those of other parties in the chain, have an impact on society – particularly on the energy supply, economy, the living environment and the environment. The impact can be positive as well as negative.

### **Positive impact**

EBN shares operational and technological knowledge with partners in the sector and also shares its knowledge of the subsurface to accelerate the energy transition, for example in the area of geothermal energy and CO<sub>2</sub> storage. EBN contributes to the security of supply of energy in the Netherlands.

The economic value creation is the cash flow to the Dutch State: the net earnings plus levies and taxes. The possession of gas has had a major impact on prosperity in the Netherlands in recent decades, but this impact has been reduced in recent years due to declining natural gas production. The renewable energy sources from the Dutch subsurface, such as geothermal energy, have the potential to be a powerful engine for the local economy. The industries provide direct and indirect employment.

### **Negative impact**

In Groningen, the extraction of natural gas has a major effect on the local living environment. The impact of earthquakes is huge. They result in damage to buildings and infrastructure. The damage in the gas extraction area is more than just material. Many people are faced with uncertainty.



The production of oil and gas as well as the use of these fossil fuels cause, among other things, emissions that are harmful to the environment and contribute to the greenhouse effect. There is also a very limited risk of direct pollution, for example by leaks. The infrastructure at oil and gas fields (offshore as well as onshore) that approaches the end of its useful life is always a point of attention. Platforms must be cleared away or given another function. Offshore pipelines and wells must be left behind clean and safe. In some cases, they need to be removed.

#### **2.4 Our position in the energy chain**

The illustration on page 14 shows what our involvement is in the energy chain. EBN is responsible for certain parts in this chain itself or together with others. We have a social obligation to contribute to an independent, reliable energy supply in the Netherlands. We provide essential energy from the Dutch subsurface in cooperation with our partners.

##### **Searching for and extracting energy sources**

EBN invests in the exploration, extraction and storage of energy sources such as natural gas, oil and possibly also geothermal energy from the Dutch subsurface in

the future. These activities are also called upstream activities and are part of EBN's core activities. Operators carry out the work and EBN co-invests. As a partner in a joint venture, EBN (and indirectly the State) also contributes to the income, and is also responsible for its share in the costs incurred as agreed in the cooperation agreement. The development of oil and gas reserves and the development of geothermal energy is carried out in a number of steps, see page 15.

##### **Sales of oil and gas**

The mining companies often sell natural gas and oil to wholesale companies, including GasTerra. GasTerra sells gas to various middlemen and end users. EBN is co-shareholder of GasTerra, and is involved in the policy of GasTerra B.V. through two seats on the Supervisory Board and two seats on the Board of Delegated Supervisory Board members. EBN has no active role in the steps that follow from the sale of the own gas.

##### **Storing energy sources**

Empty gas fields can serve as storage of energy sources, including for gas storage. The time that natural gas is

used can differ from the time that it is produced, as a result of which it is necessary to arrange storage capacity. EBN is the joint owner of four underground gas storage facilities. As a result, EBN has some involvement in midstream activities.

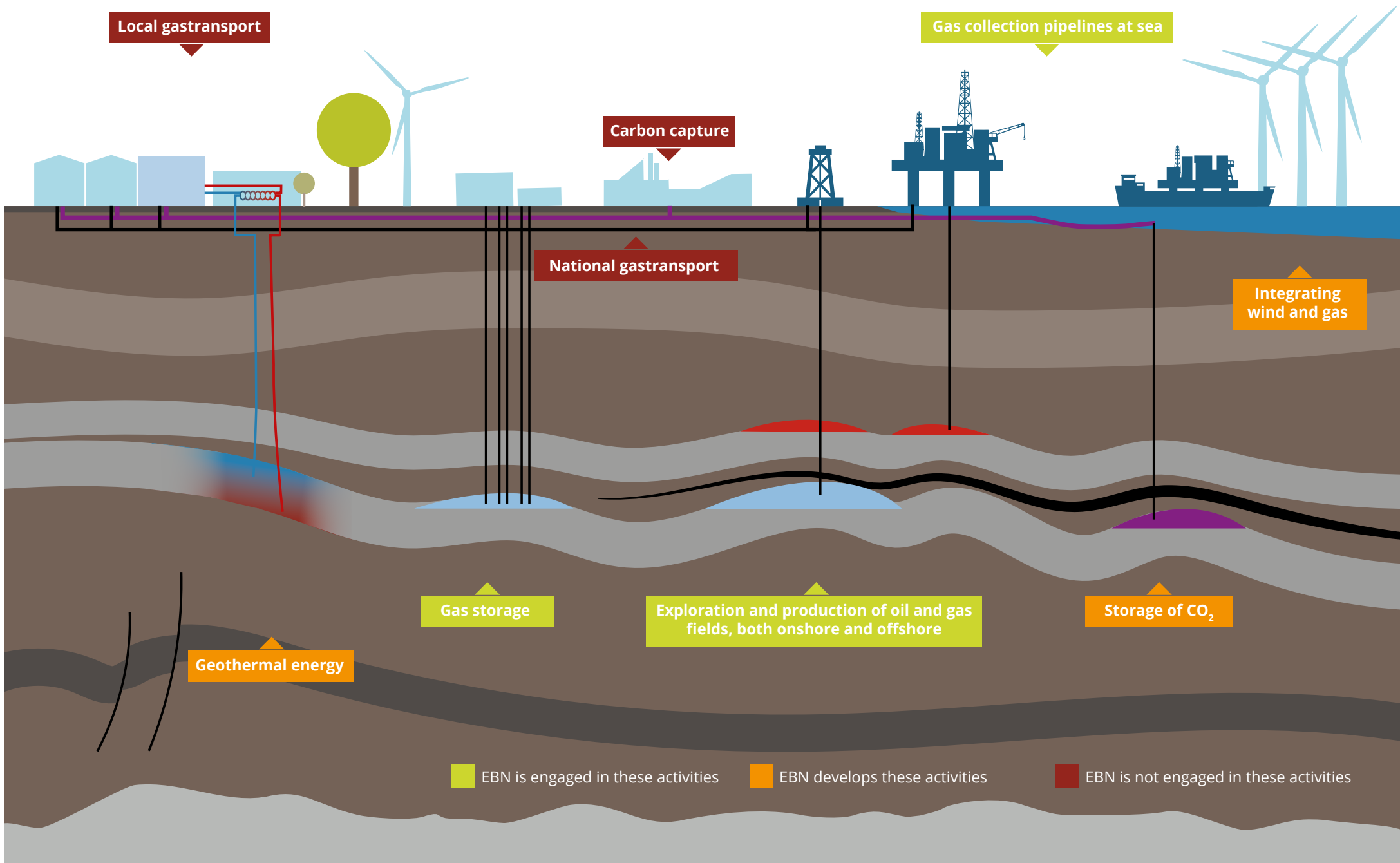
In the future, empty offshore gas fields may also be used for the storage of CO<sub>2</sub>. EBN explores the possibilities together with partners from the sector.

##### **Use of energy sources**

EBN has no role in the transport and distribution of energy and therefore has no role in downstream activities.

##### **Reuse and/or decommissioning of used infrastructure**

At the end of production, the used infrastructure will become obsolete, but it may be made available for other applications. EBN is an energiser for the effective decommissioning and reuse of disused infrastructure. We have a pioneering role in the decommissioning issue together with Nexstep, the National Platform for reuse and decommissioning.





## 2.5 The development of a geological resource

The illustration below shows how the development of a geological resource (oil, gas or geothermal energy) takes place. From the exploration to clearing up the infrastructure. In this process, there are many areas of overlap for oil and gas and geothermal energy respectively.

### Prospecting

**Oil and gas:** EBN carries out studies into potential new gas and oil sites, using regional knowledge and seismic images.

**Geothermal energy:** Feasibility studies are being conducted to determine whether a region is suitable for extracting geothermal energy. The exploration of the soil is done using regional knowledge and seismic images.

### Start of exploration

**Oil and gas:** along with licence holders, we test possible gas or oil resources through test drilling.

**Geothermal energy:** if a geothermal energy company has found a suitable location during the exploration phase where they wish to drill for geothermal heat, a licence is required. The company applies for this

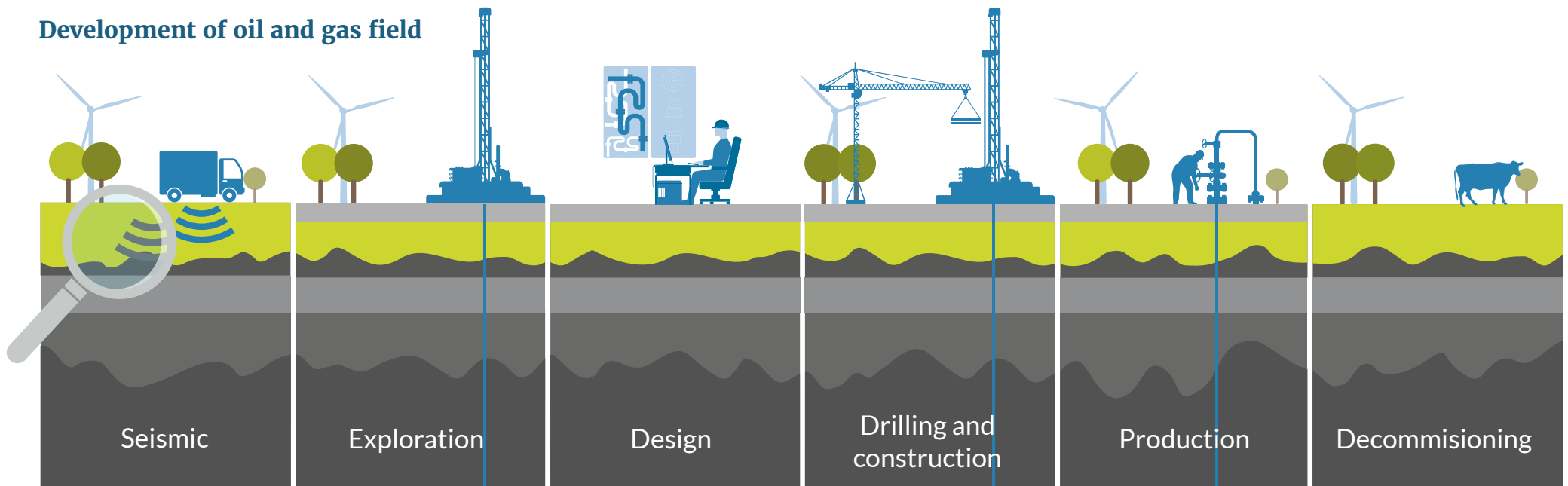
licence from the Minister of Economic Affairs and Climate Policy. Then the first well is drilled.

### Construction

**Oil and gas:** together with our partners, we have economically viable intentions for development.

**Geothermal energy:** when a suitable aquifer (an underground layer of water-bearing permeable rock) is found with the desired temperature, and if it appears that geothermal energy production is possible, a second well is drilled. These two wells are called a doublet and form the production site.

## Development of oil and gas field



## Production

**Oil and gas:** the reserves are produced as long as economically viable; at this stage, the investments earn themselves back (as a rule). The gas finds its way in the chain to the end users.

**Geothermal energy:** hot water is pumped up from the well, passed through a heat exchanger and then pumped back into the ground via the other well. The heat exchanger extracts the heat from the water and transfers it to the water in a heat network. The heat then flows to the end users via the heat network.

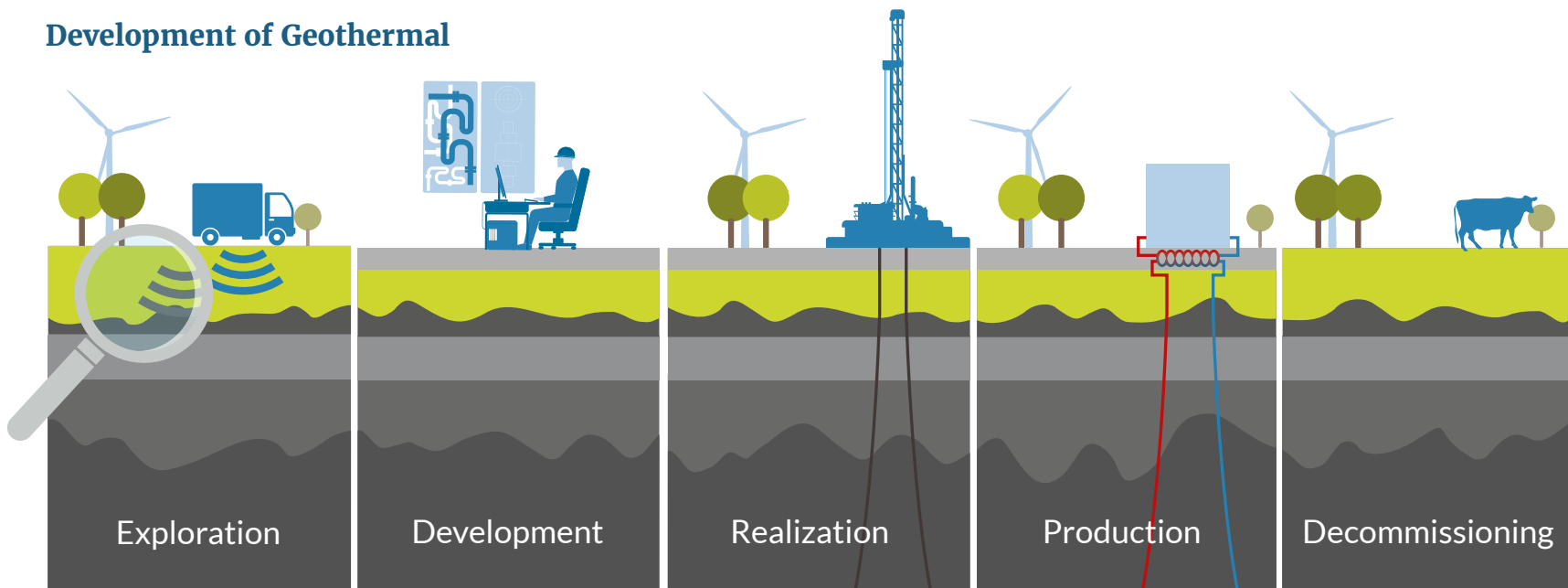
## Clean up

**Oil and gas:** once a gas production has come to the end of its lifespan, wells are permanently closed and the infrastructure is decommissioned. The surroundings are restored to their former state. In some cases, the infrastructure can be reused or an empty gas field can be used for the storage of energy or CO<sub>2</sub>.

**Geothermal energy:** when a location is no longer in use, the geothermal energy company must clean it up. The wells are closed and the installations are removed. The surroundings are restored to their former state.

When drilling for oil, gas or geothermal energy, State Supervision of Mines (SSM) ensures that this is done in a safe manner for people and the environment, and complies with laws and regulations. For more information on the development of an oil or gas field, visit: [www.hoewerktgaswinnen.nl](http://www.hoewerktgaswinnen.nl). For more information on the development of geothermal energy, visit: [www.hoewerктаardwarmte.nl](http://www.hoewerктаardwarmte.nl).

## Development of Geothermal







# Cooperation crucial to energy goals in coalition agreement

“We have ambitious goals: we are going for a 49% CO<sub>2</sub> reduction in 2030 and we are aiming for 55% in Europe together with like-minded countries. Ambitious, but most certainly feasible in our opinion. The industrial sector, the business sector, central and local authorities will have to work together to achieve the objectives of the coalition agreement. For many, it will require a different way of thinking and working. The beauty of it is that more and more parties are taking up the gauntlet.”



## Interview

**So says Maarten Camps, secretary general of the Ministry of Economic Affairs and Climate Policy (EZK). He spoke with Jan Willem van Hoogstraten, CEO of EBN, about the challenges of the coalition agreement.**

Van Hoogstraten: 'Collaboration is indeed crucial to achieving the ambitions. We can only move forward by joining forces and using each other's strength. At the same time, the urgency of the climate problem and with it the necessity of the energy transition has not yet sunk in for everyone. And I am talking specifically about the scope of the objectives. That is immense. In that respect, you can say that we need a revolution rather than evolution. It requires a director, a driver. As far as I am concerned, this is a task for the government. A good example of the positive effect of government policy is the SDE+ (incentive scheme for renewable energy production).

Camps: 'The developments are moving very swiftly. We are leading internationally with offshore wind, the first subsidy-free offshore wind farm seems to be becoming a reality. We would not have dared to dream that a few years ago. The approximately 12 companies that are responsible for most of the CO<sub>2</sub> emissions are feeling the urgency and asking for government instruments for the energy transition. Innovation is

moving fast. CO<sub>2</sub> storage should also make a substantial contribution to this. I am convinced that in 2030 we will do things differently than we can now foresee. For example, look at the potential of hydrogen. We still do not know enough about that, so it is useful if we start on some pilot projects. And that is why it is also important that an organisation such as EBN has turned around. On the one hand, you are faced with the fossil side of the transition - helping in a safe way to achieve the reduction of oil and gas - on the other hand; your knowledge and skills are essential for the development of renewable energy sources, in particular geothermal energy. The Ministry and EBN each work from their own roles on a reliable, future-proof and climate-neutral energy supply. In recent years, we have grown closer towards each other. If we look forward together, we can achieve success together.'

Van Hoogstraten: 'I totally agree. As EBN, our new role means that we also have to deal with different parties than before, such as IPO and VNG. This sometimes takes some getting used to for everyone involved. If we join forces with the ministry and trust each other, this will give an important boost to the support needed for the transition. In combination with legislation aimed at sustainability, we can take major steps. I also see an important role for the government at local level. When it comes to the decommissioning or



### **Maarten Camps**

Secretary general of the Ministry of Economic Affairs and Climate Policy (EZK)

### **Jan Willem van Hoogstraten**

CEO of EBN



## Interview

conversion of existing gas facilities, the ball lies in the municipalities' court. The announced Climate Act and a National Climate and Energy Agreement can also provide the required acceleration at local level. Although we as a society may be facing our biggest challenge ever, I am confident. It is like that riddle, 'How do you eat an elephant?' One bite at a time.'

Camps: 'We should indeed not be put off by the high level of ambition. We have to work together and show courage to innovate. In my opinion, working on pilot projects and if successful, large scale roll out, is essential. I am therefore pleased that this coalition agreement has clear goals. I am confident about our sustainable future'.



# 3. Strategy



The Netherlands is in the transition to a CO<sub>2</sub> neutral energy supply in 2050. The energy system as we know it today will change dramatically. These developments affect the energy sector and therefore also EBN. The energy transition and other developments also affect our strategy, our activities and business operations in the short and long term. EBN's business model is therefore greatly subject to change.



The figure below shows how our annual report can be read. EBN's mission and social role are embedded in our three strategic themes. The interests of our stakeholders are embedded in our material themes. EBN's strategy also provides answers to trends and developments that influence our daily practice and the possible risks that this changed environment has brought with it. The opportunities and threats come to the fore in the SWOT. EBN has formulated objectives to fulfil its mission. The results per strategic pillar (page 35) lead to the creation of value that can be found in our value creation model on page 10.

### 3.1 Trends

Climate change is a global development that has a major impact on our global society and its effect on the image of gas. EBN has identified three trends that influence our daily activities: the energy transition, the public backing for the oil and gas industry, and declining production and prolonged low prices. In recent years, the gas industry has come under pressure because of these trends.

#### The energy transition

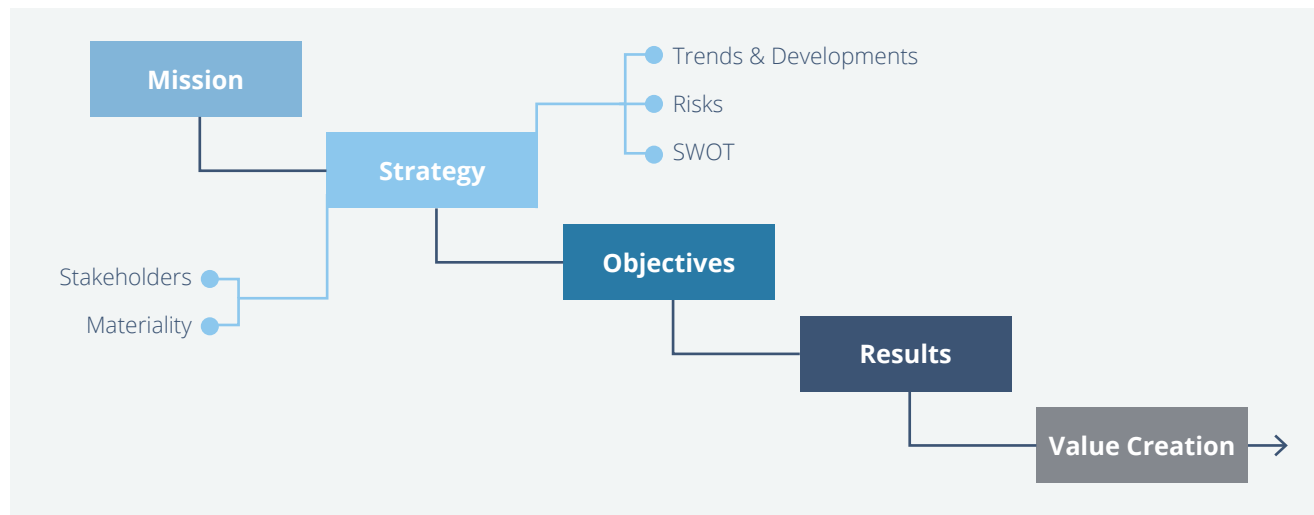
Ambitious climate objectives have been included in the coalition agreement Rutte III 'Confidence in the future'. The current government is aiming for a 49%

CO<sub>2</sub> reduction in 2030. To achieve this reduction, the government is providing a transition phase from fossil energy to sustainable energy.

The coalition agreement describes how the Dutch subsurface will (continue to) play an important role in the transition: 'The subsurface also plays an increasingly important role in sustainability, for example for the extraction of geothermal energy, the storage of substances and the extraction of drinking water'. The Dutch government is aiming at a CO<sub>2</sub> neutral energy supply in 2050, in line with the Paris climate agreement. EBN would also like to make a constructive contribution to the energy transition. We are using our knowledge and experience in the area of the subsurface for a reliable and future-proof energy supply in the long term. For example in the field of geothermal heat and the storage of CO<sub>2</sub>.

#### Public backing for the oil and gas industry

In recent years, the reputation of the oil and gas industry has deteriorated in the Netherlands and Europe. Issues such as 'safety', 'environment' and 'old fashioned fossil industry' are highlighted in the social debate. The earthquakes in Groningen cause damage resulting in a feeling of insecurity and uncertainty among residents of the province of Groningen. This has greatly reduced the public support for gas





extraction in the Netherlands. EBN is committed to informing its environment as carefully as possible and increasing knowledge in the field of oil and gas extraction.

### **Declining production & prolonged low prices**

The availability of economically recoverable reserves requires more complex exploration and extraction techniques. This means higher costs for operators. At the same time, oil and gas prices have been relatively low in recent years. Consequently, the production from our small fields is declining. In addition, the number of platforms that are at the end of their life span and that will have to be decommissioned in the next few years is growing. The extraction from the Groningen field has been sharply reduced due to safety. All of this creates financial pressure on results of the oil and gas industry.

It is necessary that EBN and its partners invest more in efficiency and innovation.

### **3.2 SWOT and dilemmas**

A SWOT analysis was drawn up to elaborate on the strategy. The SWOT provides insight into the strengths and weaknesses of EBN. Partly on this basis, we can identify a number of dilemmas:

1. The gas paradox: natural gas is part of both the problem (CO<sub>2</sub> emissions) and the solution (contribution to the energy transition through flexibility, transportability, storage possibilities, reuse of the gas infrastructure and lower CO<sub>2</sub> emissions compared to coal). The challenge here is to deal with this as carefully and balanced as possible.

2. The lack of support discourages activities related to gas extraction. At the same time, EBN is in favour of creating economic and social value by means of, among other things, this gas extraction. Tension exists between them, which is why those concerned must handle this as well as possible.
3. There is still a considerable amount of recoverable reserves in the North Sea, which are often difficult to access. At the same time, there is the call for decommissioning existing infrastructure. It is a tricky balance between, on the one hand, not removing important infrastructure too soon so that potential extraction of gas resources remain possible and, on the other hand, heeding the statutory clean-up obligations.

## SWOT

### Strengths

- Trusted and active partner in the E&P industry, also when it comes to reuse and decommissioning
- Overview position in the E&P industry
- Unique data position for E&P activities
- Encouraging E&P activities by own studies
- Facilitating knowledge sharing within and outside of the sector
- Qualified personnel
- Positive company culture (great place to work)
- Relatively small organisation with financial strength

### Weaknesses

- EBN relatively unknown among relevant stakeholders
- Not yet very active in the communication with external stakeholders
- IT systems not yet adequately adjusted in line with revised strategy
- Collaboration among themes/departments at EBN could be improved

### Opportunities

- Unique data position for subsurface activities
- Contributing to the acceleration of the energy transition
- E&P infrastructure can be used for the energy transition.
- Further fleshing out a pioneering role in decommissioning and reuse
- Contributing to the development of (ultra deep) geothermal energy
- Driving efficiency in E&P activities (low-cost development)
- Encouraging new activities in open areas (particularly at sea)
- Attracting new operators for the Netherlands

### Threats

- Oil and gas prices low for the long term, negative investment climate
- Support for E&P activities has deteriorated
- Earthquakes in Groningen and other disasters
- Disappearing infrastructure
- Long-term low prices give rise to the risk that joint venture partners cannot satisfy clean-up obligations
- Data theft or IT systems not available
- EBN may not be able to participate adequately in future because of insufficient mandate

### 3.3 Vision, mission and strategy



Due to the changed environment, EBN further examined the focus of the activities at that time in 2016 and we explored new activities. We have identified a number of priorities in the strategy. After the reassessment of the strategy, our organisation was adapted to the new strategy in 2017, so that existing and new activities can be properly secured in the organisation. This is how we give meaning to the more active role we aspire to. Read more about our new organisation on page 54 and how it has been fortified for future developments.


#### 3.3.1 Vision and mission

Our vision is: 'The Dutch geological energy sources play an important role in the energy transition'. Our mission is: 'Realising value from geological sources of energy in a safe, sustainable and economically responsible manner'.

#### 3.3.2 Strategic priorities

Three strategic priorities detail our mission:

-  **Our Dutch Gas:** Making the most of Dutch energy sources;
-  **Return to Nature:** taking the lead in the decommissioning issue and contributing to the development of CO<sub>2</sub> storage

 **New Energy:** Contributing to accelerating the development of (ultra deep) geothermal energy and energy storage.

#### **Our Dutch Gas**

EBN is working on solutions to optimally, sustainably and safely utilise existing gas fields. The Netherlands still possesses a considerable potential of gas resources, which can be used for the energy transition. We want to use the Dutch gas only where there are no more sustainable or cleaner forms of energy available (yet). This means gas can be the support and backup for renewable energy. Gas will probably continue to play an important role until we are able to set up our entire energy supply in a sustainable manner. Here we refer to the Energy Agenda of the Ministry of Economic Affairs and Climate Policy, which describes the role of gas as follows: '*Gas, as the least polluting fossil fuel, will continue to play an important role in the transition for a long time [ed: decades] also on the transition path to the ambitions of the Paris Climate Agreement*'.

#### **Return to Nature**

EBN takes control of effectively decommissioning or reusing disused oil and gas platforms. In the North Sea, but also onshore, the oil and gas industry faces a major challenge in the coming years. More and more fields are reaching the end of their useful life.

This allows the oil and gas infrastructure to become available for other applications. EBN and NOGEPA set up the National Platform for Reuse and Decommissioning, Nexstep, in October 2017, following recommendations in the November 2016 Masterplan for Decommissioning & Re-use. We have drawn up this Master Plan in collaboration with the sector. EBN strives with the sector towards a safe, sustainable and cost-efficient reuse or decommissioning of existing infrastructure. The energy transition offers an opportunity to reuse existing elements before the ultimate safe and efficient decommissioning. For example, CO<sub>2</sub> can be stored in empty-produced gas fields on the North Sea. This is seen as a good opportunity to reduce CO<sub>2</sub> emissions. EBN supports projects for the development of CO<sub>2</sub> storage.

#### **New Energy**

EBN develops partnerships to use geothermal energy efficiently. To realise low CO<sub>2</sub> energy supply in the Netherlands in 2050, the Dutch heat supply must be made more sustainable. Geothermal energy can make a major contribution to CO<sub>2</sub> neutral energy management. The Ministry of Economic Affairs and Climate Policy, together with EBN and TNO, explored the possibilities for realising geothermal pilot projects last year. On the basis of this survey, two Green Deals were signed in June 2017; Green Deal Brabant and the





Green Deal Ultra Deep Geothermal. The Green Deal parties are working on the realisation of various geothermal projects. As a non-operating partner EBN offers these parties support by making our knowledge and expertise available and working with the parties on a portfolio approach. The coalition agreement of 2017 provides that the subsurface will play an increasingly important role in the transition to a sustainable CO<sub>2</sub> low energy supply.

An amendment to the Mining Act is necessary to enable EBN to play a greater role in both geothermal and CO<sub>2</sub> storage.

### **3.4 Organisational change**

After the change in strategic priorities, a start was made on implementation of the strategy within our organisation at the end of 2016. This was followed up on in 2017. To empower the organisation adequately for the implementation of the strategy, a more thematically designed organisational model was sought. The management worked on more focus, more flexibility and working in a more result-oriented manner with the aim of creating an organisation that is tough enough for future developments. As of 1 September 2017, EBN is working in the new organisation.

### 3.5 Material themes

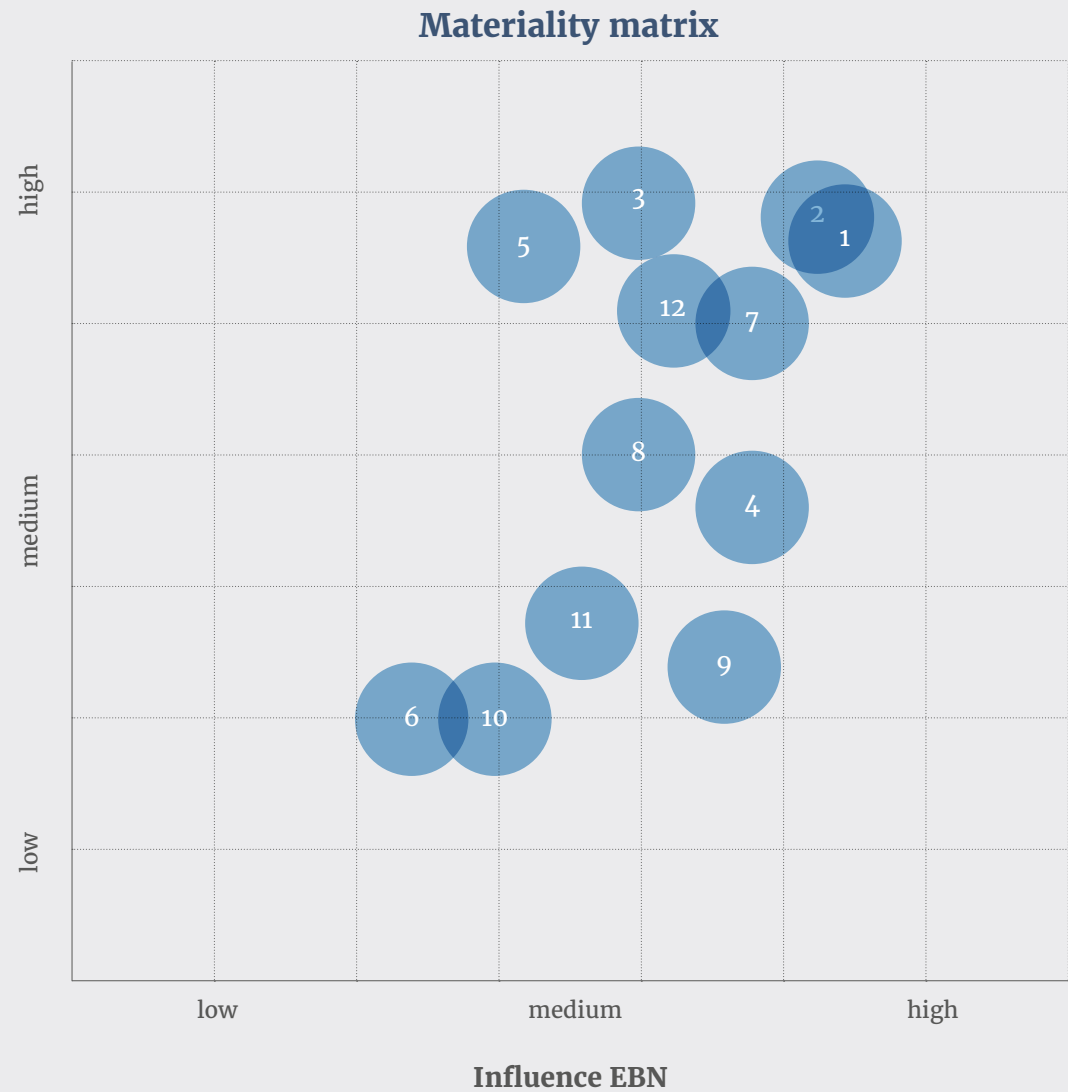
Which material issues are important for us and our stakeholders to include in our policy and to report on in our annual report? To gain insight into this, we perform a materiality analysis. We carried out an extensive materiality analysis for the 2016 annual report, and this year a reassessment was carried out. The materiality matrix on page 28 shows how much weight the various material issues put on the scales for the relevant interested parties and for EBN. The chart reveals where the interests overlap. We have classified our material issues according to the structure from the framework of the International Integrated Reporting Council (IIRC). Our material themes are based on four values: transparency, integrity, cooperation and staying critical. These values form an obvious basis for us.

### Material themes

Strategic pillar	Material issue	More information about this	Page
	<b>Produced</b>		
	1 Encouraging effective detection and extraction of oil and gas	Results 2017: Our Dutch Gas Interaction with stakeholders	37 50
	2 Effective decommissioning and reuse	Results 2017: Return to Nature	43
  	<b>Intellectual</b>		
	5 Guiding and coordinating innovation	Results 2017	35
  	3 Collecting and bringing knowledge	Results 2017 and interaction with stakeholders	35, 50
  	<b>Human</b>		
	9 Attracting and develop talent	The people of EBN	53
  	4 Effective advice and influence	Business model	10
  	<b>Natural</b>		
	6 Sustainability in the value chain	EBN Sustainability Report 2016–2017	<a href="http://www.ebn.nl">www.ebn.nl</a>
	7 Development of new energy	GRI Index 2017	Annex 9.5
  	<b>Financial</b>		
	8 Creation of economic value	Financial results Financial Statements	47 100
  	<b>Social/relational</b>		
	10 Creating support for our work	Strategy Main strategic risks	25 67
	11 Guaranteeing (external) safety	Interaction with stakeholders	50
  	12 Contributing to the energy transition	About EBN Business model Strategy Results 2017 Interaction with stakeholders	7 10 25 35 50

1. Encouraging effective detection and extraction of oil and gas
2. Effective decommissioning and reuse
3. Collecting and bringing knowledge
4. Effective advice and influence
5. Guiding and coordinating innovation
6. Sustainability in the value chain
7. Development new energy
8. Creation of economic value
9. Attracting and developing talent
10. Support for our work
11. Safeguarding (external) security
12. Contributing to the energy transition

Impact surroundings (stakeholders)







### 3.6 SDGs

EBN wants to contribute to the achievement of Sustainable Development Goals. In 2017, we identified three Sustainable Development Goals (SDGs) of the United Nations and linked them to our strategy. These sustainable development goals consist of seventeen goals that should make the world a 'better place in 2030', according to the United Nations in their proposal for a new global agenda. These goals address major global problems such as hunger, inequality and climate change. The United Nations is appealing to the corporate world to contribute towards resolving these problems.

EBN strives to contribute to these goals by integrating the goals that are most relevant in our strategy and business activities.

To determine which targets are relevant to us, we analysed all seventeen SDGs. Three SDGs are in line with our activities and our role in the energy chain, namely:





















- SDG 7: Sustainable and affordable energy
- SDG 9: Innovation and sustainable infrastructure
- SDG 12: Sustainable consumption and production

We see the SDGs as an incentive to make our value chain more sustainable and to make a constructive contribution to the acceleration of the energy transition. By giving substance to these SDGs, we are continuing our mission: 'Realising value from geological energy sources in a safe, sustainable and economically responsible manner'. We regard this as our social role. In 2018, we will further detail these three objectives.

### 3.7 Connectivity matrix

Our strategy provides an answer to new developments in the energy sector, the energy transition and society. This allows us to follow a course making EBN better able to deal with challenges, risks and opportunities. The material topics indicate what is important for our stakeholders and for EBN, and where we have influence and therefore also have an impact. We believe it is important that there is a clear link between these material issues and our strategy. At the same time, we also want to mitigate the associated risks through active risk management. The connectivity matrix on page 30 makes this clear. The connectivity matrix shows the connection between the value we want to create and our strategic pillars and risks linked to our objectives.



Strategic pillar	SDG's	Material themes	Strategic risks	Focal points of strategic objectives for 2017	Achieved result
 <p><b>Our Dutch Gas</b> The optimal, safe and sustainable use of Dutch gas fields</p>	 	<ul style="list-style-type: none"> <li>• Creation of economic value</li> <li>• Contributing to the energy transition</li> <li>• Collecting and bringing knowledge</li> <li>• Safeguarding (external) security</li> <li>• Encouraging effective detection and extraction of oil and gas</li> <li>• Sustainability in the value chain</li> <li>• Creating support for our work</li> <li>• Effective advice and influence</li> <li>• Attracting and developing talent</li> <li>• Guiding and coordinating innovation</li> </ul>	<ul style="list-style-type: none"> <li>• Consequences of earthquakes Groningen</li> <li>• Contingencies</li> <li>• Support activities onshore</li> <li>• Support activities offshore</li> <li>• Commodity prices</li> <li>• Cooperation and knowledge sharing</li> </ul>	<ul style="list-style-type: none"> <li>• Setting Up 'Best Practices Forum'</li> <li>• Health, Safety and Environment (HSE) benchmark</li> <li>• Implementation 2017- sustainability policy actions</li> <li>• Organising Exploration Day</li> <li>• Organising Prospex stand</li> <li>• At least three exploration licences will be applied for</li> </ul>	     
 <p><b>Return to Nature</b> Taking a leading role in the reuse and decommissioning of disused infrastructure and contributing to the development of CO<sub>2</sub> storage</p>		<ul style="list-style-type: none"> <li>• Creation of economic value</li> <li>• Contributing to the energy transition</li> <li>• Effective decommissioning and reuse</li> <li>• Collecting and bringing knowledge</li> <li>• Safeguarding (external) security</li> <li>• Sustainability in the value chain</li> <li>• Attracting and developing talent</li> <li>• Effective advice and influence</li> <li>• Guiding and coordinating innovation</li> </ul>	<ul style="list-style-type: none"> <li>• Contingencies</li> <li>• Support activities offshore</li> <li>• Clean-up obligations</li> <li>• Cooperation and knowledge sharing</li> </ul>	<ul style="list-style-type: none"> <li>• Launch of National Platform for Decommissioning and Reuse</li> <li>• Organise decommissioning and reuse conference</li> <li>• Setting Up North Sea Decommissioning Forum (NL, UK, DK, NO)</li> </ul>	  
 <p><b>New Energy</b> Contributing to accelerating the development of (ultra deep) geothermal energy and energy storage</p>	  	<ul style="list-style-type: none"> <li>• Creation of economic value</li> <li>• Contributing to the energy transition</li> <li>• Collecting and bringing knowledge</li> <li>• Safeguarding (external) security</li> <li>• Development new energy</li> <li>• Creating support for our work</li> <li>• Attracting and developing talent</li> <li>• Effective advice and influence</li> <li>• Guiding and coordinating innovation</li> </ul>	<ul style="list-style-type: none"> <li>• Contingencies</li> <li>• Support activities onshore</li> <li>• Cooperation and knowledge sharing</li> </ul>	<ul style="list-style-type: none"> <li>• Website <a href="http://www.hoewerктаardwarmte.nl">www.hoewerктаardwarmte.nl</a></li> <li>• Study of underground energy storage in the Netherlands</li> <li>• Determine virtual CO<sub>2</sub> price for investment proposals</li> </ul>	  






The objective has partly been realised



The objective has largely been realised



The objective has been realised

Strategic pillar	Focal points of objectives for 2018	Our impact	Information on page
 <p><b>Our Dutch Gas</b> The optimal, safe and sustainable use of Dutch gas fields</p>	<ul style="list-style-type: none"> <li>• Signing and implementing Decommissioning Security Agreement and Decommissioning Security &amp; Monitoring Agreement</li> <li>• Electrification of the North Sea hub(s)</li> <li>• Development of three dual play exploration targets</li> </ul>	<p><b>Energy supply</b> Security of supply, Supply security</p> <p><b>Climate</b> Contribution to the acceleration of the energy transition Greenhouse gas emissions</p> <p><b>Economy</b> Revenue/prosperity, Direct and indirect employment</p> <p><b>Nature &amp; environment</b> Environmental effects</p>	<p>X</p> <p>X</p> <p>X</p> <p>X</p> <p>X</p> <p>X</p> <p>X</p>
 <p><b>Return to Nature</b> Taking a leading role in the reuse and decommissioning of disused infrastructure and contributing to the development of CO<sub>2</sub> storage</p>	<ul style="list-style-type: none"> <li>• Developing the Nexstep innovation program 2019</li> <li>• Sign CC(U)S programme Rotterdam</li> </ul>	<p><b>Climate</b> Contribution to the acceleration of the energy transition</p> <p><b>Economy</b> Competitiveness</p> <p><b>Nature &amp; environment</b> Environmental effects</p>	<p>X</p> <p>X</p> <p>X</p> <p>X</p>
 <p><b>New Energy</b> Contributing to accelerating the development of (ultra deep) geothermal energy and energy storage</p>	<ul style="list-style-type: none"> <li>• Performing Exploration Work Programme Ultra-Deep Geothermal Energy</li> <li>• One workshop per month for local/regional authorities, water boards</li> <li>• Presence at VNG congress</li> </ul>	<p><b>Energy supply</b> Security of supply, Supply security</p> <p><b>Climate</b> Contribution to the acceleration of the energy transition</p> <p><b>Economy</b> Yields, Direct/indirect employment</p> <p><b>Nature &amp; environment</b> Environmental effects</p>	<p>X</p> <p>X</p> <p>X</p> <p>X</p> <p>X</p> <p>X</p>

# “There are still surprises in the North Sea”

Oranje-Nassau Energie (ONE) is one of the parties, which, in collaboration with EBN, identifies and produces the gas reserves in the Dutch North Sea. Chris de Ruyter van Steveninck, CFO of ONE, and Thijs Starink, Programme Manager Small Fields at EBN, exchanged views on the role of natural gas from the North Sea for the energy transition.





## Interview

De Ruyter van Steveninck: 'As a relatively small player, we can and will play an innovative role in extracting the remaining reserves in the North Sea. We want to do this as sustainably as possible. In that respect, a great deal has changed in recent years. Where gas was previously produced in the traditional way, we now opt for sustainable alternatives wherever possible. This is how we are endeavouring to develop our recent discovery – the Ruby gas field – with as small a CO<sub>2</sub> footprint as possible. Take as an example what we are doing at the Q16 gas field at the Maasvlakte. The production location of this field is connected to the electricity grid and we check whether the field is suitable for CO<sub>2</sub> storage, and whether the wells can be used for geothermal energy. In the context of the transition, we are also thinking about the possibilities of combining large-scale wind or solar energy with offshore gas production. We like these kinds of challenges and the company is working on how it can be done more efficiently, but also more sustainably.' 'We no longer want more platforms like those that were installed a few years ago', adds Starink. 'In that respect, it is good if the operator and EBN are on the same line.'

The focus at ONE is on gas, but you also have an eye for combinations with sustainable sources. In your view, what is needed for natural gas from the North

Sea to be used even better for the energy transition?'

De Ruyter van Steveninck: 'A number of things can be improved. For example, larger parties can be encouraged to work more efficiently, the CO<sub>2</sub> price can go up and it would help if there were more insight into the costs of connecting a platform to existing infrastructure. In Norway, the latter is regulated for example, while in the Netherlands there is uncertainty about gas transmission tariffs offshore. Can EBN do something about this?' Starink: 'If excessive rates are charged, then we can fight them. Profit should not be the stake for sharing infrastructure. This encourages parties to lean back, while we actually want progress and innovation. The focal point for the coming years is therefore cooperation and clustering. We are going to talk to the big (pipeline) operators, also to make agreements about rates. It may be late, but if we can still improve, then we have to do that. The time to explore is running. I miss that urgency with a number of companies. That is why EBN will be an activist partner more than before. More insistent, more rigorous. When it comes to infrastructure sharing for example'.

De Ruyter van Steveninck: 'That's good to hear. As an entrepreneurial party, we feel supported by EBN. Of course, there are sometimes tough discussions, but that is good. My advice to EBN: Take on that

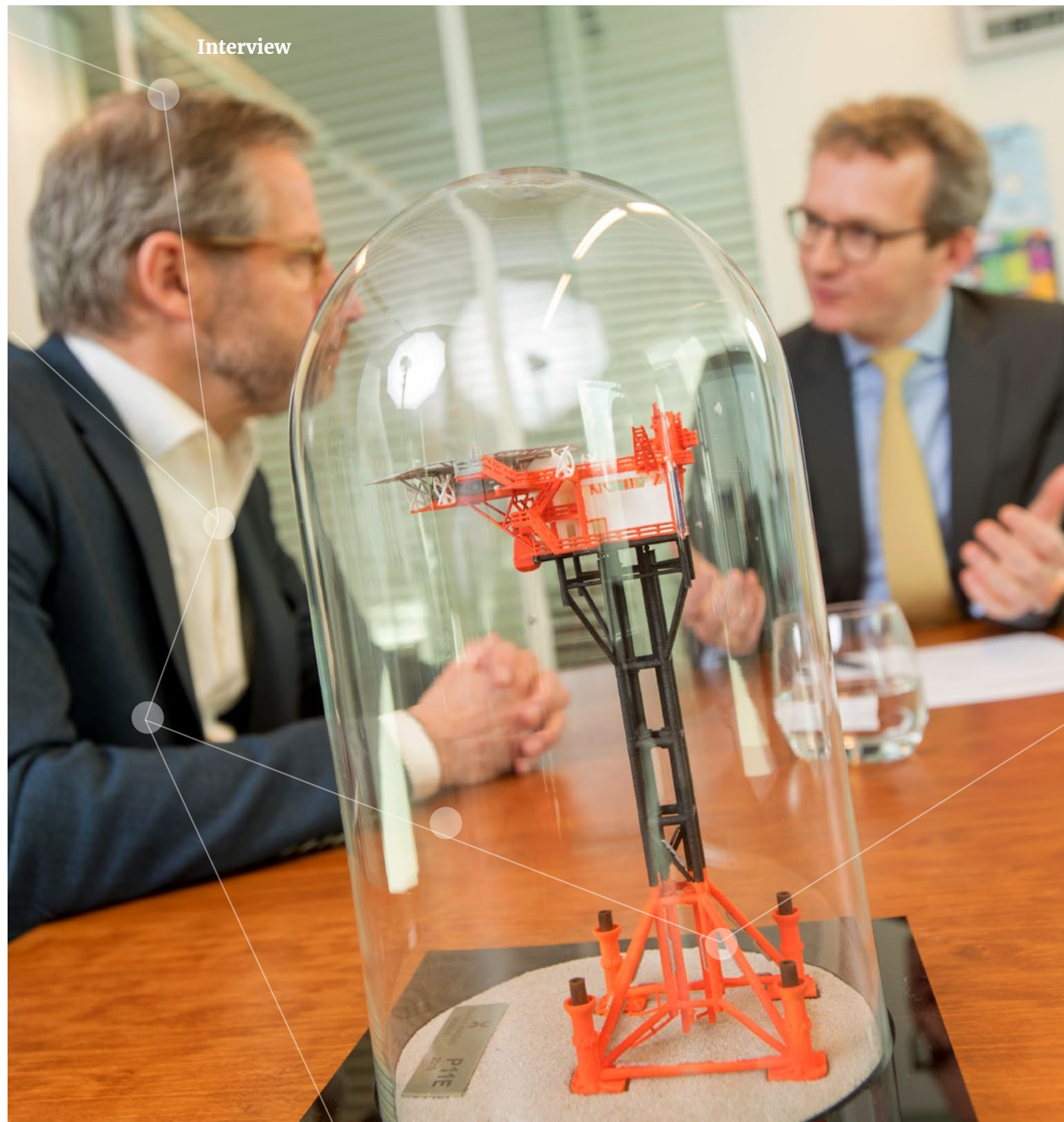


**Chris de Ruyter van Steveninck**  
CFO of ONE

**Thijs Starink**  
Programme manager Small fields EBN

## Interview

more activist role. We all benefit if all parties proactively seek and extract gas. That benefits the entire industry and the energy transition. If we are going to produce less from small fields, then we will have to import natural gas - that will mean more CO<sub>2</sub> emissions and less revenue for the government, while we could use that for the energy transition. There are certainly still exploration possibilities in the non-traditional reservoirs, such as Ruby. Even areas that have been looked at before may now be interesting thanks to advancing insights and new techniques. There are still surprises in the North Sea. We have to dare to put on those rose-tinted spectacles, continue to innovate and seize opportunities'.



# 4. Results for 2017

To give substance to our core activities (investing and collaborating in partnerships, managing our participations, and developing and applying knowledge for our participations and new applications of the Dutch subsurface):

- we maintain close contacts with the operators, partners from the energy sector, the Ministry of Economic Affairs and Climate Policy as shareholder and policy maker, and our other stakeholders and
- we conduct our own technical studies.
- This is how we create economic and social value.

For the results achieved by EBN in 2017 in a nutshell, we refer to the overview of the key figures on page 6.





## General objectives

Topic	Explanatory notes	Objective	Realisation
<b>EBN's profit</b>	EBN's profit (after tax) shown in million EUR	≥161	556
<b>Administration costs</b>	EBN's costs for staff, hiring expertise, office, etc. shown in million EUR	≤15,8	15,4
<b>Reserves maturation small fields</b>	The net supplementation (maturation) of gas reserves in the Netherlands in GNm <sup>3</sup> GE.	≥9,7	11,47
<b>Drilling</b>	The number of drills at new locations in the Netherlands, onshore or offshore.	≥13	11
<b>Score transparency benchmark</b>	The transparency benchmark is an annual study into the content and quality of social reporting (max 200 points).	≥170	185
<b>Setting up National Platform</b>	EBN is launching a National Platform for decommissioning and reuse along with industry partners.	Yes	Yes
<b>Participation EBN consortium UDG</b>	Together with seven consortia, TNO, the Ministry of Economic Affairs and Climate Policy and the Ministry of Infrastructure and Water Management, EBN is joining the Green Deal Ultra Deep Geothermal.	Yes	Yes

## Our Dutch Gas objectives 2017

Topic	Explanatory notes	Achieved result 2017	More information on page
Setting up 'Best Practices Forum'	EBN wants to set up a 'Best Practices Forum' for the optimal exploration and production of small fields in the Netherlands.		37
Health, Safety and Environment (HSE) benchmark	EBN wants to set up an HSE benchmark and put it into use.		42
Implementation 2017 sustainability policy actions	EBN wants to formulate actions on the basis of its sustainability policy. These actions, the so-called sustainability objectives, will be formulated in 2017 and implemented in the organisation.		52
Organising Exploration Day	EBN will organise the Exploration Day again in 2017. A day where the main theme is EBN, operators and suppliers sharing knowledge and studies		39
Organising Prospex stand	EBN is participating in the Prospex fair in London in 2017.		39
At least three exploration licences will be applied for	EBN aims at at least three exploration licenses being applied for by operators in 2017.		37



The objective has partly been realised



The objective has largely been realised



The objective has been realised

### 4.1 General objectives

For 2017, the Executive Board along with the Supervisory Board has determined a number of general objectives for EBN. These objectives, and the results obtained, are shown on page 36.

### 4.2 Our Dutch Gas

EBN is committed to optimum use of Dutch gas stocks, among other things, by conducting its own studies and working towards actively gaining and aggregating knowledge. In addition, EBN is working hard to substantially reduce the CO<sub>2</sub> emissions in gas exploration.

#### 4.2.1 The active acquisition of knowledge

##### Studies on possible gas occurrences

The aim of the studies in the area of exploration is twofold: 1) The identification of possible new gas occurrences and the optimal use of already known possible gas occurrences in the Dutch subsurface and 2. The active acquisition and transfer of knowledge within and outside the Dutch gas sector.

We do our own study work to identify possible new gas and oil resources. EBN takes part in a large number of collaborations and Joint Industry Projects. The studies focus mainly on areas on the continental

shelf where currently no exploration or extraction licenses have been issued.

Further progress was made in 2017 with work in the northern part of the North Sea (the D, E, F, A and B blocks). In addition, a study has been started into cracks in fields, to increase understanding of this in order to gain more control for maximum drainage of a compartmentalised gas field, a field divided up by cracks.

##### Reservoir property maps

When evaluating the suitability of reservoirs in the Dutch subsurface for the economic exploitation of oil

and gas and geothermal heat, knowledge of the reservoir properties is very important. The last time that reservoir properties were identified on a large scale was in 2009. Since 2009, approximately two hundred new drills have been made and a large number of reservoir studies have been carried out. This new information and these insights are essential for making more accurate assessments of reservoir quality and productivity, both of which are extremely important for exploration studies and, for example, the economic evaluation of marginal occurrences. To include this new information in existing surveys, EBN, together with TNO, updated the 2009 data. We use all this information for, among other things: predicting reservoir properties for exploration for oil and gas, an improved estimation of production characteristics of existing and new fields and evaluating the geothermal potential.

### **Earthquakes in Groningen**

In 2017, there were eighteen quakes with a magnitude of  $M \geq 1.5$  on the Richter scale. That is five more than in 2016, when there were thirteen quakes.

The biggest earthquake was at Slochteren on 27 May 2017. It had a magnitude of  $M 2.6$  on the Richter scale. The parties involved, including the State Supervision of Mines (SSM) and NAM, had predicted that a temporary decrease in the number of quakes

would occur in 2016 as a result of the reduced annual production. It was also predicted that this effect would be temporary and that the number of earthquakes would increase again each year with equivalent production. This effect appears to be visible in 2017, also in production-limited areas such as in the Loppersum region. To be able to make predictions about the seismic activity with more certainty, however, more study is needed.

The Measurement and Control Protocol (M&RP) came into effect twice this year as a result of the exceeding of signal parameters. The first time, on 29 August 2017, the earthquake density in the Appingedam area was higher than 0.25 quakes/(km<sup>2</sup>. 12 months). On 14 December 2017, the limit value for earthquake density was exceeded for the second time, then in the region of Zeerijp - 't Zandt. In both cases, the level has gone to "signalling level". Measures relating to this excess were overshadowed by the quake of Zeerijp ( $M = 3.4$ ) on 8 January 2018 in the same region.

After the first excess of a signal parameter within the M&RP, the Minister of Economic Affairs and Climate Policy decided, partly based on advice from SSM, to amend the consent decision on the 2016 extraction plan submitted by NAM for the Groningen gas field

by reducing the maximum gas annual production for the gas year 2017/2018 by ten per cent. So doing, the Minister of Economic Affairs and Climate Policy established the maximum gas annual production at 21.6 billion Nm<sup>3</sup> with an opportunity to extract an extra 5.4 billion Nm<sup>3</sup> in a cold winter. Several parties objected to both the consent decision and the subsequent amendment. The Council of State issued its ruling on 15 November 2017 and it annulled both the consent decision and the amendment decision. The minister now has a year to substantiate what the maximum amount of gas-year production should be, taking reduction scenarios for gas demand into account. As long as he does not take a new decision, the maximum gas year production for the gas year 2017/2018 is limited to 21.6 billion Nm<sup>3</sup>.

After the earthquake at Zeerijp on 8 January of this year, SSM advised a reduction of gas production in Groningen. It advised the Minister of Economic Affairs and Climate Policy to reduce production to 12 Nm<sup>3</sup> per year. The Minister of Economic Affairs and Climate Policy will determine which measures will be taken with regard to gas extraction in Groningen.

EBN undertook various substantive activities in 2017 that contribute to safer and more optimal production. This is in line with its mission and the policy of the



Minister of Economic Affairs and Climate Policy. EBN has developed a number of studies that should contribute to better insights into the processes in the subsurface and the earthquakes. The results of EBN's technical studies are shared with these parties. This work is complementary to the studies carried out by NAM, oil and gas companies engaged, and domestic and foreign knowledge institutes. EBN carefully monitors all relevant studies in this area. In addition, the Ministry of Economic Affairs and Climate Policy and SSM are setting up a new, independent research programme called the Knowledge Programme for Mining Effects (KEM). There will also be an independent research programme under NWO, called DeepNL.

#### **Use of the North Sea and system integration**

EBN works together with research institutes and industrial parties in a number of TKI projects that investigate the possibilities of system integration on the Dutch continental shelf. The research focuses on the integration of oil and gas infrastructure with wind energy at sea, with storage and transport possibilities of energy and with CO<sub>2</sub> storage. EBN contributes with knowledge and operational insights to these projects and initiatives. EBN also plays a role in bringing together industries to realise the system integration initiatives.

#### **Virtual CO<sub>2</sub> price**

As a result of the Dutch ambitions for the CO<sub>2</sub> emissions and the additional policy that ensues from this, EBN suspects that pricing of the CO<sub>2</sub> footprint in some form is to be expected in the near future. To be prepared for this, in 2017 for the first time scenarios for a virtual CO<sub>2</sub> price were developed. These can be used in the evaluation of E&P euro investment proposals or the optimisation thereof.

A price of 40 euros/ton CO<sub>2</sub> is determined as a mid-case scenario. In doing so, account was taken of both the CO<sub>2</sub> pricing given in the Coalition Agreement for electricity production and the price charged by various peers of EBN. From now on, the determination of a CO<sub>2</sub> price is part of the annual process to update the short and medium-term commercial departure points.

#### **4.2.2 Actively aggregating knowledge**

We share knowledge with interested parties through various platforms. In 2017, EBN organised the Dutch Exploration Day for the second time. A wide delegation of operators active in the Netherlands was present. EBN presented its own studies this year but also offered operators and consultants the chance to present studies into the Dutch subsurface. EBN was also present again at the Prospex fair in London this

year. There we presented our own work. This enabled us to reach operators who are not (yet) active in the Netherlands.

In August 2017, after a test phase, the Geo-drilling Events database was launched and made available to operators. Geo-drilling events are incidents with a geological cause that have led to a delay in the drilling process and which could possibly have resulted in a dangerous situation (Geo-Hazard). This database contains descriptions of drilling incidents in which (surprising) geology played a role. Examples are increased pore pressure or formations with high drilling resistance. A good overview of Geo-drilling Events helps in the design of a new well and the safe and efficient preparation of future drilling. This tool was presented and demonstrated at the Dutch Exploration Day on 23 November 2017.

This year, EBN also executed the BOON benchmark for the year 2016. EBN is investigating the operational costs of the activities in the North Sea. The benchmark is performed every two years. EBN has partly automated this benchmark in recent years. Operators now have digital access to their own results and can carry out their own analyses.

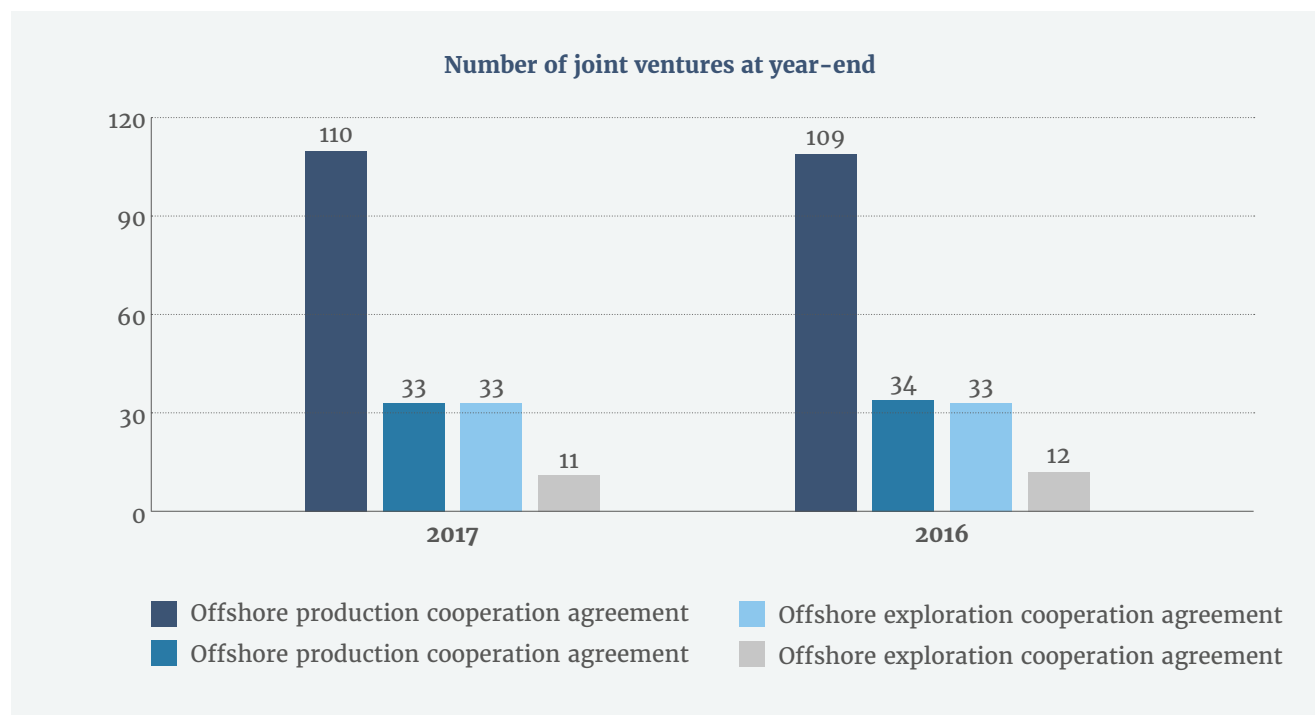
#### 4.2.3 Our Dutch Gas 2017 results

##### Joint ventures for detection and extraction of oil and gas

As at 31 December 2017, EBN was participating in 197 joint ventures (31 December 2016: 198). 187 of these are partnerships in exploration or extraction activities. We are also participating in five pipelines (including gas purification facilities), four gas storage facilities and the gas wholesaler GasTerra B.V. The total number of partnerships dropped slightly compared to last year. We commenced three new partnerships in exploration and extraction activities. Four cooperative ventures in exploration or extraction activities were terminated because one licence was renounced, one licence was withdrawn by the minister and two exploration licences were converted into one (combined) production licence.

##### Drilling

The plan was to carry out thirteen drills in 2017. Ultimately eleven were carried out: six exploration and evaluation drills and five production wells. The activity level was low last year because of the low oil and gas prices. The eleven drills performed provided technically extractable gas in ten cases. No gas or oil was found at one drill. Operationally, all drills went well. There were nine offshore drills and two onshore.

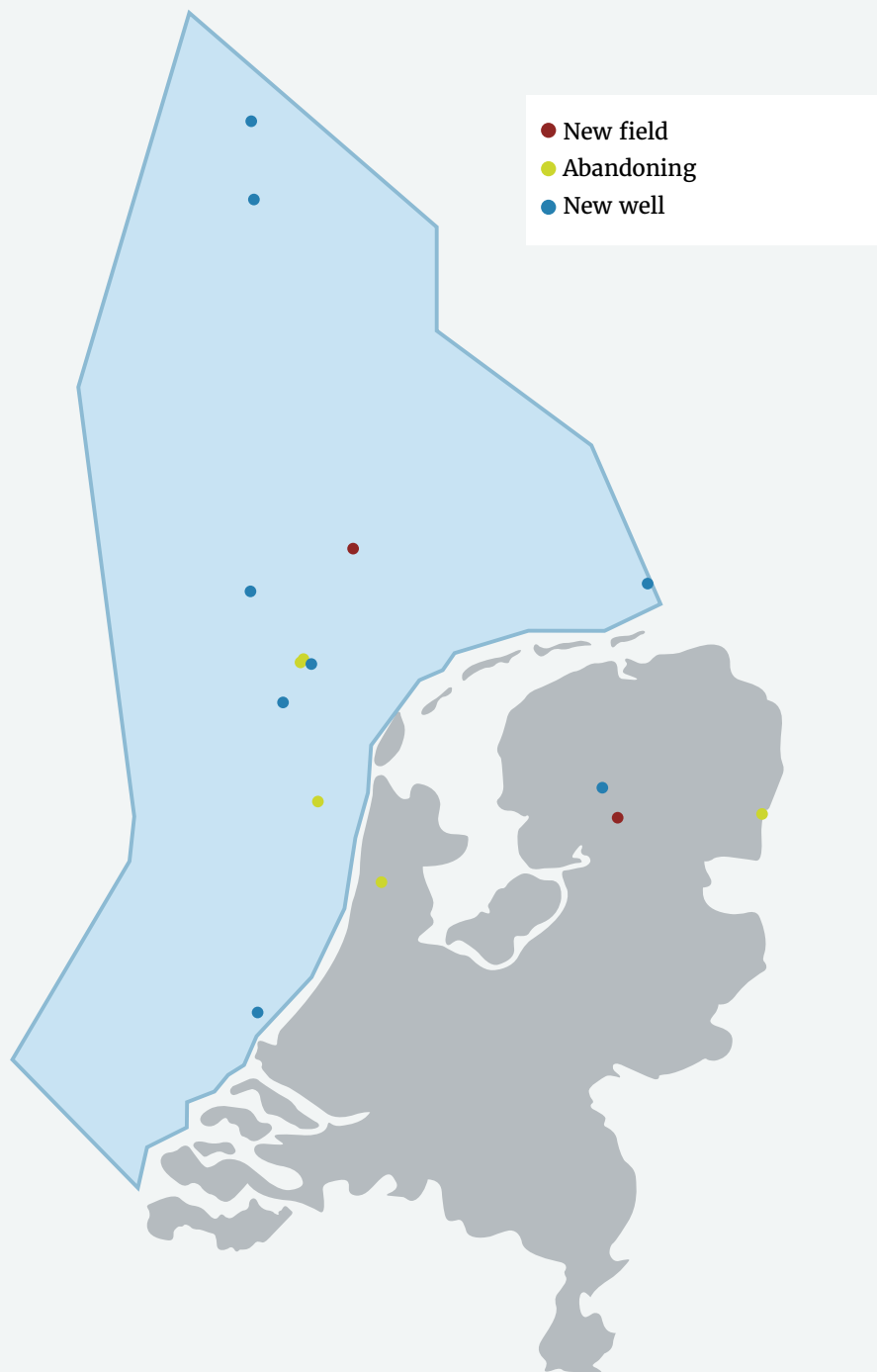


##### Oil and gas production

Following the earthquakes in the province of Groningen and the resulting situation, the Minister of Economic Affairs and Climate Policy decided in 2015 to further lower the ceiling of the gas production from the Groningen field. As a result, the production fell from 27.6 billion Nm<sup>3</sup> in 2016 to 23.5 billion Nm<sup>3</sup> in 2017. The small fields in which EBN participates produced a total of 18.7 billion Nm<sup>3</sup> (2016: 20.6 billion Nm<sup>3</sup>).

The gas stocks produced during the winter months from the underground gas storages Norg, Grijpskerk and Alkmaar are usually injected back into the storages during the summer months. This calendar year there is a small imbalance of almost 0.37 billion Nm<sup>3</sup> between Grijpskerk (net production) and Norg (net injection).

The total gas production for 2017 is 42.2 billion Nm<sup>3</sup> (excluding the imbalance from the gas storages).



The EBN share in the gas production in 2017 was 17.5 billion Nm<sup>3</sup> (2016: 19.9 billion). The major focus on cost control and the availability of the production facilities contributed to this. In 2016, the production fell by eight per cent; in 2017, this was nine per cent. The share of small fields in total gas production increased slightly compared to 2016 (44 per cent compared to 43 per cent in 2016). The oil production totalled 0.68 million Sm<sup>3</sup> (Standard cubic metre), against 0.62 million Sm<sup>3</sup> in 2016. The production from small fields in 2017 was slightly higher than budgeted.

#### Reserves of oil and gas in the netherlands

In 2017, the (estimated) gas reserve, in which EBN participates, will have decreased in the Dutch soil by 44 billion Nm<sup>3</sup> to 702 billion Nm<sup>3</sup>. EBN's share in this (estimated) gas stock amounts to 283.4 billion Nm<sup>3</sup>.

#### Oil and gas portfolio

The Netherlands has a significant potential of small (oil and) gas fields, both offshore and onshore. In total, EBN participates in the production of natural gas (and to a lesser extent of oil) from approximately 290 small Dutch fields, 240 of which were producing in 2017. In 2017, two new fields were put into production. Engie E&P Nederland B.V. has put an offshore field into use and Vermilion Energy Netherlands B.V. has put an onshore field into use.



### Seismic surveys

In 2017, there were two seismic surveys. Offshore 595 km<sup>2</sup> was surveyed and onshore 315 km<sup>2</sup>. Both were 3D acquisitions. In total 910 km<sup>2</sup> was surveyed in 2017.

### HSE benchmark

In 2017, EBN set up the Health Safety and Environment (HSE) benchmark. This makes it possible to make the performance in the areas of health, safety and the environment of individual production sites and oil and gas companies comprehensible, and to work towards optimal results. In setting up this benchmark, twenty-four relevant parameters were selected from the GRI-G4 during the first phase. In the follow-up process, the benchmark was further extended to twenty-nine parameters, with the trend being made clear per operator over several years.

The data was also extracted from the e-MJV (electronic - Environmental Annual Report) database with the consent of the operators. Operators enter their annual environmental report into this database. The twenty-nine selected parameters allow EBN to analyse trends and make comparisons. As part of the further implementation of EBN's sustainability plan, the HSE benchmark will be used in 2018 to achieve objectives of the sustainability plan.

## Our Dutch Gas 2018 objectives

Topic	Explanatory notes
<b>DSA and DSMA signed and implemented</b>	In 2018, the Decommissioning Security Agreement and the Decommissioning Security Monitoring Agreement will be signed and implemented by all operators.
<b>Define stage gate electrification North Sea hub(s)</b>	EBN ensures that the project with regard to electrification of the North Sea hub(s) will get to the 'define stage gate' in 2018.
<b>The development of three dual play exploration targets.</b>	EBN's objective is that at least three 'dual play' exploration targets are reprocessed in 2018.

### 4.2.4 Objectives for 2018

The Supervisory Board has formulated various strategic objectives for the strategic pillar Our Dutch Gas. These objectives are important indicators of performance within the strategic pillar 'Our Dutch Gas'. These strategic objectives must contribute to achieving the EBN objectives (see page 57).

## Return to Nature objectives 2017

Topic	Explanatory notes	Achieved results 2017	More information on page
<b>Launch of National Platform for Decommissioning and Reuse</b>	In 2017, EBN wants to launch a National Platform for decommissioning and reuse along with industry partners.		45
<b>Organise decommissioning and reuse conference</b>	EBN will organise a conference in 2017 on decommissioning and reuse		44
<b>Setting Up North Sea Decommissioning Forum (NL, UK, DK, NO)</b>	In 2017, EBN wants to set up a forum for decommissioning and reuse in which neighbouring countries, the United Kingdom, Denmark and Norway, are actively involved.		44



The objective has partly been realised



The objective has largely been realised



The objective has been realised

### 4.3 Return to Nature

EBN takes control of effectively decommissioning or reusing disused oil and gas platforms. More and more fields are reaching the end of their useful life. This will make the oil and gas infrastructure available for other uses. The energy transition offers an opportunity to reuse existing elements before the ultimate safe and efficient decommissioning. For example, empty-produced gas fields on the North Sea may be used in the future for the storage of CO<sub>2</sub>.

#### 4.3.1 The active acquisition of knowledge

##### National decommissioning database

In 2016, EBN, together with NOGEPa and IRO, designed the Masterplan Decommissioning & Re-use. In 2017, this was followed up on in a Joint Industry Project (JIP) for the further elaboration of the plan. Part of JIP Re-use & Decommissioning is setting up

a national database for upstream oil and gas infrastructure; wells, installations and pipelines. EBN fulfilled a pioneering role in this project, but operators have also actively contributed to the design of the database. In 2017, a first version of the national database for all offshore infrastructure was completed. The purpose of this database is to be transparent towards stakeholders with the help of data, to provide insight to the service industry in the scope of future decommissioning activities, to help operators identify possible joint decommissioning activities and to allow operators to benchmark with regard to the costs of decommissioning.

##### Sharing best practices

An important part of the decommissioning process is to ensure that the empty-produced oil or gas reservoirs, which are connected to the surface by means of

wells, are insulated so that no residual hydrocarbons can escape to the surface. With Nexstep, EBN wants to encourage operators to share best practices in this area so that they can learn from each other's success and mistakes. This means that future projects for the decommissioning of wells can be carried out in an even safer and more efficient manner. By organising regular workshops, relevant lessons are recorded in a database. In 2017, EBN organised two shared-learning workshops. The database currently contains thirty learnings. The aim is to organise three to four workshops annually to add new data to the database.

##### Legislation and regulations reuse and decommissioning

Various working groups are active within the National Platform for Reuse and Decommissioning, Nexstep. These are composed of representatives from EBN and the operators. One of these working groups is active in

the field of legislation and regulations. This working group aims for efficient and effective regulations in the field of reuse and decommissioning of oil and gas infrastructure. This is done on the basis of a list of prioritised topics defined in the Master Plan for Decommissioning and Re-use. In 2017, the working group commenced on enshrining the existing industry standard for the decommissioning of wells in the mining regulations. The working group also started to draw up a comparative assessment for offshore pipelines. The aim is a generic system for assessing whether a pipeline can remain where it is or if it has to be removed after it has been decommissioned.

#### **Transport and storage of CO<sub>2</sub>**

At the request of the Ministry of Economic Affairs and Climate Policy, EBN carried out an inventory study with Gasunie in 2017 into the possibilities and costs of transport and storage of CO<sub>2</sub> in the Netherlands. In addition, a number of scenarios have been worked out in which different quantities of CO<sub>2</sub> collected annually in the Netherlands are stored in empty offshore gas fields. One of the conclusions is that there is sufficient offshore storage space for all scenarios until after 2060. Costs can be saved when part of the offshore infrastructure (platforms and wells) is reused for CCS. The report of this study was delivered in December 2017. It is used, among other things, as input for the

CCS Roadmap of the Ministry of Economic Affairs and Climate Policy.

#### **CO<sub>2</sub> storage project**

Storage of CO<sub>2</sub> in empty-produced offshore gas fields is seen as a good opportunity to reduce CO<sub>2</sub> emissions. EBN wants to contribute to the achievement of the Dutch CO<sub>2</sub> reduction targets. Therefore, together with Gasunie and the Port of Rotterdam Authority, EBN is investigating the possibilities of realising a basic infrastructure for collecting and transporting CO<sub>2</sub> in the Rotterdam port area, which can then be stored in empty-produced offshore gas fields. The idea is to set up a transport pipeline and storage infrastructure as a 'collective facility'. As a result, there are important cost advantages and several parties can collect and store CO<sub>2</sub>.

#### **4.3.2 Actively aggregating knowledge**

##### **Offshore energy exhibition & conference**

In addition to the launch of Nexstep (see page 45 for more information), a breakfast session was organised during the Offshore Energy Exhibition & Conference in which the state of affairs regarding decommissioning and reuse was presented. EBN presented an overview of the future decommissioning task on the North Sea and the potential for reuse of oil and gas infrastructure.

#### **North sea decommissioning forum**

On 11 October 2017, the North Sea Decommissioning Forum was organised in the Amsterdam RAI. During this private event, Dutch, Danish, English and Irish stakeholders exchanged information about national and international developments concerning the reuse and decommissioning of oil and gas infrastructure in the North Sea. EBN and the Ministry of Economic Affairs and Climate Policy were present at this forum on behalf of the Netherlands. This forum was a first step towards international cooperation, including with regard to regulations.

#### **4.3.3 Results for 2017**

##### **State of affairs decommissioning and reuse**

In 2017, no platforms were completely decommissioned or removed. However, preparations did start for the removal of ten platforms and their associated pipelines. Preparations also started for the reuse of a Self-Installing Platform (SIP) of which the production well will be abandoned in 2018.

In 2017, nine offshore production wells and three exploration wells were permanently abandoned. An offshore production well has been left for drilling an exploration well, but the well lock has been reused. Nine onshore wells have been definitively abandoned.

### Launch of national platform for reuse and decommissioning

On 10 October 2017, Nexstep, the National Platform for Reuse and Decommissioning, was launched during the Offshore Energy Exhibition & Conference in the Amsterdam RAI. Nexstep is an association in which the Dutch State (EBN) and the oil and gas industry (NOGEPA) are represented. Nexstep aims to facilitate and organise the future decommissioning and reuse of oil and gas infrastructure (wells, installations and pipelines) in the Netherlands. In the coming decades, the optimal reuse of this infrastructure will be key for the energy transition. Topics on Nexstep's agenda are: sharing knowledge and experiences, innovation, and improved regulations in the field of reuse and decommissioning of oil and gas infrastructure.

#### 4.3.4 Objectives for 2018

The Supervisory Board has formulated various strategic objectives for the strategic pillar Return to Nature. These objectives are important indicators of performance within the strategic pillar 'Return to Nature'. These strategic objectives must contribute to achieving the EBN objectives (see page 57).

### 4.4 New energy

To realise a CO<sub>2</sub> neutral energy supply in the Netherlands in 2050, the Dutch heat supply must be

### Return to Nature objectives 2018

Topic	Explanatory notes
Nexstep innovation programme 2019	In 2018, EBN wants to start on the design of an innovation programme for reuse and decommissioning.
CCS project Rotterdam	In 2018, EBN, together with partners, wants to contribute to the development of the CCS project Rotterdam.

made more sustainable. EBN uses its knowledge of the deep subsurface for the development of geothermal energy in the Netherlands. This is done, for example, through the play and portfolio approach. The potential of the Dutch subsurface is being developed in a safe, responsible, cost-effective and risk-reducing manner.

#### 4.4.1 The active acquisition of knowledge

##### Synergy geothermics and oil and gas

In 2017, EBN contributed to studies into synergy between oil, gas and geothermal energy. The oil and gas sector has a lot of knowledge and experience in the deep subsurface. This knowledge and experience can be applied for the development of geothermal energy in the Netherlands. In 2017, EBN participated in the reconnaissance table 'Cooperation and synergy in the subsurface for sustainable heat'.




This reconnaissance table is an initiative of the KVGN (Royal Association of Gas Manufacturers in the Netherlands). Topics discussed at these meetings are: early accessibility to confidential oil/gas subsurface information for the geothermal sector, reuse possibilities of discharged oil and gas wells as geothermal well, dual play exploration, and safety and responsible subsurface coordination.

##### Upscaling geothermal energy in heat networks

In December 2017, the study 'Upscaling Geothermal Energy in Thermal Networks' was launched. The analysis is being carried out by IF Technology, CE Delft and Berenschot. EBN contributes the knowledge and experience of doing business in the subsurface and the play and portfolio approach.



## New Energy objectives 2017

Topic	Explanatory notes	Achieved result 2017	More information on page
<b>Study of underground energy storage</b>	In 2017, EBN will conduct a study into the possibilities of underground energy storage in the Netherlands.		46
<b>Website hoewerктаardwarmte.nl</b>	In 2017, EBN will launch the website <a href="http://www.hoewerктаardwarmte.nl">www.hoewerктаardwarmte.nl</a> in collaboration with Stichting Platform Geothermie, DAGO (Dutch Association Geothermal Operators) and the Ministry of Economic Affairs and Climate Policy, making information about geothermal energy available.		46
<b>Determine virtual CO<sub>2</sub> price for investment proposals</b>	EBN wants to determine a virtual CO <sub>2</sub> price for investment proposals in 2017.		39



The objective has partly been realised



The objective has largely been realised



The objective has been realised

Together with Gasunie, EBN identifies the potential of the Dutch subsurface and the aboveground heat demand. It identifies the areas in which the supply meets the demand. Based on this knowledge, a strategy is determined for the optimal development of geothermics and heat networks in the Netherlands, which is efficient, safe and responsible. The play and portfolio approach is used here. The end result of this study will contribute to the acceleration and improvement of the development of geothermal energy in the Netherlands.

### Underground energy storage

EBN had the intention of conducting a study for 2017 into the possibilities of underground energy storage in the Netherlands. After the summer, the Ministry of

Economic Affairs and Climate Policy requested EBN to conduct a study together with TNO to form the basis for a vision on underground storage in the Netherlands. Such a policy vision will monitor all forms of underground storage, including energy storage. The project started in the third quarter of 2017 and will be completed by mid-2018. It is important that the technical possibilities and the offer of underground space are ‘matched’ with the aboveground demand for storage. The calculation of realistic storage scenarios in terms of both energy efficiency and costs and revenues is part of this study. The results of the study will enable the government to better assess which underground space can best be used for which application.

### 4.4.2 Actively aggregating knowledge

#### Launch of website [hoewerктаardwarmte.nl](http://hoewerктаardwarmte.nl)

EBN launched the website [hoewerктаardwarmte.nl](http://hoewerктаardwarmte.nl) in November 2017. This website was created in collaboration with Stichting Platform Geothermie, DAGO (Dutch Association of Geothermal Operators) and the Ministry of Economic Affairs and Climate Policy. The website describes procedures, techniques, and environmental effects and any risks associated with the exploration, detection and extraction of geothermal energy. The purpose of this website is to inform stakeholders properly and transparently. The information on the website has been developed in consultation with various experts from organisations that have specific knowledge about geothermal energy, such as municipalities, provinces, nature

## Objectives for New Energy 2018

Topic	Explanatory notes
<b>Execution of Exploration Work (EWP) Programme</b>	The EWP and the pertaining cooperation agreement will be signed in early 2018. At the end of the EWP, a well-founded business case is drawn up for each region based on the results and an exploration strategy, and a consortium can decide whether or not to continue with the realisation of a pilot project.
<b>One workshop per month for province/municipality/water board</b>	EBN gives a workshop every month to a province, municipality or water board in the field of the development of (ultra-deep) geothermal energy in the Netherlands.
<b>Presence at VNG congress</b>	EBN will participate in the VNG congress in 2018.

and environmental organisations, the national government, producers of geothermal energy, the regulator and TNO.

### Exploration work programme UDG

EBN and TNO offer support to consortia based on agreements in the Green Deal on Ultra-Deep Geothermal Energy (see page 47), by making their knowledge and expertise available in an Exploration Work Programme that focuses on coordinated geological research in the three identified regions. The Exploration Work Programme (EWP) describes the study activities for

the Dinantien limestone. These are necessary for each of the seven projects of the Green Deal UDG. The programme offers a kick-start to these seven projects and at the same time creates added value for potential future projects. In the second half of 2017, the programme was drawn up under the supervision of EBN and in close collaboration with the consortia and TNO.

### 4.4.3 Results for 2017

#### Accession to Green Deal Ultra Deep Geothermal

In June 2017, the Green Deal Ultra-Deep Geothermal Energy was signed by Hydreco GeoMEC, Huisman

Equipment, Port of Rotterdam, ASR, Parenco, Vermilion and FrieslandCampina, on behalf of seven consortia, each consisting of several companies, together with EBN, TNO, the Ministry of Infrastructure and Water Management and the Ministry of Economic Affairs and Climate Policy. The Green Deal Ultra Deep Geothermal Energy (UDG) is a cooperation programme aimed at increasing the understanding of the possibilities of geothermal energy at great depth (from four kilometres) with the aim of making an important contribution to a sustainable energy supply. The temperature of the current geothermal projects is insufficient for the supply of heat to the process industry. Ultra-deep geothermal energy is expected to make a major contribution in particular to the heat supply for temperatures above 130 degrees Celsius.

#### Accession Green Deal Geothermal Brabant

EBN joined the Green Deal Geothermie Brabant at the request of the partners on 28 June. By joining, EBN can use its knowledge and expertise to speed up the development of the geothermal potential in North Brabant together with the other parties. The aim of this Green Deal is to make the energy mix in Brabant more sustainable by professionalising the sector and achieving economic economies of scale through upscaling and joining forces. EBN's portfolio approach gives concrete substance to this.

#### **Accession to geothermal alliance South Holland**

The Geothermal Alliance South Holland was created during the congress 'Energy Transition and Geothermal Energy' in the municipality of Westland on 9 November 2017. This is a joint venture between the Province of South Holland, DAGO (Dutch Association of Geothermal Operators), Eneco, HVC, Hydreco GeoMEC, Municipality of Westland and EBN. These parties aim to promote the extraction and use of geothermal energy in the province of South Holland. A vision will be developed for the optimal development of geothermal energy in South Holland. They will endeavour to make this vision concrete in plans to extract geothermal energy in a systematic, geographical and socially responsible manner with an appropriate connection to existing and future laws and regulations.

#### **4.4.4 Objectives for 2018**

The Supervisory Board has formulated various strategic objectives for the strategic pillar New Energy. These objectives are important indicators of performance within the strategic pillar 'New Energy'. These strategic objectives should contribute to achieving the EBN objectives (see page 57).

### **4.5 Financial results**

#### **4.5.1 Financial course of affairs**

The annual sales for 2017 fell by 3 per cent to EUR 3.0 billion, compared to EUR 3.1 billion in 2016. The decrease in sales was mainly caused by lower realised sales (-16 per cent), which was compensated by higher realised prices (+13 per cent). The net profit amounted to EUR 556 million. Operational costs amounted to EUR 962 million (2016: EUR 982 million). Depreciations, including impairments, amounted to EUR 0.5 billion (2016: EUR 0.8 billion). Total payments to the Dutch State, including levies, amounted to EUR 1.5 billion (2016: EUR 1.3 billion) EBN generates a significant free cash flow every year because of substantial and strong positive cash flows from operating activities, which are higher than the investment expenses. This is also expected to be the case in 2018. As a result, solvency is considered excellent, even if the solvency ratio is numerically low. The latter is caused by the fact that up until 2016 the financial results were fully distributed to the shareholder.

Starting from the financial year 2016, of the annual net earnings remaining after payment of the special profit distributions, 60% is added to equity and 40% is paid out as dividend to the shareholder. This addition to equity takes place in principle until EBN has

reached 10% solvency. EBN's good solvency is also reflected in the long-term credit ratings, being AAA at Moody's and AA at Standard & Poor's.

The cash position as at year-end 2017 was EUR 2,004 million (2016: EUR 1,566 million). EBN is able to comfortably meet its outstanding current financial obligations because of this position and due to the significant free cash flows that are also expected for 2018. No long-term loan will mature in 2018. EBN has a commercial paper programme of EUR 2 billion. EBN also has a committed revolving credit line with three reputable banks, which allows EBN to withdraw up to EUR 400 million for general business purposes. This credit line runs until August 2022. Neither facility had been used at year-end 2017. Because of this, the liquidity position is excellent, which is also expressed in the short-term credit ratings, being P-1 at Moody's and A-1+ at Standard & Poor's.

#### 4.5.2 Investments

The investments in production and storage licences fell by 44%: from EUR 281 million in 2016 to EUR 156 million in 2017. This is a worrying development. It is important to continue to develop offshore fields and to add new reserves to keep production up to level as much as possible. Without sufficient investment, gas production from small fields will diminish considerably. The low point of the downward trend of recent

years seems to have been realised in 2017. We expect investments to increase in 2018.

#### 4.5.3 Sales

##### Gas and storage capacity

Due to a relatively cold winter in 2017 and an increasing demand for gas on the world market, gas prices in the Netherlands were twenty per cent higher than in 2016: on average 17 EUR/MWh. The prices on the

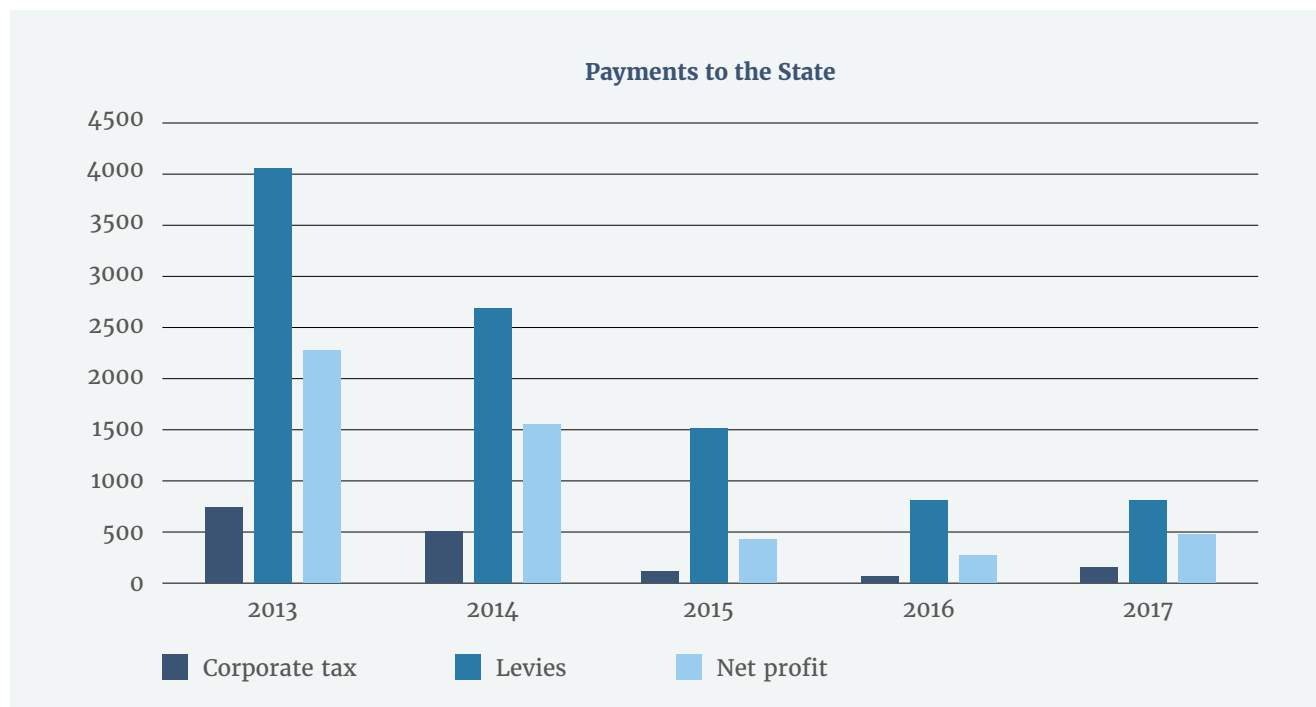
Title Transfer Facility (TTF), one of the most liquid virtual trading places for gas in northwestern Europe, peaked at more than 22 EUR/MWh in February, but in the summer gas was sold at 15 EUR/MWh in accordance with the regular seasonal pattern.

The volume-weighted average selling price for the EBN gas portfolio was fifteen per cent higher than in 2016: at 16 EUR/MWh. Total sales fell by sixteen per cent to less than 17 billion Nm<sup>3</sup>. This was mainly the result of further production limitation of the Groningen field and the natural declining production from small fields.

No gas storage capacity was auctioned from the Bergermeer underground storage facility in 2017. The available 5 TWh has been sold through so-called optimisation agreements, a new sales concept that enables the Bergermeer Capacity Marketing Company to benefit from interim price fluctuations. The portfolio now includes gas storage capacity sold on the basis of multipliers (18 TWh), based on a fixed price (3 TWh) and via optimisation agreements.

##### Oil, condensate and lpg

As a result of OPEC's production limiting measures, and the other oil exporting countries, and an increasing demand, the average price for a barrel of crude







oil (Dated Brent) in 2017 came to EUR 48. That is about twenty per cent more than the year before. The price fluctuated within the range of EUR 40 to EUR 55 per barrel during the year.

The weighted average realised sales price for EBN's oil and condensate portfolio came to about EUR 45 per barrel in 2017, which is over twenty per cent more than in 2016. The difference compared to the price for a barrel of Dated Brent can be explained by quality differences (higher acidity, poorer viscosity, and higher mercury concentrations), which leads to a margin compared to Dated Brent. Total sales of oil and condensate in 2017 came to over 2.5 million barrels, six per cent less than in 2016.

The oil fields Amstel and De Ruyter produced better than expected and the build up of production from the Schoonebeek oil field is progressing well.

#### 4.6 Social results

##### 4.6.1 Our stakeholders

EBN wants transparent reporting on its stakeholders: who they are, how we shape our interaction and what issues are discussed. For 'interested parties' we use the definition of the word 'stakeholders' in the Global Reporting Initiative, roughly meaning: on the one hand stakeholders are entities or individuals who may experience significant effects from our activities, products and services; on the other hand, the actions of stakeholders may affect achieving EBN's strategic objectives.

##### Interaction with stakeholders in 2017

In determining its strategy and business operations, EBN not only takes trends and developments into account, but also the interests of its stakeholders. As a policy participation, EBN serves a social interest: contributing to an independent, reliable energy supply in the Netherlands. The interests of our stakeholders differ. We have contact with our stakeholders on various material issues on a regular basis and at various levels. We have included a table in the annex 155 that describes who our stakeholders are, what form the interaction with these parties has, and what the discussion issues were in 2017. Here below we focus on a number of special activities that took place in 2017.

### **Interaction in the context of the implementation strategy**

For the implementation of the revised strategy in 2016, a process was started to implement the new strategy in the EBN organisation. In November 2016, a start was made on creating a new design for the organisation. This was followed up on in 2017. Many internal EBN stakeholders were involved in the creation of this new design: the management, a selection of employees for a so-called practical test, coordinators of the themes and members of the transition team. In order to realise the transition of the new organisational structure, a transition team has been set up to go through the process together with the Executive Board and the Works Council. In May 2017, the decision of the organisational change was presented to all EBN employees and the implementation of the new organisation could start. From 1 September 2017, work has commenced according to the new structure. Prior to this, so-called 'onboarding days', where the organisational change was the main theme, were held.

### **Publication focus on energy 2017**

On 19 June, EBN presented the Focus on Energy report for a large group of stakeholders. Partners from the sector and various NGOs and policy makers attended this event. In three interactive sub-sessions,

stakeholders entered into dialogue with each other on various propositions and topics in which EBN's strategic themes 'Our Dutch Gas', 'Return to Nature' and 'New Energy' were key. The Green Deal for Ultra-Deep Geothermal Energy was also signed by the Ministries of Economic Affairs and Climate Policy and Infrastructure and Water Management, EBN, TNO and seven consortium parties.

### **KVGN**

As a corporate member of KVGN (Royal Association of Gas Manufacturers in the Netherlands), we have worked to shape the sustainability of the Dutch gas sector and to enter into a dialogue with the government and other stakeholders. As part of the project 'Gas in a Long-term Sustainable Energy Management' (GILDE), KVGN officially launched the 'Gas-to-measure' vision and the accompanying GILDE agenda at a work meeting in early 2017. The GILDE agenda contains concrete projects to contribute to a climate-neutral energy supply. EBN is responsible for the Geothermal and CCS themes within the GILDE agenda. 'Gas-to-measure' and the GILDE agenda have been developed in consultation and cooperation with stakeholders from within and outside the gas sector, such as NGOs. In addition, the KVGN organised a series of symposia in which the subject of Energy Transition was central.

### **Participation in transition paths sessions**

A policy pathway of five different transition paths was launched in the 2016 Energy Agenda. The Ministry of Economic Affairs and Climate Policy organised various stakeholder meetings. These aimed to: gather information about how the transition paths to 2030 could look in order to achieve policy objectives. EBN participated in several meetings.

### **Transition coalition**

The Transition Coalition is an initiative of more than 60 organisations with an interest in the energy supply. This coalition is committed to speeding up the energy transition, whereby the economic and ecological opportunities are optimally utilised. The Transition Coalition wants:

- a climate act that realises the objectives of Paris (COP21), including intermediate goals in 2030 and 2040 that are in line with this;
- a guarantee mechanism for an energetic and consistent execution that connects and appeals to the parties, and guarantees agreements made independently across governments;

EBN has been a member of the Transition Coalition since 2016, and participates in meetings at the CEO, communication and Young Professionals level. For more information: [www.transitie-coalitie.nl](http://www.transitie-coalitie.nl)



#### **Launch Nexstep – offshore energy**

Together with NOGEPA, EBN launched the National Platform for Reuse and Decommissioning, Nexstep, during the Offshore Energy Exhibition & Conference in October 2017. Nexstep is a member organisation that wants to stimulate and facilitate cooperation between stakeholders. It is a realisation based on recommendations in the so-called Masterplan for Decommissioning & Re-use in November 2016.

#### **Talks with local and regional authorities in the field of geothermal energy**

Various municipalities and provinces are involved in the Green Deal Brabant and the Geothermie Alliantie Zuid-Holland. EBN is regularly asked by local and

regional authorities to join as a knowledge partner in exploratory talks in the field of geothermal energy.

#### **Workshops ultra-deep geothermal energy**

The Green Deal Ultra Deep Geothermal Energy (UDG) is a cooperation programme between the government, EBN, TNO and seven consortia. The programme focuses on increasing the insight into the possibilities of geothermal energy at great depths (from four kilometres). The goal is to make an important contribution to a sustainable energy supply, in addition to geothermal energy at lesser depths that already occurs more frequently in the Netherlands. In the programme, seven consortia, the Ministries of Infrastructure and Water Management and Economic

Affairs and Climate Policy, TNO and EBN are pooling their knowledge and expertise to achieve this development. In 2018, various stakeholder meetings will be organised. For a wider group of interested parties, there is also a public seminar. During these meetings, participants are invited to discuss these developments.

#### **4.6.2 Sustainability**

Within the oil and gas industry there is still a lot of profitability in the field of making the chain sustainable. Together with our partners we are inventorying the possibilities to take steps forward. In 2017, we shaped our sustainability policy. Within our policy frameworks, we have given our contribution to the



energy transition and the sustainability of our activities a concrete form. In this sustainability policy, EBN has formulated short-term actions, so-called sustainability objectives. In 2017, these short-term actions from the sustainability policy were implemented within the organisation. In 2018, the sustainability objectives will be updated on the basis of the sustainability policy, and will be implemented.

In order to provide insight into our sustainability policy, we published the Sustainability Report 2016/2017 in 2017. We also report on our operational performance indicators, i.e. our own sustainability performance and that of the sector.

The 2016/2017 Sustainability Report can be found at [www.ebn.nl/publicaties](http://www.ebn.nl/publicaties). In 2018, we will report on the progress of our sustainability policy in the Sustainability Report 2017/2018. We want to involve our stakeholders by ensuring that EBN's sustainability policy is in line with the expectations of our stakeholders. The sustainability report will be published in the summer. We hereby report according to GRI guidelines. For an overview of the most important issues for EBN and its chain partners and the associated GRI indicators, we refer you to the GRI-table in table 9.5.

#### 4.6.3 The people of EBN

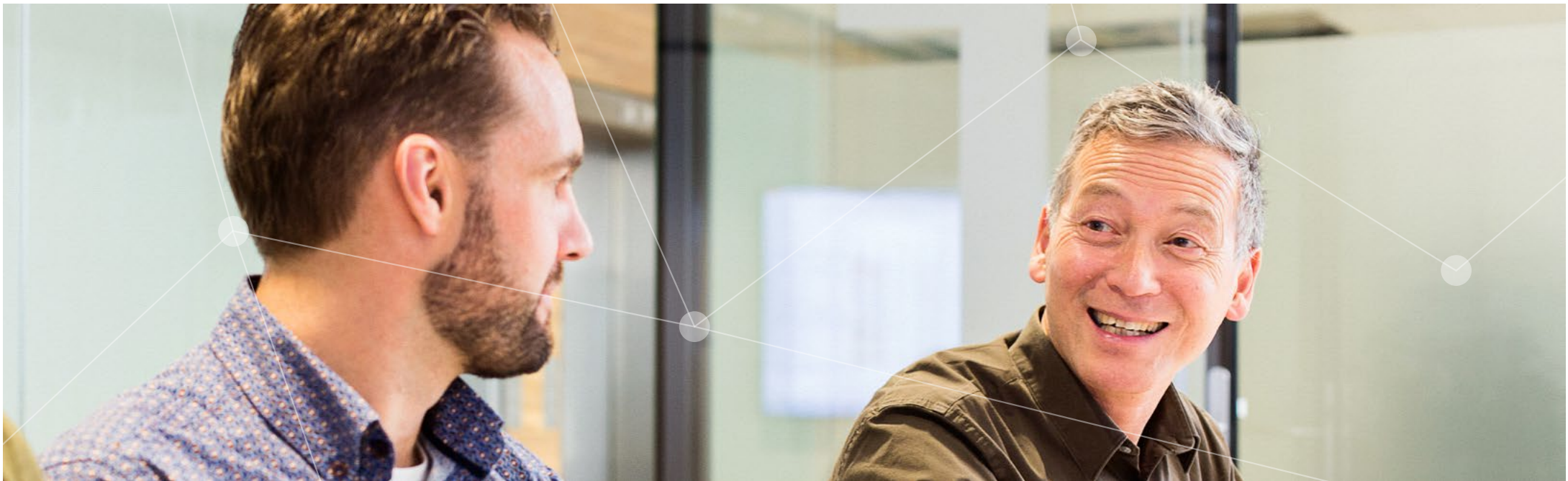
EBN is a 'Great Place to Work'. The results of the Great Place to Work survey in 2017 did decrease slightly in the support departments compared to 2015. An organisational change was implemented on 1 September 2017, which may have influenced this. EBN therefore regards the results of the 2017 satisfaction survey as a baseline measurement.

In 2018, attention will be paid to the outcomes of the satisfaction survey, which will be used as input for our Executive Board and the management, for the improvement in operational management and an increase in employee satisfaction. EBN has decided to participate in the Great Place to Work survey again at the end of 2018 in order to monitor the results of the efforts in 2018.

<b>Operational performance indicators up until 2016<sup>2</sup></b>	<b>2016</b>	<b>2015</b>
<b>Energy consumption</b>	18.2 PJ	20.2 PJ
<b>Energy-efficiency improvements (result vs. target)</b>	12.8 vs 15.1%	10.5 vs 15.1%
<b>Energy consumption as a percentage of the energetic carbon production</b>	2,72%	2,8%
<b>CO<sub>2</sub>-emission</b>	655 Kton	772 Kton
<b>Methane emissions</b>	5.0 Kton	6.0 Kton
<b>Fatal accidents</b>	0	0
<b>Industrial accidents that led to absenteeism</b>	20	27
<b>Industrial accidents that did not lead to absenteeism</b>	17	22

<sup>2</sup>Operational performance indicators are reported based on statements by operators and consolidated by the Netherlands Enterprise Agency. These figures relate to the calculated EBN share in Dutch gas production and annual drilling activities. The 2017 figures will only be available later this year and will be published in the EBN sustainability report 2017/2018.





### **Training and development**

There are 82 employees at EBN. In 2017, EBN also invested in the development of its employees. Various company-wide training sessions took place in 2017. These training courses matched the demands of the changing market and the new strategic objectives. The hours that employees spent in training and development (training, seminars, courses and conferences) compared to 2016 therefore dropped from 45 to 38 training hours on average per employee. We encourage employees to take appropriate training and courses. In 2018, this will be given more emphasis and guidance through a recalibration of the strategic training policy and the focus of Principals (functional manager of disciplines).

In addition to knowledge development, EBN invests in coaching and training for personal development. For example, in the field of communication skills, energy management and personal leadership. In addition, we invest in professional development by having employees carry out assignments at one of our partners for several months. Since 1 June 2017, an employee of EBN has been seconded full-time to the Ministry of Economic Affairs. Another employee has carried out an external assignment at Petrogas E&P Netherlands B.V.

### **Organisational change**

An organisational change took place in mid-2017. The organisation is now managed on a thematic basis,

with separation of management tasks into operational, functional and hierarchical management tasks. The primary process is organised with multidisciplinary teams. These teams are distributed over six themes that are led by programme managers. With this adjustment, EBN aims to achieve its objectives with more responsiveness and focus.

All EBN employees are assessed annually by their hierarchical manager. This is done on the basis of input from the operational managers and team members. EBN employees also have an annual development interview with their functional manager where they discuss their short-term and long-term objectives in the field of (career) development. 2017

was a transitional year for EBN, also with regard to the HR cycle. Normally, the development interviews take place in the summer. In the summer of 2017, EBN was in the midst of the reorganisation that became effective on 1 September 2017. We are currently working on the roll-out of the new HR cycle, in which the development plans are integrated into an annual plan. The annual plan consists of performance agreements and development objectives. The annual plan is drawn up at the beginning of the year. All employees draw up an annual plan for 2018.

#### EBN core values

The core values of EBN were also evaluated during the organisational change. An assessment has been made of the extent to which the core values demonstrably contribute to the realisation of the strategic objectives. The new core values are:

#### Core values

- We stand for the public case
- We add value
- We dare to lead the way
- We create connection
- We do what we promise

## HR objectives

Topic	Objective	Result in 2017
<b>Total absenteeism (short-term, medium-term, long-term)</b>	EBN strives for a total absenteeism rate (short-term, medium-term, long-term) of less than 3%.	The absenteeism rate was 4 per cent.
<b>Short-term and medium-term absenteeism</b>	The short-term and medium-term absenteeism rate is less than 2.5%.	The short-term and medium-term absenteeism rate was 1.4 per cent.
<b>Employee satisfaction</b>	EBN is a Great Place to Work	The results for 2017 are not yet known. For this reason there will be reported on 2016
<b>Career guidance</b>	All employees have an annual performance and development appraisal meeting.	In 2017, all employees had a performance appraisal meeting. In a few cases, a development interview was not officially recorded during the period of the organisational change
<b>Diversity</b>	EBN strives to have a more gender-balanced workforce. Thereby, EBN continues to aim for a male-female ratio of 65/35 per cent.	32.9 per cent of the workforce is female

#### EBN employees

The average age was 43.7 in 2016, in 2017 it was 44.5. EBN is attempting to bring about a rejuvenation of its workforce through the influx of young and

ambitious professionals. EBN is investing in the development of young talent. We offer them a three-year traineeship in technical and commercial positions. We are focussing on the development of

a new generation of ambitious young people who consciously choose a future in the energy sector and want to contribute to the energy transition.

In the past year, the average number of FTEs at EBN increased. In 2016, this was 74.8 FTE and in 2017 this was 77.66 FTE. Female employees make up thirty-three per cent of the complement. Female employees are employed at all levels, from management to the Supervisory Board with the exception of the team of directors. Twenty-one per cent of the managerial and/or professional roles are filled by female employees.

Due to a number of long-term sick employees, the absenteeism figure in 2017 was on the high side, but had clearly decreased compared to 2016. In 2016, the absenteeism rate for the whole year was 4.9 per cent. In 2017, it fell to 4 per cent. Short-term and medium-term absenteeism increased slightly from 1.2 per cent to 1.4 per cent in 2017. EBN supervises sick employees through careful reintegration processes, the use of assessment offices, external multidisciplinary support, and personal supervision from HR, managers and colleagues. In the context of prevention EBN organised a training course on energy management and stress prevention for all employees, and a training session on absenteeism

meetings for managers in 2017. In addition, EBN invests in individual coaching programmes, sports instruction on location, chair massages and regular workplace surveys.

#### **4.6.4 Employee participation**

In 2017, the Works Council met with the director four times. A member of the Supervisory Board was also present at two of these meetings. Following the implementation of the new strategy, various consultations on the organisational change took place in the first quarter in addition to the regular meeting. The Works Council received a request for advice on the organisational change on 28 March and the Works Council issued its recommendation on 5 May. The Works Council has given a positive recommendation, subject to a number of conditions. The Works Council explained its advice in two sessions with the employees. On 22 May, the Works Council received a second request for advice: 'Request for advice on Support for Implementation Strategy'. The Works Council gave a positive recommendation on 2 June and gave a number of concrete recommendations to the director. After issuing these recommendations, the Works Council was involved in the implementation process in the second quarter. This was not part of the request for advice.

The regular consultations concerned a WOR (Works Councils Act) article 24 meeting. The general course of events was discussed in the presence of SB member Jaap Huijskes. Furthermore, the new sickness absence and home working arrangements were discussed during the meeting. In the regular consultations of the third quarter, the director explained the investigation that was carried out with regard to facility matters, and the intention to implement a time registration system was discussed. Furthermore, the expectations regarding EBN's financial results were discussed this year. With regard to the implementation of the new organisational structure, three consultations took place. Among other things, the first findings on the new way of working were discussed.

Chairman of the Supervisory Board Hein van Oorschot was present at the last regular meeting of the year. An important topic of discussion was the results of the Great Place To Work study and the survey on the new organisational structure that the Works Council held among employees. In addition, the strategic objectives and management objectives were discussed. In December, the Works Council also received a request for consent for the Sick Leave Scheme, Limited Time Registration and Performance Management Regulations.

#### 4.7 Objectives 2018

The Supervisory Board has set a number of general EBN targets for 2018. These objectives are important indicators of EBN's performance. That is why they are also the starting point for remuneration. For more information, see Annex 9.4.

To achieve the EBN objectives, the team of directors formulates the strategic objectives. These objectives generally contain concrete projects that have to contribute to achieving the EBN objectives. The strategic objectives can be found for each strategic pillar in the results sections. During the year, the progress of these objectives will be monitored and reported on in the annual report for 2018.

#### EBN objectives 2018

Topic	Explanatory notes	Objective
Profit EBN after tax	EBN's profit shown in million EUR	≥ 300
Administration costs	EBN's costs for staff, hiring expertise, office, etc. shown in million EUR	≤ 19.8
Reserves maturation small fields	The net supplementation (maturation) of developed gas reserves in the Netherlands in GNm <sup>3</sup> GE.	≥ 7.2
Offshore Drills	The number of offshore drills	≥ 18
Define stage project Porthos achieved	The CCS Porthos project in Rotterdam will be launched in 2018 in the define stage.	Yes
Financial participation EBN in geothermal energy	EBN also contributes financially to the development of geothermal projects in the Netherlands	2



# The North Sea as a Northwestern European powerhouse

“IRO was set up as a trade association for service companies in the oil and gas sector almost 50 years ago. IRO now has 450 members and almost all members are also involved in sustainable energy. Chairman Pieter van Oord, also chairman of the board of Van Oord, and Eric Kreft on behalf of EBN (programme manager of Nexstep), exchanged views on the future of the North Sea. What role does the North Sea play in the energy transition? And how can Nexstep - the initiative of EBN and the Dutch oil and gas industry focused on the reuse and decommissioning of oil and gas infrastructure - contribute to the shift to sustainable?”



## Interview

Van Oord: 'In the seventies, the North Sea was the breeding ground of the offshore gas and oil industry. Thanks to the unique possibilities of the North Sea, a disproportionate offshore sector has developed. Look at the IRO members, we all work internationally. All the knowledge and expertise we have acquired over the past 50 years – from platforms and pipelines to drilling techniques – can be used for the North Sea's new future. A future with fewer gas and oil production platforms, but with a great deal more sustainable energy sources. Nexstep is therefore a good initiative, just because of the fact that possible synergies are given very careful thought. The combination with offshore wind is one of course, but there are so many other possibilities for using the infrastructure differently. At the same time, contractors still have a wait and see approach to decommissioning. As a contractor, how do you build a business case for decommissioning? You do not know what you will encounter and the chance of cost overruns is high. Nexstep needs to get a grip on this.'

“That is why joint knowledge development is one of Nexstep's focal points' says Kreft. 'The infrastructure of the North Sea offers opportunities for production, storage and transport of sustainable energy but it is not a simple task. Just look at the infrastructure. Adjustments are needed to be able to use it in the

new situation, and the various owners must continue to carry out maintenance. Who arranges that? Who pays for that? Etc. We are dealing with many parties, there are many different interests and there are substantial investments involved. The decommissioning of the entire North Sea is estimated at 100 billion, the Dutch part at 6.7 billion.

For the time being Nexstep is formed by EBN and the operators. Within Nexstep we form steering groups that focus on the further development of specific disciplines; from wells and pipelines to offshore platforms and onshore production sites. We share knowledge and experience, encourage innovation and promote effective and efficient regulations. The service companies can also make a valuable contribution. IRO is therefore genuinely invited to participate in Nexstep. Shared learning is important'.

### Repeatability is the magic word

Van Oord: “Really it is like an Ikea cupboard. If you have to put four together, I know that you will manage the fourth cupboard quicker than the first one. Repeatability is the magic word. For decommissioning, but also for CO<sub>2</sub> storage. Without CO<sub>2</sub> storage we will not meet the 2030 targets of the coalition agreement. We also need to develop knowledge about this together. The interaction between CCS and the



**Pieter van Oord**

Chairman of the board of Van Oord

**Eric Kreft**

EBN – Programme manager of Nexstep



North Sea is extremely interesting but we are not that far yet. We are still in the waiting room. As soon as the industry abandons its cynicism and prepares itself, materials are needed and the service companies will spring into action'. Kreft: 'It's a puzzle. The changing of the guard is imminent, but it is not yet clear what the timeframe looks like and when the transition from gas to wind for example will be a reality. The energy agreements that are coming will provide direction".

#### **Powerhouse of Northwestern Europe**

"Let's see the necessary transition from gas and oil to sustainable energy as an opportunity", continues Van Oord. 'We are realising a new labour-intensive industry. From 2020, more people will be working in the renewable energy supply than in the oil and gas industry. Innovation and knowledge development will get a boost. Completely new disciplines will arise such as maintenance of windmills. And just like in the seventies, thanks to the North Sea, we have the opportunity to learn this in the home market, then standardise it and export it to the rest of the world. Not that we are the first worldwide, but the North Sea is a unique area; shallow, sandy and there is always wind. The North Sea is not going to be emptier, but if we do it right, we can grow into the powerhouse of Northwestern Europe. The Saudis have oil, we have the North Sea".



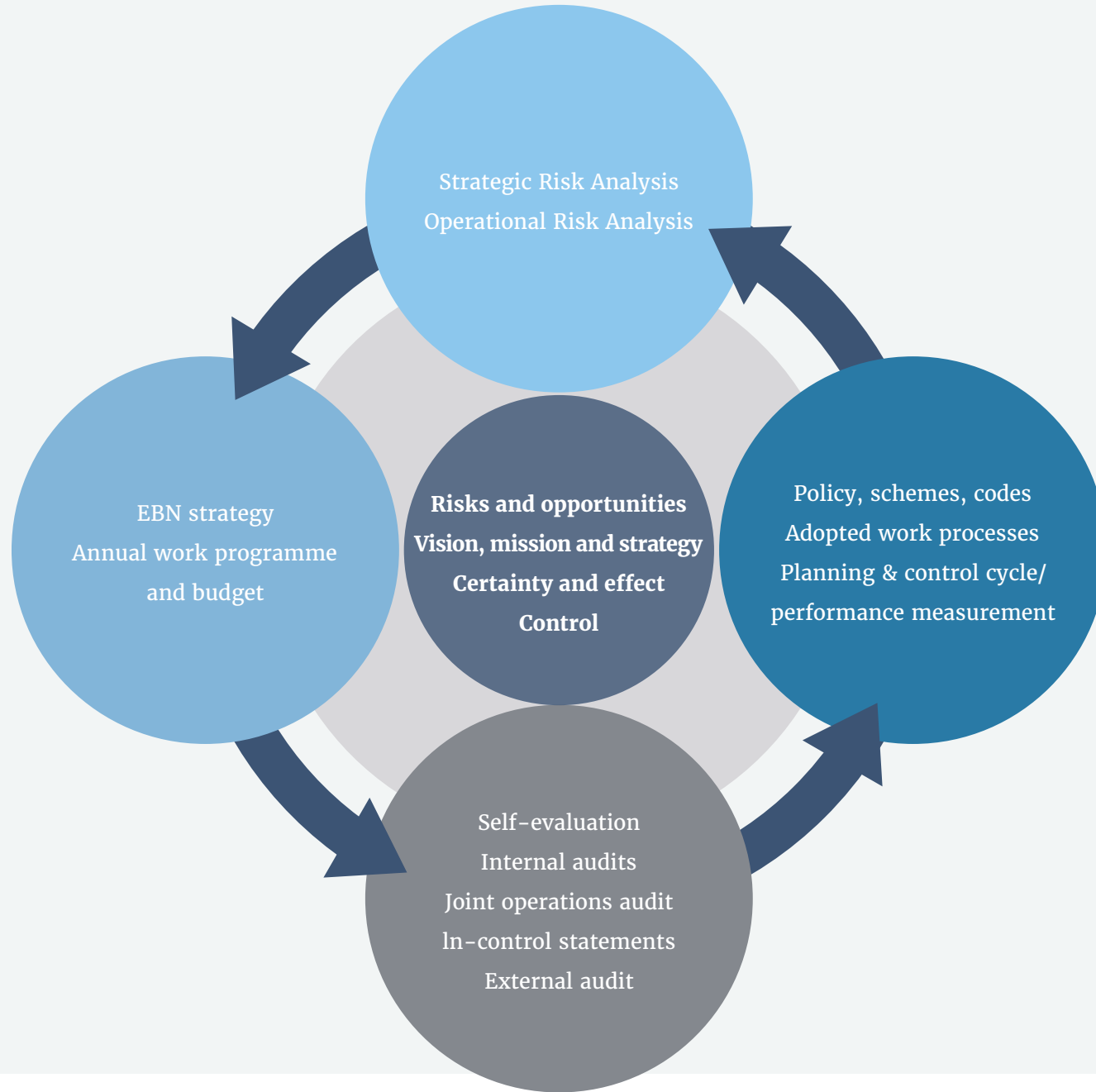
# 5. Governance and Risk

## 5.1 Risk management

### 5.1.1 Risk management system

In the past year and a half, EBN's risk management system has attracted a great deal of attention from the Executive Board and the Supervisory Board. On the one hand because of the development of the new strategic themes 'Return to Nature' and 'New Energy' and on the other hand due to developments concerning the earthquake problem.





As a policy participation, EBN sees controlling the risks in the most effective way within the frameworks that the Dutch State has provided as a very important task. Last year management also devoted extra attention to evaluating EBN's risk appetite and to reinforcing risk culture throughout the company.

The risk management system, based on the COSO model, consists of four separate pillars, within which we have designated various activities that are carried out in conjunction.

Identifying, assessing and controlling risks helps us to achieve goals in a responsible manner, comply with laws and regulations and continuously monitor the management of the risks and, where necessary, change and improve them.

Management is ultimately responsible for the design and supervision of an effective internal risk management and control system. We develop different activities in order to manage risks effectively. During annual sessions, strategic risks are updated and determined by the Executive Board, which results in the Strategic Risk Analysis (SRA).

At department level, strategic risks are linked annually to department objectives, and an Operational

Risk Analysis (ORA) is drawn up annually. Since 2017, the ORAs have been structured on the basis of business processes related to strategic themes. During these sessions, a self-assessment of the risks and the design and operating effectiveness of the identified control measures takes place. Based on this, action holders within the departments/themes are designated and departmental and theme objectives are adjusted if necessary. The results are discussed with the relevant portfolio holder in the Executive Board and anchored in the relevant department plans.

Risk management activities continuously take place based on the planning and control cycle, on the basis of defined policies, work processes and by linking individual goals to managing risks.

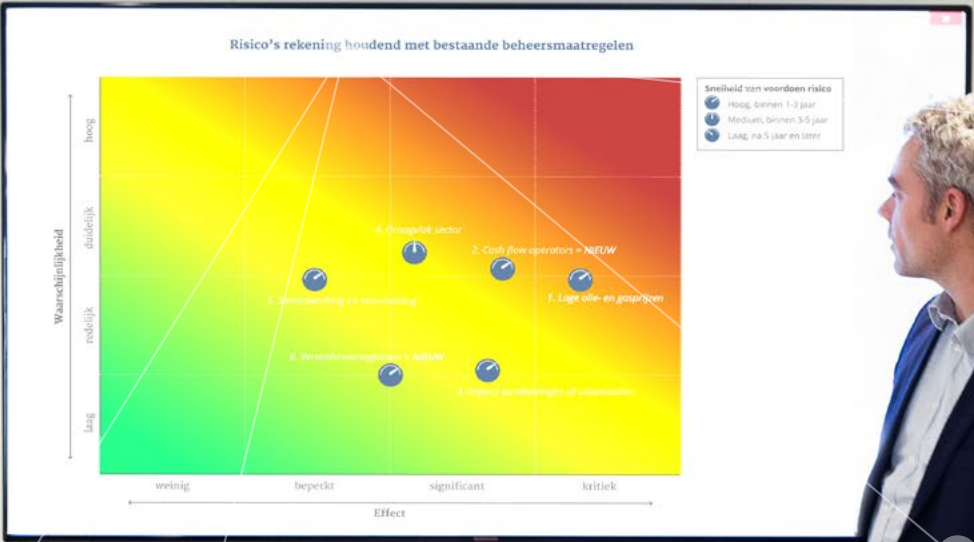
Employees are the most important success factor for an effective risk management system. To enhance risk awareness, we involve employees from all levels in ORA sessions. This also contributes to reinforcing a professional criticism at EBN. We strive for the right balance between structural elements and cultural aspects such as unwritten rules, behaviour, togetherness and experience within the organisation. In 2017, the core values were redefined with input from all employees. In 2018, we will facilitate specific dialogue sessions for all employees about the unwritten cultural

aspects. We want to further strengthen our risk-aware culture with a focus on value creation in the long term.

Within the planning and control cycle, EBN uses a performance management system. This was introduced in 2013 and recalibrated in 2016. We work with reports in which we periodically monitor the performance of the partnerships and departments on the basis of established performance indicators. Actions from the SRA and ORA, and the follow-up of relevant internal and external audit findings are an integral part of this. The Executive Board follows the performance of EBN as a whole based on monthly reporting and adjusts where needed. The various reports are regularly discussed and published internally in the various departments. In addition, quarterly reports are issued to the Supervisory Board and the Ministry of Economic Affairs and Climate Policy. The last report of 2017 was structured for the first time on the basis of the strategic themes.

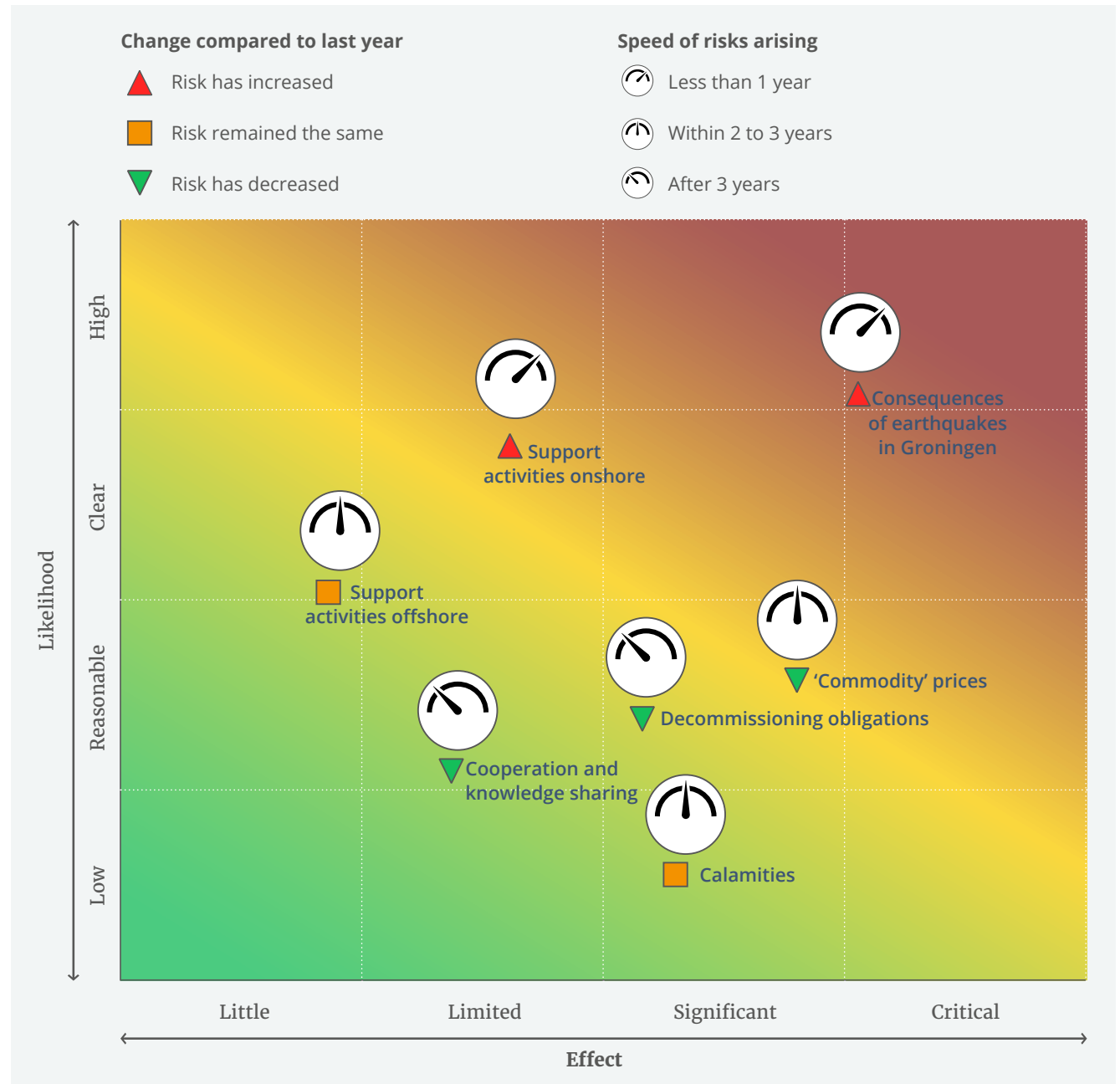
### **5.1.2 Risk profile**

In this chapter, EBN's most important strategic risks are explained, including the risk appetite, management measures taken, and, where relevant, a general description of the sensitivity of the results to material external events (such as, for example commodity

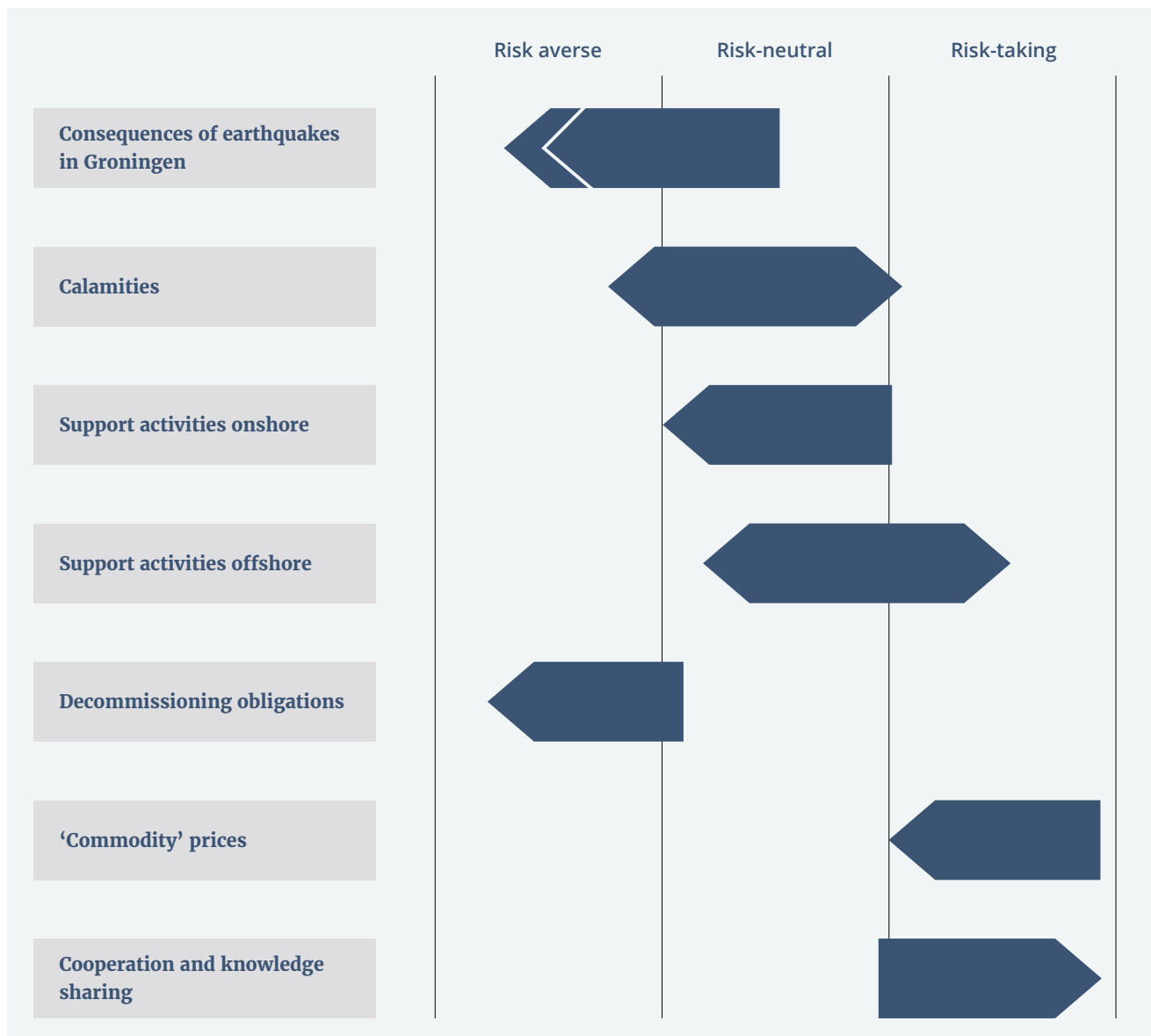


prices or incidents at third parties). Financial risks are included in the chapter 'Policy to control financial risks' on page 125. Operational risks and compliance risks are included in the other chapters.

The figure alongside shows the most important strategic risks for EBN, including the relative development compared to a year ago. The risks with regard to 'commodity' prices, compliance with our decommissioning obligations, cooperation and knowledge sharing have decreased this year. On the other hand, the risks relating to production in Groningen and the support for onshore activities have increased significantly. In the following sections, we explain the risks involved, including the actions that EBN takes to maintain exposure within the risk appetite.







## 5.2 Risk appetite

Last year risk appetite was introduced per theme in the EBN annual report. This year, this was further substantiated by specifying the risk appetite per risk. The figure alongside shows the risk appetite for the most important strategic risks. The risk appetite for financial and operational risks included in other chapters is neutral. For compliance risks it is risk averse.

## 5.3 Main strategic risks



### Consequences of earthquakes in Groningen



#### Risk

The production of gas from the Groningen field (with the operator NAM) causes earthquakes, resulting in damage to houses and buildings. Reinforcement programmes to be prepared for possible future quakes have been and are being defined. Contingencies in the form of personal accidents (personal injury) as a result of, for example collapse, cannot be entirely ruled out. EBN has a 40% interest in the Groningen partnership and will proportionally bear the costs of the consequences of earthquakes.

As a result of the earthquakes induced by natural gas extraction in Groningen, the Minister of Economic Affairs and Climate Policy has limited the production of natural gas from the Groningen field. This production limitation is fixed in a consent decision that states when, where and how much natural gas may be produced from the Groningen field.



#### Risk appetite

The minister determines his consent decision on the basis of, among other things, a safety assessment from State Supervision of Mines. NAM produces no more than the consent decision and actively monitors the seismic activity in the Groningen field. EBN tries to estimate the consequences of this decision as well as possible and, where possible, to specify its advisory role towards the ministry and towards NAM prior to decision-making. EBN follows the position of the ministry with its risk appetite and is therefore risk averse.



#### Control measures

For the theme Groningen, EBN has put together a special team that researches and publishes on the movement in the subsurface of the Groningen field in various production scenarios. The results of these studies are combined with larger studies of, among others, NAM, KNMI, SSM and TNO. The ultimate goal is to create a scientifically based idea of the safety of gas extraction from the Groningen field. In this way, EBN contributes 'indirectly' to better decision-making on safety by providing knowledge and cooperating with the operators.



## Calamities



### Risk

Calamities can occur in the area of safety and the environment during the operations of our operators. For example, blow out, collisions, leaks, emissions and other safety incidents, with possible injuries as a result. Disasters can cause social resistance against the activities performed by the partnerships in which EBN has an interest. This can also lead to resistance to the role EBN performs as part of its statutory task. The ultimate consequence could be that EBN will have to terminate these activities.



### Risk appetite

An important task of EBN is to realise value from geological energy sources in a safe, sustainable and economically responsible manner. Safety comes first. E&P activities are associated with relatively high technical risks. This has led to a highly developed safety culture in the E&P industry. In recent years, the non-technical risks have grown. Non-technical risks arise from interaction with the environment and stakeholders. Weighing all the risks and dealing with these risks in a responsible manner is inherent to this task. We take health, safety and the environment (HSE) into account. Depending on the situation EBN is more or less willing to take risks. On average, EBN's risk appetite on this theme is risk-neutral to risk-taking.



### Control measures

EBN develops an HSE benchmark for all extraction activities. The aim is to enter into an explicit dialogue with operators about the safety and environmental effects of gas extraction. And, as a major partner, having a means to assess and positively influence the HSE performance of our operators.

The importance of safety and the emphasis we want to put on it requires communication on calamities to be an essential part of risk mitigation. EBN strives to communicate as transparently as possible in the event of calamities.

For new activities, such as geothermal energy, the industry is still at an initial stage compared to oil and gas extraction. This industry can make an important contribution in the context of the energy transition. The technical and safety risks are often comparable to those of onshore gas production. The potential operators and partners of EBN (in the case of participation) in the future have less knowledge of and experience with the subsurface. This information initially requires a higher risk appetite from EBN, and in order to manage the risks, it requires more explicit involvement of EBN in activities such as seismic research, drilling and heat production.



## Support activities onshore



### Risk

Due to the earthquake problem, and with regard to the safety of the residents of Groningen, the reputation of the E&P sector in the Netherlands is generally under pressure. Long-term environmental objectives play an important role in the public debate and a significantly reduced gas consumption is anticipated in the future. These risks affect the activities of EBN and the operators. Production restrictions are implemented (Groningen), and further developments of small fields are made more difficult (stop to onshore exploration licences). It is not excluded that this emanates in the form of social resistance to other onshore projects. For example, for geothermal energy, the components of CO<sub>2</sub> projects that are carried out onshore, licensing processes with a long lead time, stricter legislation and regulations that are introduced and the activities concerning production and abandonment that are subject to stricter supervision.



### Risk appetite

Sufficient support for the onshore activities is of course very desirable. Due to the earthquake problem but also due to other factors, there is not much support. EBN has a 'following' role in this. EBN follows the Ministry of Economic Affairs and Climate Policy. That is the reason why EBN has a risk-neutral position to a risk averse position.



### Control measures

EBN remains in close contact with the ministry regarding the official line to be followed. EBN advises where possible and necessary, so that optimal decision making takes place in The Hague, with a view to the interests of all stakeholders. EBN has contacts with other industry parties to ensure that the communication on gas extraction in the Netherlands is factually accurate and neutral.

The importance of safety and the emphasis we place on it requires communication around disasters to be an essential part of risk mitigation.

With regard to geothermal and CO<sub>2</sub> storage, all parties involved are informed and actively involved in the process as early as possible. This means sufficient guarantees for social acceptance are built in.





## Support activities offshore



### Risk

Risks related to offshore activities include climate change and with it the increasingly strong voices against the use of fossil energy sources, the relatively limited space on the North Sea, and the strong competition from wind farms, sand extraction and nature reserves for example. Due to declining production at constant or increasing costs, the risk of accelerated termination of these activities increases.



### Risk appetite

EBN is of the opinion that the gas that can still be extracted from the North Sea can make an important contribution to the acceleration of the energy transition. EBN is partly dependent on other parties in this. Where possible, EBN takes the risk of showcasing the importance of the North Sea. Here too, EBN is often dependent on the vision of the Ministry of Economic Affairs and Climate Policy. The risk that EBN takes can therefore best be described as neutral.

EBN has recalibrated its strategy with active participation and close collaboration with a broad group of stakeholders, both internally and externally. This increases support.



### Control measures

EBN proactively targets operators, so that it also has a non-operator influence in the sector. During the recalibration of the strategy there was intensive cooperation and participation between EBN and its stakeholders. EBN is increasingly present during symposiums, conferences and trade fairs. The purpose of this is to increase awareness, inform visitors and thereby share knowledge and increase social support.

With the 'Energy in the Netherlands' infographic, EBN is helping to initiate an informed dialogue. On the one hand to transfer knowledge, on the other hand to increase the understanding and hence the acceptance of gas.

To provide transparency about the activities of the industry, we report on our own activities and those of our partners in our annual report, in the annual Focus on Energy report and on our website. In 2017, this has contributed to more transparency about our activities and gas production in the Netherlands as a whole.



## Decommissioning obligations



### Risk

There is a risk that reuse and decommissioning will be carried out sub-optimally, both technically and financially. The technical risk mainly concerns inadequate mutual coordination and knowledge sharing between licence holders. The financial risk concerns the availability of sufficient financial resources and cash flow from all partners in order to be able to meet the obligations regarding the decommissioning of infrastructure that is no longer in use in the future.



### Risk appetite

In the coming years it will be a matter for EBN to take a leading role in decommissioning activities on the North Sea, because these are increasing in number. Because of the emerging but urgent nature of the theme, the risk appetite is risk averse.



### Control measures

Following the 'Masterplan Decommissioning and Re-use' in 2016, EBN launched a national platform for reuse and decommissioning in 2017 in collaboration with NOGEPa under the name 'Nexstep'. Nexstep's mission is to serve as an inclusive and cooperative umbrella organisation that coordinates and facilitates the dialogue on the reuse and decommissioning agenda for the oil and gas infrastructure in the Netherlands.

The E&P operators, united in NOGEPa, designed a financial guarantee system together with EBN in 2017. Through this system, the participating partners will provide each other with financial guarantees per licence for the decommissioning obligations.

In the event that in future there is no licence holder for a particular licence that is able to comply with the decommissioning obligations, the State becomes the beneficiary of these financial guarantees. This system will be formalised in 2018. The aim is to have the agreements operationalised on 1 January 2019.



## 'Commodity' prices



### Risk

The risk is that structurally low oil and gas prices or even a further fall in oil and gas prices will negatively affect the investment climate, or that investments and/or maintenance work will be postponed, as a result of which the underground potential of the Netherlands will not be fully utilised and infrastructure will age more quickly. Low prices and uncertainty about the investment climate and costs may discourage both current operators and potential new parties from investing in the Netherlands. Ultimately, this may result in lower revenue for EBN, less revenue for the State and may even lead to impairments.



### Risk appetite

EBN has the policy of not hedging and, as a result, deliberately does not hedge against downward price trends. The risk appetite can therefore be characterised as risk-taking.



### Control measures

EBN advised the Ministry of Economic Affairs and Climate Policy in 2016 on tax measures. In addition, EBN encourages knowledge sharing. We do this, for example, by organising workshops in the field of low-cost development, by using our NOV management within the Small Fields theme to influence operators, and by issuing the OPEX Offshore benchmark. For the longer term, EBN conducts its own studies within the themes Exploration, Reuse & Decommissioning, Geo-Energy and Advice & Innovation. These studies contribute to the optimal use of the Dutch subsurface. A long-term goal and action plan have been recorded for all areas. EBN thus contributes to the future-proofing of operators.



## Cooperation and knowledge sharing



### Risk

Parties involved in oil and gas extraction in the Netherlands benefit greatly from cooperation and the sharing of data and knowledge. This is even more the case at the time of complex decommissioning decision processes where multiple parties (operators) sometimes have to operate in a cluster, but also when entering into new exploration activities where existing infrastructure of other operators must be used. Specific domains include cost savings through cooperation, innovation and digitisation, both in oil and gas extraction and decommissioning, and in new activities related to the energy transition.

The risk is that insufficient coordination and knowledge sharing takes place from EBN and/or between the industrial parties themselves, creating inefficiencies and ambiguities.



### Risk appetite

EBN also plays a role in the dialogue on the energy transition: it is a policy participation and has extensive knowledge of and experience in doing business in the subsurface. Contributing to strengthening, improving and developing new energy sources such as geothermal energy and other forms of utilising the subsurface are new strategic priorities for EBN. As a result, the risk appetite is risk-taking where this fits within the policy that the government is developing around the energy transition.

EBN actively and often leads in collaborative ventures, at conferences and symposia, in Joint Industry Projects (for example in the TKI context and in the New Energy Coalition) but also abroad, such as Prospex. EBN also organises thematic workshops with operators and stakeholders.



### Control measures

EBN has conducted studies for all themes and defined long-term objectives and action plans. EBN also draws up the BOON report (OPEX Offshore NL benchmark), a sustainability report and an HSE benchmark. A CAPEX benchmark is used for this. After the drafting of a Master Plan in 2016, Nexstep, the National Platform for decommissioning and re-use was also launched in October 2017.

In addition, EBN has frequent consultations with NOGEPa and its members, there is an active participation in KVGn and Gilde and good contacts are maintained with the Universities (including Delft, Utrecht and Groningen). Discussion is also stimulated by the EBN publication FOCUS and by the annual energy infographics. For good and transparent communication about the energy transition, the EBN website was revised in 2017 and an informative website was launched on [hoewerkaardwarmte.nl](http://hoewerkaardwarmte.nl).

These control measures together contribute to better knowledge sharing within the sector.



In 2016, change management was included in the risk matrix as one of the strategic risks. Based on the measures taken and evaluation criteria (likelihood, effect, speed of occurrence), the Executive Board has concluded during its SRA that this risk is not included in the risk matrix presented. Operationally, there is undiminished attention to optimise EBN's capacity to change.

### 5.3.1 Reviews and audits

In 2017, various internal audits were carried out based on our audit annual plan. These are aimed at evaluating the quality and effectiveness of the important working processes and/or a number of specific themes within those working processes. This concerns audits on treasury, the determination of long-term commercial assumptions and IT governance. Based on the findings, we have established actions that are assigned to owners. The findings are presented and explained to the Executive Board. The most important ones are also discussed with the Audit Committee of the Supervisory Board. The Executive Board monitors the implementation of the actions on a quarterly basis.

In 2017, like every other year, in addition to the internal audits EBN deployed joint venture audits to conduct a financial audit of the costs charged on to

our organisation within the context of the various joint ventures. The findings of the joint venture audits were discussed with the partners and adjustments were made where necessary.

There is also an annual external review of the process for the determination of the oil and gas reserves and resources. A detailed review is performed on nine fields that have undergone material changes and/or are material in the portfolio of EBN. The recommendations of the review are implemented and followed to guarantee a continuous improvement of this process.

In addition to the identified improvement points arising from internal and external audits, and reviews relating to processes including IT, no significant shortcomings were found in the operation of the internal risk management and control systems.

### 5.3.2 In-Control statement

The Executive Board supervises the effective operation of the internal risk and control system through its day-to-day supervision and periodic reports. These reports include the results of the SRA, ORAs, internal and external reviews and audits, and any complaints and whistleblower notifications. The most important results are discussed by the Executive Board with the audit committee and the Supervisory Board.

Based on its own observations, and additional assurance derived from internal and external reviews and audits, the Executive Board declares that:

- the annual report provides sufficient insight into shortcomings in the functioning of the internal risk management and control systems;
- the aforementioned systems provide a reasonable degree of certainty that the financial and non-financial reporting contains no inaccuracies of material importance;
- it is justified under the current state of affairs that the financial reporting has been prepared on a going concern basis;
- the annual report mentions the material risks and uncertainties that are relevant to the expectation of the continuity of the company for a period of twelve months after preparation of the report.

## 5.4 Corporate Governance

### Shareholder

#### General

EBN is a private company with the Dutch state as the sole shareholder. Management of the shares is in the hands of the Ministry of Economic Affairs and Climate Policy. EBN is a policy participation. Shareholder status and the role of policymaker are vested in the same ministry.



EBN's issued and paid up capital is EUR 128,137,500 and is divided into 284,750 ordinary shares with a nominal value of EUR 450 per share.

The shareholder appoints the director and the supervisory directors of EBN. The Supervisory Board submits a nomination for the appointment of the director to the shareholder. The Minister of Economic Affairs and Climate Policy has to approve that recommendation beforehand.

The shareholder appoints a Supervisory Director on the basis of a recommendation by the Supervisory Board. The shareholder appoints a chairman from the members of the Supervisory Board.

EBN's articles of association also state that the director requires prior approval from the Supervisory Board or the shareholder for certain decisions. Concerning the approval of the Supervisory Board, please refer to page 76. The shareholder's approval is required for the following:

- Entering into or terminating any sustainable collaboration or investment with a value exceeding EUR 200 million;
- Closing the business, or winding up the company or a subsidiary or important division of the business;
- Decisions of the Executive Board about a significant change in the identity or character of the company. This includes taking or disposing of a substantial stake in the capital of another

company and transferring the business to a third party.

#### **Shareholders' meeting**

The annual shareholders' meeting was held in March 2017. The director, the Finance Director and the Supervisory Board attended this shareholders' meeting.

The following topics are on the agenda of the annual shareholders' meeting in any case:

- Discussing the written annual report by the Executive Board on issues concerning the company and its management;
- Adoption of the financial statements and determination of the profit appropriation;

- Discharging the director of responsibility for his management over the past financial year;
- Discharging the Supervisory Board of its responsibility for supervision over the past financial year.
- The financial statements for 2016 were adopted and the Executive Board and the Supervisory Board were discharged of their responsibility.

#### **Informal consultation**

In addition to the general meeting of shareholders the shareholder representatives of the Ministry and the Finance Director of EBN had regular informal consultations: in 2017, four times. The objective of this informal consultation is to provide the shareholder with all the relevant financial information that the shareholder needs to exercise his authority. Providing relevant information is one of the Executive Board's obligations.

The policymaker is also regularly consulted on an informal basis. There are fixed consultation times, such as the strategic consultation, the executive consultation and the mining and gas production consultation. In these fixed consultation meetings, information is exchanged on developments within the two organisations, any changes to the energy policy and relevant developments in EBN's tasks and activities. In addition to members of the team of

directors, other EBN employees also attend these meetings. In addition to the director, the chairman of the Supervisory Board is also present at the strategic consultation.

#### **Supervisory board**

The Supervisory Board is responsible for supervising the Executive Board's social policy and the general course of affairs within EBN and advises the Executive Board when necessary and desired. In turn, the Executive Board provides the Supervisory Board with all necessary and relevant information to enable it to execute its tasks and responsibilities. EBN's articles of association also state that the Executive Board requires prior approval from the Supervisory Board for certain decisions. For example when:

- establishing and amending the operating budget and the investment and financing plan;
- appointing proxyholders;
- making investments and/or disinvestments;
- conducting other legal transactions to the value of more than EUR 50 million.

The composition of the Supervisory Board was changed in 2017 by the appointment of Mr de Vries on 1 March 2017, the resignation of Mr Gratama van Anel at the shareholders' meeting in March 2017, and by the appointment of Mr Samsom on 22 March 2018.

The regulations of the Supervisory Board changed in 2017 to bring the provisions in line with the corporate governance code 2016.

#### **Executive board**

EBN's Executive Board comprises one executive director. The Executive Board is responsible for general policy and strategy with the company's associated risk profile. The Executive Board is also responsible for achieving the company's objectives, the results achieved and the social aspects of business relevant to the company. Where necessary, the Executive Board submits decisions to the shareholder or the Supervisory Board for approval. It also ensures the proper functioning of the internal risk management and control system.

#### **Team of directors**

The Executive Board is assisted by two functional directors who, together with the executive director, constitute the team of directors. The executive director is chairman of the team of directors. The current team of directors consists of the executive director Jan Willem van Hoogstraten (CEO) as well as the following persons: Mr Scheffers (Director Strategy & Technology) and Mr Boekelman (Director Finance). The organisation chart is shown on page 9.

Until 1 September 2017, the team of directors consisted of the executive director and three functional directors. Due to the organisation of the EBN organisation in themes (see also page 54), the position of Director Asset Management has become redundant. The Executive Board regulations have been adjusted to this on 1 September 2017, with the approval of the Supervisory Board. The Executive Board regulations have also been amended to comply with the corporate governance code.

The Executive Board regulations state how the tasks are distributed among the team of directors. The team of directors acts on the basis of joint responsibility. Within that joint responsibility, the tasks are divided into functional areas. This specific task division is set down in writing.

Each member of the team of directors is responsible for preparing policy matters and decisions in his or her own operational area. After decision making within the team of directors, the members of the team of directors ensure the prompt implementation of the decisions made. In principle, the team of directors meets every second week.

In the annual report the Executive Board describes the main risks related to EBN's strategy and the design

and operation of the internal risk management and control systems. The Executive Board also indicates what significant changes were implemented and what significant improvements were proposed. For this description, see page 61.

#### **Remuneration**

The shareholder determines the policy on the Executive Board's remuneration. The Supervisory Board determines the actual remuneration of the individual members of the Executive Board within the framework of that policy, including the variable remuneration. The remuneration of the Executive Board is explained in the remuneration report of the Supervisory Board.

#### **Governance table**

The governance table in annex 9.3 contains the following data for the team of directors and the Supervisory Board: age, other positions, terms, profiles/specific knowledge and task within EBN.

#### **Conflicts of interest**

EBN endorses principle 2.7 of the Corporate Governance Code (see below Application of the Dutch Corporate Governance Code') that any form or appearance of conflict of interest between the company and the Executive Board or Supervisory Board must be

avoided. The articles of association, the Executive Board regulations and the regulations of the Supervisory Board contain rules on (potential) conflicts of interest between the company and the Executive Board or Supervisory Board. Any (potential) conflict of interest that is of material significance to the company or the relevant director or supervisory director must be reported immediately to the chairman of the Supervisory Board. No reports were made by the director or by a supervisory director in 2017.

#### **External auditor**

The shareholder is responsible for appointing the external auditors, with the Supervisory Board having a right of nomination. On the recommendation of the Supervisory Board, in 2015, the shareholder appointed PwC as auditor for the years 2016, 2017 and 2018 (with a possibility for renewal for 2019).

#### **Application of the dutch corporate governance code**

EBN attaches great value to a good corporate governance. For this reason, EBN voluntarily subjects itself to the principles and best practice provisions of the Dutch Corporate Governance Code (insofar as these apply to EBN). EBN thus follows the policy of the government with regard to state participations and the Code.



The Dutch Corporate Governance Code and information about this can be found at: <http://commissiecorporategovernance.nl>.

An EBN report outlines for each principle and best practice provision how it implements these. This implementation report can be found at: [www.ebn.nl/ebn-over/corporate-governance/](http://www.ebn.nl/ebn-over/corporate-governance/).

EBN will put the implementation report on the agenda for the shareholders' meeting in 2018 in accordance with the recommendation of the corporate governance committee.

### Diversity policy

In consultation with the team of directors, the Supervisory Board drew up a diversity policy at the end of 2017 for the composition of the Supervisory Board and the Executive Board. EBN strives to be a good reflection of Dutch society. Diversity within an organisation contributes to a healthy corporate culture, resilience and creativity. This also applies to the composition of the Supervisory Board and the team of directors. The following aspects have been taken into account in determining the objectives of the diversity policy: nationality, age, gender and background regarding education and professional experience.

The Supervisory Board has determined the following objectives:

	2019-2023
<b>Supervisory Board</b>	At least 2 female members, at least 2 male members, two members <55 years on appointment, a maximum of 2 members with E&P experience, a maximum of 2 members with experience at government organisations
<b>Executive Board</b>	Relevant from 2020
<b>Team of directors</b>	At least 1 woman, average age or age new team of directors member <50 years

Since EBN has one director, it is currently not useful to include a specific objective for this person. A (re) appointment is only relevant from 2020. At that time, the composition of the team of directors will be examined, as well as the aspects of nationality, age, gender and background.

The team of directors (excluding the director) now consists of two functional directors (with the same nationality, gender and age group). When recruiting a new director, consideration will also be given to

variation in nationality, age, gender and background (cultural diversity).

Since the diversity policy was adopted at the end of 2017, it is not yet possible to report on how the policy was implemented in 2017. This also applies to any results in the past financial year.

The Supervisory Board consists of four men and one woman. The percentage of female supervisory directors is twenty per cent and remained the same



during the 2017 financial year. As a result, EBN has not yet achieved a balanced distribution of seats with at least 30 per cent of the seats occupied by women and at least 30 per cent of the seats occupied by men. The Supervisory Board pays attention to the balanced distribution of seats when recruiting every new supervisory director. The Supervisory Board notes that it did not succeed in this when recruiting the most recent supervisory director.

#### **5.4.1 Integrity**

##### **Code of conduct, internal complaints board and confidential adviser**

The importance we attach to transparency and clarity externally also applies within the confines of our own

organisation. Integrity is one of EBN's sustainability themes. The areas of focus that EBN distinguishes for the integrity theme are: human rights, non-discrimination, anti-corruption, competition and transparency. EBN also details its efforts to act with integrity and in a responsible manner through its Code of Conduct. The Code of Conduct is applicable to all the employees and accessible to all. This provides a guideline for making personal choices and individual decisions. We also use the Code of Conduct to test the actual conduct of our company and employees. Training sessions are given regularly to ensure compliance with competition law. If internal employees have complaints, they can speak to a confidential adviser or the complaints board.

In 2017, the complaints board did not receive or deal with any complaints. The confidential adviser had discussions with two employees in 2017. The Code of Conduct is available at: [www.ebn.nl/ebn-over/corporate-governance](http://www.ebn.nl/ebn-over/corporate-governance).

The general objectives of EBN's procurement policy are the reduction of purchasing costs, decreasing supply risks, increasing product and vendor quality and improving the procurement function. The procurement policy is based on the following purchase vision: 'EBN deals with procurement and suppliers in a professional manner. EBN purchases at the right price/quality ratio, under controlled risks in a transparent manner. EBN wants to be a reliable and careful

partner for suppliers and potential suppliers, offering fair and equal opportunities.' Purchasing is coordinated by a purchasing manager and a procurement procedure applies for purchases depending on the financial value. As part of the purchasing policy EBN has General Purchasing Terms and Conditions. These are declared applicable as much as possible to the goods or services that EBN purchases itself. These General Purchasing Terms and Conditions can be found on the website under <https://www.ebn.nl/over-ebn/juridisch/>. If a supplier does not act in accordance with these General Purchasing Terms and Conditions, he will be called to account about this.

#### **Whistleblowers' scheme**

On the basis of the regulations protecting whistleblowers, employees can report any alleged abuse to the Executive Board or the Supervisory Board. The current regulations protecting whistleblowers can be found at: [www.ebn.nl/ebn-over/corporate-governance](http://www.ebn.nl/ebn-over/corporate-governance).

#### **International conventions and guidelines**

EBN as a policy participation naturally complies with conventions and guidelines, which the Dutch State approves, including the OESO guidelines for international companies and the UN Guiding Principles on Business and Human Rights.



# Focus on geothermal energy

“The train is moving, we are speeding up, more passengers are boarding and the train can no longer be stopped. The energy transition is in full swing and geothermal energy is one of the pillars”. Saskia Hagedoorn, director of Hydreco Geomec, believes in the value of geothermal energy for a sustainable energy supply. She spoke with Eveline Rosendaal, programme manager for Geo-Energy at EBN, about the opportunities and challenges of geothermal energy.





## Interview

“Our ambition is clear; we want to be one of the largest geothermal energy companies in the Netherlands”, says Hagedoorn. ‘As far as staff are concerned, we are already growing this year to 20 FTEs. And we are also one of the front-runners in terms of projects; currently we are working on the development of twelve concrete projects. Ultra-deep geothermal energy will require a few more years of preparation, but the basis is also there. We follow a portfolio approach in all our geothermal projects because we believe that we can reduce the costs and the risk profile of projects and increase the pace and quality. Together with EBN, we look at how we can accelerate the development of geothermal energy. EBN has relevant knowledge and is used to geological risks and projects that require long-term thinking. We speak each other’s language. In addition, geothermal energy is capital intensive and an EBN share of 30 to 40% is very welcome. Despite the potential for the longer term, we are still faced with substantial investments and uncertainties. But it is beyond a doubt that geothermal energy can make a significant contribution to the energy transition’.

### **The industry can make the difference**

“True, we also see a great future for geothermal energy’, adds Rosendaal. ‘Collaboration and knowledge sharing are essential to achieving this.

That is why it is good that we work for UDG with seven consortia, government and knowledge institutes within the Green Deal Ultra Deep Geothermal Energy (UDG), with the aim of increasing the insight into the opportunities of geothermal energy at a minimum of four kilometres”.

“I totally agree,’ Hagedoorn continues. ‘Within the Green Deal, the parties are not only occupied with their own project. All participants understand that UDG only gets off the ground when we approach it as a collective. We are a learning sector. You could say that we are in the adolescent phase. Many lessons have already been learned, but there is still much to be learned until there is a mature geothermal industry. This applies to the industry, but also to the competent authority. How does the regulator fulfil its role? Which game rules apply? That too is in full swing. Sometimes we are rowing against the tide, but that certainly does not discourage me. During my geology studies, I knew that I wanted to commit to sustainable energy. In 2005, I immersed myself in geothermal electricity production in Iceland and Italy. Then I had the intention that if geothermal energy in the Netherlands is going to mean something that I want to fully commit and contribute towards the realisation of these sustainable Gigajoules. I am happy that I can do that and I am convinced that



**Saskia Hagedoorn**

Director of Hydreco Geomec.

**Eveline Rosendaal**

Programme manager for Geo-Energie at EBN.

## Interview

the industry can make the difference. The ball is in our court. After that we have to effect the change in cooperation with the government’.

“Innovation and learning are inherent to the transition,” says Rosendaal. ‘You also see that in the other energy sources that are part of a future sustainable energy mix. Wind energy without a subsidy was unthinkable until recently. For the development of the sector, it is good that there are parties such as Hydreco Geomec with practical experience and focus on the professionalism and acceleration of geothermal energy. Look at the quality, safety, health and environmental management system that you have specifically set up and implemented for geothermal energy in accordance with the requirements of State Supervision of Mines. For you, geothermal energy is not something that you ‘do’ on the side’.

“On the other hand, it is nice for us to be able to meet the challenges of geothermal energy with an independent party such as EBN. EBN has a vision and puts its money where its mouth is”.





# 6. Report from the Supervisory Board

## 6.1 General

The Supervisory Board as the employer of the director has the job of supervising the policy of the Executive Board and the general course of affairs within EBN. In this report, the Supervisory Board explains how it has implemented its methods of supervision and advised the Executive Board.

In accordance with the Central Government Holdings Policy Memo 2013, EBN applies the Corporate Governance Code. The section on Corporate Governance and Risk Management in this annual report addresses the application of the Corporate Governance Code in more detail. A revised Corporate Governance Code was published in December 2017. This was changed to the Dutch Civil Code in September 2017. EBN reports in this annual report on the application of this revised Corporate Governance Code by EBN.

## 6.2 Composition of the Supervisory Board

The following changes took place in the composition of the Supervisory Board in 2017.

- With effect from 30 March 2017, Mr Gratama van Andel stepped down as a member of the Supervisory Board. The Supervisory Board thanks Mr Gratama van Andel for his long and intensive involvement with EBN as a member of the Supervisory Board. His knowledge about the history of EBN in DSM respect was indispensable.
- Mr De Vries was appointed by the shareholder as a member of the Supervisory Board on 1 March 2017 and the Supervisory Board appointed Mr De Vries as chairman of the Audit Committee due to the resignation of Mr Gratama van Andel.

- Mr Samsom was appointed by the shareholder as a member of the Supervisory Board on 22 March 2018 and the shareholder appointed Mr Huijskes as Chairman of the Supervisory Board on 22 March 2018 due to the resignation of Mr van Oorschot.

For all vacancies on the Supervisory Board the profiles as approved by the general meeting of shareholders in June 2015 were used. The profile is also published on EBN's website: <https://www.ebn.nl/ebn-over/rvc/>.

The profile indicates the required characteristics of the individual members and the collective Supervisory Board. The Supervisory Board must be composed in such a way that the members can operate independently and critically in relation to each other, the Executive Board and each partial interest. The composition of the Supervisory Board will take into account the nature of the activities of EBN, its mission and objectives, the tasks of the Supervisory Board and expertise of the other members of the Supervisory Board.

The chairman of the Supervisory Board, Mr Van Oorschot, is the primary contact person for EBN's Executive Board. The entire Supervisory Board has a joint responsibility. All members of the Supervisory Board are also members of the Audit Committee and the Remuneration Committee/Selection and

Appointment Committee (hereinafter: remuneration committee). The governance table (annex 9.3) shows membership and chairmanship of the Board and the committees.

The members of the Supervisory Board do not maintain any other business relationships with the company. No conflict of interest has become apparent between the company and members of the Supervisory Board. The Supervisory Board meets the requirements for independence as stated in the Corporate Governance Code (best practice provisions 2.1.7 to 2.1.9).

The personal details, the current ancillary positions of the members of the Supervisory Board and the retirement schedule are published on the company's website, under Corporate Governance – Supervisory Board (<https://www.ebn.nl/over-ebn/raad-van-comissarissen/>). Personal details, other positions, tasks at EBN, appointment terms and ages can be found in the governance table annex 9.3.

## 6.3 Composition of the Executive Board

Per 1 March 2016, Mr Van Hoogstraten was appointed as director by the general meeting of shareholders. The preceding nomination procedure was carried out by the Supervisory Board in consultation with the shareholder and the Works Council was involved



in this procedure. Simultaneously with the appointment of Mr Van Hoogstraten, the shareholder established the remuneration policy for the director. With regard to the remuneration policy, the Supervisory Board has established the remuneration and further terms and conditions of employment of Mr Van Hoogstraten. The Works Council has given its opinion on the remuneration policy. In the Corporate Governance section of this annual report, the composition and division of tasks of the Executive Board will be addressed in more detail.

#### 6.4 Meetings of the Supervisory Board

The Supervisory Board met five times in 2017. Three meetings took place at the office of EBN in Utrecht; one meeting was held at an external location, and one meeting was held by phone.

In addition to the members of the Board, the members of EBN's team of directors attended these meetings. The external auditor was present at the first meeting of 2017. At that meeting, the financial statements and annual reports on the administrative organisation

and internal control of the external auditor were discussed. At the request of the Supervisory Board, EBN employees attended a number of meetings to clarify which projects these employees are involved in. The Supervisory Board gets to know the organisation of EBN better as a result.

In 2017, the Supervisory Board attended two consultation meetings with the Executive Board and the Works Council.

Meeting	Mr Van Oorschot	Mr Huijskes	Ms Kneppers-Heijnert	Mr De Vries	Mr Weck
AC March 2017	X	X	X	X	X
Supervisory Board March 2017	X	X	X	X	X
Remuneration March 2017	X	X	X	X	X
Supervisory Board June 2017	X	X	X	X	X
Remuneration June 2017	X	X	X	X	X
AC September 2017	X	X	X	X	X
Supervisory Board September 2017	X	X	X	X	X
Supervisory Board December 2017	X	X	X	X	X
Remuneration December 2017	X	X	X	X	X
Supervisory Board January 2018	X	X	X	X	X

The table below shows the presence of the supervisory directors per meeting. For every supervisory director, an attendance percentage of 100 per cent of the meetings of the actual Supervisory Board and of the committees applies.

### **6.5 Approvals by the Supervisory Board**

The Supervisory Board approved the following matters in 2017:

- In March 2017, the Supervisory Board accepted the positive advice from the Audit Committee about the 2016 financial statements, and advised the shareholder to adopt the 2016 financial statements and to grant discharge to the Executive Board for the policy and the supervision that was conducted.
- The Supervisory Board has approved an amended version of the authorisation and proxy scheme. The adjustments have been made because of the different set up of the EBN organisation as of 1 September 2017.
- An amendment to the Treasury Statute of EBN has been approved by the Supervisory Board.
- The Supervisory Board approved the work programme and budget of EBN and EBN Capital for 2018, including the financing plan.
- EBN asks the Supervisory Board for approval for investment proposals of which the EBN share is EUR 50 million or more. EBN requested this

approval in 2017 for two investment proposals; the Supervisory Board approved both proposals.

In paragraph 1.8.4 the approvals and decisions are mentioned as a result of the implementation of the corporate governance code.

### **6.6 Cooperation between EBN and the Ministry of Economic Affairs and Climate Policy**

EBN and the Ministry of Economic Affairs and Climate Policy have consultations with each other on a regular basis. A distinction is made between subjects that concern the shareholding and policy energy issues. EBN informs the Supervisory Board about both contacts.

In 2017, the chairman of the Supervisory Board and the chairman of the team of directors held a strategic meeting with the director-general of Energy, Telecom and Competition, and other Ministry employees at the Ministry of Economic Affairs and Climate Policy. The strategic discussions focused on exchanging and aligning information about strategic issues and developments in the field of energy policy in general. The (policy) goals and priorities of the Ministry and EBN for the coming year were also discussed at this meeting. The ministry explained the coalition agreement and its consequences for EBN's activities.

The Supervisory Board attaches great value to a good relationship with the Ministry, and the visits to the Ministry are important to maintaining a good relationship.

### **6.7 Strategy of EBN**

In 2016, the Supervisory Board approved an amended EBN strategy. Components of EBN's strategy are discussed at every meeting of the Supervisory Board. For example, in 2017 the Supervisory Board took note of developments in the area of geothermal energy at every meeting. The subject geothermal energy is discussed in section 1.8.3 and for the subject of strategy the Supervisory Board refers to page 21.

### **6.8 Issues discussed 2017**

On the basis of quarterly reports, the Executive Board informed the Supervisory Board about the relevant developments within EBN. These quarterly reports are distributed in advance of the quarterly meetings. In these meetings, the Supervisory Board pays attention to at least social developments, the production of gas, oil and condensate in the relevant quarter, the recent price developments and the development of the turnover and net profits. In its quarterly reports, EBN also gives an overview of investment levels. The quarterly reports also deal with the developments in EBN's joint ventures.

### 6.8.1 Earthquakes in Groningen

At all meetings in 2017, the Supervisory Board was informed of the developments in Groningen, including recent quakes, the number of damage reports and their handling, the reinforcement task and the changes in the claims handling process (NAM at a distance). EBN has informed the Supervisory Board about the most important legal proceedings against NAM, such as the proceedings in which the parties are claiming compensation for (immaterial) damage and the depreciation of homes due to earthquakes in Groningen. The decision of the Council of State of 17 November 2017 about the consent decision and the minister's amended decision on the maximum permitted production from Groningen was also discussed. Finally, the Supervisory Board is involved in the interpretation by EBN of its positions on the boards of the Gasgebouw.

### 6.8.2 Decommissioning and reuse

At several meetings, EBN informed the Supervisory Board about the removal of infrastructure and the system under development in which licence holders will furnish financial collateral on the basis of model agreements due to the clean-up obligations in the existing production licences. The formation of the Nexstep association as a national platform for decommissioning and reuse has also been discussed with

the Supervisory Board. The Supervisory Board refers to page 43 of the annual report for further information on this matter.

### 6.8.3 Geothermal energy

The topic of geothermal energy has been discussed at all Supervisory Board meetings. Among other things, the green deals UDG and Brabant in which EBN participates, the possible role of EBN in the development of geothermal energy as a source of energy, the technical and financial aspects of geothermal projects, and the risks and social aspects of these projects were discussed. The Supervisory Board has taken note of the State Supervision of Mines Report on the state of the sector. In September, the Supervisory Board paid a working visit to a geothermal project of ECW at Agriport A7, a site for large-scale greenhouse horticulture. The Supervisory Board also became acquainted with DAGO during this visit.

The Ministry of Economic Affairs and Climate Policy has initiated exploration into a possible role for EBN in the acceleration of the development of geothermal energy as a sustainable energy source. EBN and the Ministry of Economic Affairs and Climate Policy organised a number of workshops. The Supervisory Board refers to page 46 of the annual report for further information about geothermal energy.

### 6.8.4 Miscellaneous/corporate governance code 2016

The implementation of the 2016 corporate governance code led to the following actions for the Supervisory Board:

- The regulations of the Supervisory Board were amended in 2017 to bring the provisions into line with the 2016 Corporate Governance Code.
- The Supervisory Board has approved an amended version of the management regulations. The management regulations have been amended to bring the provisions into line with the 2016 corporate governance code and because of the different composition of the team of directors as of 1 September 2017.
- In consultation with EBN's team of directors, the Supervisory Board has established a diversity policy for the Supervisory Board itself and for the team of directors. See the corporate governance section (p. 74) for further explanation.
- The Supervisory Board has taken note of the new core values of EBN (see p. 55 for further explanation).
- The Board discussed the ancillary positions of the Supervisory Board and the team of directors (see p. 160 for the current ancillary positions).
- On the positive advice of the audit committee, the Supervisory Board approved EBN's appointment of the internal audit manager.



### **6.9 Evaluation of the Executive Board and self-evaluation**

The Supervisory Board evaluated its own performance, the performance of the individual committees of the Supervisory Board and that of the individual members of the Supervisory Board, as well as the performance of the Executive Board, in the absence of the team of directors. This evaluation took place on the basis of individual questionnaires; the HR manager provided the feedback on the basis of the individual lists. Based on this, the conclusions related to the evaluation were discussed. The Executive Board was also present

during the discussion of the conclusions, since the evaluation also concerned cooperation between the Executive Board and the Supervisory Board. The conclusions of the evaluation were discussed in the Supervisory Board; the differences and similarities between the members of the Supervisory Board in answering various topics were discussed. A number of concrete points for improvement have also been identified (of various kinds) with which the Supervisory Board has immediately started.

### **6.10 Meetings of the Audit Committee**

The tasks and methods of the Audit Committee are set out in the Supervisory Board's regulations for the Audit Committee. The Audit Committee's tasks include supervising, auditing and advising the Executive Board on the functioning of internal risk management and control systems and supervising the company's disclosure. The Audit Committee met twice in 2017. In addition to the members of the audit committee, the team of directors, the controller and the secretary attended these meetings from EBN's side. The external auditor attended both meetings.



In the first meeting, the Audit Committee reviewed, amongst other issues, the annual report, the financial statements and the auditor's report for 2016. The auditor's report was discussed at length with the external auditor. After discussing the financial statements and the annual report, the Audit Committee advised the Supervisory Board to adopt the annual report for 2016. In addition, the internal audit plan for 2017 (including the findings of the internal audits carried out in 2016) was discussed. Suggestions from the audit committee were processed in the final internal audit plan. In 2016, the following audits were performed: new sales and balancing agreements, cash management and legal risk reporting. The audit committee was informed of the results of the audits carried out, the most important findings and recommendations, and the follow-up of the audits.

At the second meeting of 2017, the audit committee paid attention to the following topics: the performance of the external auditor including the execution of the joint venture audits by the external auditor, the return requirements of EBN for its activities and the post investment review. For determining the economic value of investment projects, EBN uses a return requirement that is based on the WACC (weighted average cost of capital). The WACC is determined annually and the result thereof is discussed with the Audit Committee.

During this meeting, EBN's half-year report was discussed in the presence of the external auditor. The external auditor provided an explanation of the assessment report and the accompanying review. The audit committee issued a positive opinion on EBN's key figures for the first half of 2017. This positive advice was adopted by the Supervisory Board.

The external auditor, PwC, also explained the 2017 audit plan at this meeting (the audit plan for the audit of EBN's financial statements for the 2017 financial year). PwC discussed the draft audit plan with the team of directors before the audit plan was submitted to the audit committee. PwC discussed the audit plan with the audit committee, paying particular attention to the scope, the materiality of the audit plan, the auditor's fee and the main risks of the annual reporting that the external auditor has named in the audit plan. The Audit Committee proposed to the Supervisory Board that the audit of the financial statements be established in accordance with the audit plan. The Supervisory Board gave this assignment in accordance with the proposal of the audit committee.

#### **PwC as accountant**

In 2015, the general meeting of shareholders engaged PricewaterhouseCoopers Accountants N.V. to perform the audit of the financial statements of EBN for

the financial years 2016–2018 with an extension possibility for the duration of one year. PwC's work started in 2016.

#### **EBN's credit rating**

In 2017, EBN informed the Supervisory Board about the credit rating of EBN by Moody's and Standard & Poor's. Per 6 July 2017, Moody's set EBN's credit rating at Aaa/P-1 (with the prospect of 'stable'). Per 14 June 2017, Standard & Poor's maintained EBN's credit rating at AA/A-1+ (with the prospect of 'negative').

#### **Declaration of the Executive Board**

The Supervisory Board asked the Executive Board to provide the Supervisory Board with a declaration for 2017 to support the usual reports to the Executive Board. The Executive Board issued that declaration, which serves to support provision 1.4.3 of the Corporate Governance Code. In accordance with this provision, the Supervisory Board discussed the following issues with the Executive Board: the company's strategy and primary risks and the results of the Executive Board's evaluation of the structure and functioning of the internal risk management and control systems. This issue is discussed in more detail in the section Corporate Governance and Risk Management.

### **6.11 Meetings of the remuneration committee/ selection and appointment committee**

The duties and working methods of the remuneration committee are laid down in the 'Regulations of the Remuneration Committee' and the duties and working methods of the selection and appointment committee are laid down in the 'Regulations of the Selection and Appointment Committee of the Supervisory Board'. The duties of these committees include, among other things, making a proposal to the Supervisory Board for the remuneration of the director, drawing up selection criteria and appointment procedures for the director and supervisory directors and the periodic evaluation of the performance of the director and Supervisory Board members. The meetings of these committees are combined and are then designated as meetings of the remuneration committee.

The remuneration committee met four times in 2017 in the presence of the Executive Board, the secretary and the HR manager. In 2017, the committee engaged in determining the objectives to be achieved for EBN and for the team of directors for 2017, the realisation of the objectives over 2016 for EBN and the team of directors, updating the distribution of tasks of the team of directors and the recruitment and selection of a new supervisory director. EBN's organisational

change as of 1 September 2017, including the structure of the themes, consultation with the works council and the selection of the programme managers, has been discussed several times.

The General Meeting of Shareholders adopted the remuneration policy for the Executive Board simultaneously with the appointment of Mr Van Hoogstraten per 1 March 2016. The remuneration report further discusses the remuneration policy.

### **6.12 Financial Statements**

The Supervisory Board reviewed the annual report, the financial statements and the declaration and management letter from the auditor PwC. The Supervisory Board can accept these and recommends that the General Meeting of Shareholders should adopt the financial statements accordingly. The Supervisory Board advises the General Meeting of Shareholders to discharge the Executive Board of responsibility in respect of the policy it has implemented and the Supervisory Board of responsibility in respect of its supervision.

Supervisory Board, Utrecht, 14 March 2018

Mr H.M.C.M. van Oorschot (chairman)

Mr J. Huijskes

Mrs E.M. Kneppers-Heijnert

Mr W.S. de Vries (from 1 March 2017)

Mr J.W. Weck

# 7. About this report

In this annual report over the 2017 financial year, EBN accounts for its financial and non-financial performance. The report is intended for all stakeholders that are directly or indirectly involved in our activities. In the 'Our Stakeholders' section on page 50, we discuss in more depth whom we consider among our stakeholders, and how we discuss relevant issues with them.

### Reporting policy

EBN reports annually on its financial performance in accordance with IFRS and on its social and sustainability performances in accordance with the applicable guidelines of the Global Reporting Initiative (GRI). This enables us to also offer the transparency our shareholder desires and we clarify our social role. To continue complying with the GRI guidelines, EBN bases its reporting since the 2014 report on the GRI G4 guidelines at the Core application level. We also use the Oil and Gas Sector Supplement.

The annual report is set up as an integral report, whereby we note that we are going through a development on this point. In the annual report for 2015, a value creation model was included for the first time, based on six capitals of the IR framework of the International Integrated Reporting Council. This model enables us to show the coherency of our strategy, risks, environmental factors, results and the resulting social impact. In the annual report for 2016 we have added an overview of the link between the trends that we identify in our environment, the opportunities and risks they offer and how we are responding to this with our strategy. Our ambition for the 2017 annual report is to take further steps to increase the structure and mutual cohesion of information.

To make the cohesion more transparent, a connectivity matrix has been added this year for example.

### Reporting process

The reporting process is structured as follows:

### Creation of executive board report

The process with regard to the non-financial part of the annual report was as follows. A kick-off meeting was held at the beginning of October 2017. EBN's annual report committee informed the Executive Board about the issue, the manner of publication and the timetable. A month later EBN employees involved were also informed about the timetable of the report, the required information and the issue. Subsequently,

Strategic review	Executive Board
Risk analysis	Departments
Materiality analysis	Internal and external stakeholders
Determination of material topics	Executive Board and employees
Determination of control framework	Executive Board
Check of validation process/data	Internal audit
Data collection	Topic owners/departments
Preparation of synopsis	Annual report committee
Static part of report	Annual report committee
Dynamic part of report	Annual report committee
Assurance	External auditor





data collection took place by means of an internal request. EBN employees involved were asked to provide information for the report. At the same time, the theme of the annual report was developed in the form of four interviews. In these interviews, four EBN employees talked to representatives from different organisations. This year the annual report comprises a static part (for which no year-end data is required) and a dynamic part (for which year-end data was needed). An internal survey took place for both the static and the dynamic part. The annual report was written by the annual report committee. The Executive Board and the shareholder were able to view the texts on several occasions and respond to them. Eventually, the static and dynamic parts of the

annual report were merged into one complete report. The sustainability information in the annual report has been reviewed by an external auditor; the assurance report is included in this annual report. The external auditor also audited the financial statements; the auditor's report is included in the other information in the financial statements. The annual report was also submitted to the Supervisory Board. Finally, the entire annual report was definitively adopted at the General Meeting of Shareholders.

#### **Materiality analysis**

The materiality principle is the key element in both the IR framework and the GRI guidelines. According to the IR framework, materiality has a broader

context than just the annual report; it is also about control of the organisation over issues that have an impact. Emphasis on the substantive issues according to the <IR> framework should improve internal and external decision-making. The GRI guidelines require an organisation to find out which (material) aspects it is most important to report on from a social point of view. For this process, GRI expressly requests that the reporting organisation consider where in the chain certain aspects occur and what influence it has on them. For EBN, this means looking at the materiality of aspects for our own organisation, but also at our role and influence with regard to operators, partners and customers.

In the business model on page 10, we provide a description of our core activities and our position in the energy chain. In the annex (155), based on a chart we show which stakeholders we are dealing with and on which material aspects EBN has a direct or indirect influence.

Since a significant part of EBN's operations is the financial participation in oil and gas activities and trading in hydrocarbons, the material aspects of these activities should be included in EBN's reporting. We do add that EBN is not the operating party in the oil and gas extraction; those are the oil and gas companies that we work with.

### **Materiality determination**

The annual materiality determination forms the basis for determining the content of our annual report. In our annual report we provide an explanation of the issues that we consider to be of material importance for the value chain within which we operate and issues that our stakeholders have indicated are of material interest to EBN. In 2016, we carried out an extensive materiality analysis. In 2017, a review of the materiality analysis took place. We have taken the following steps in which employees are explicitly involved:

#### **Step 1: Updating material issues**

In 2017, the material issues and their definitions were updated. It was investigated whether the description of the material issues was still adequate. It was also investigated whether issues were no longer relevant to EBN and whether there were issues that might be material for EBN. On the basis of this update, no material issues have lapsed and no new material issues have been added. However, the descriptions of the issues and their definitions have been tightened up based on an internal consultation among employees.

#### **Step 2: Ranking of the material issues**

We determined the importance of material issues for our stakeholders in 2016 using a stakeholder survey in which various stakeholder groups participated. In 2017, the priority of the material issues for our organisation was reassessed based on an internal review by means of a desktop analysis and discussions with our management. The internal and external scores are equally weighted in this analysis.

#### **Step 3: Drawing up a materiality matrix**

The materiality matrix was adjusted on the basis of this review. The results are shown on pages 27 and 28. The topics from this matrix form the basis of this integrated annual report.

The new materiality matrix has been submitted and approved by the management.

#### **Shifts 2017**

An internal ranking was made in 2017, as a result of which the material subjects were only shifted on the x-axis of the materiality matrix. Compared to 2016, material issues are more centred in 2017. The encouragement of efficient exploration and extraction of oil and gas and effective decommissioning and re-use remain important for our organisation, and show a high score. Other material issues show a shift compared to 2016. A big 'riser' is the development of new energy. This can largely be explained by the fact that EBN has started to focus more on this strategic priority. The steering and coordination of innovation has also increased compared to 2016. Innovation is of great importance to EBN and its partners within the oil and gas industry, partly because of the financial pressure on the industry. The issues of gaining and aggregating knowledge, and effective advice and influence have declined. This can partly be explained by the fact that in a number of cases EBN has no direct influence and can only use its influence indirectly (via third parties). Contributions to the energy transition have also decreased. An explanation for this is that this issue has been adjusted in relation to 2016 to make an active contribution to the discussion about

the energy transition to contribute to the energy transition. The connotation of the issue has changed. EBN may have less influence on the entire energy transition than on the discussion.

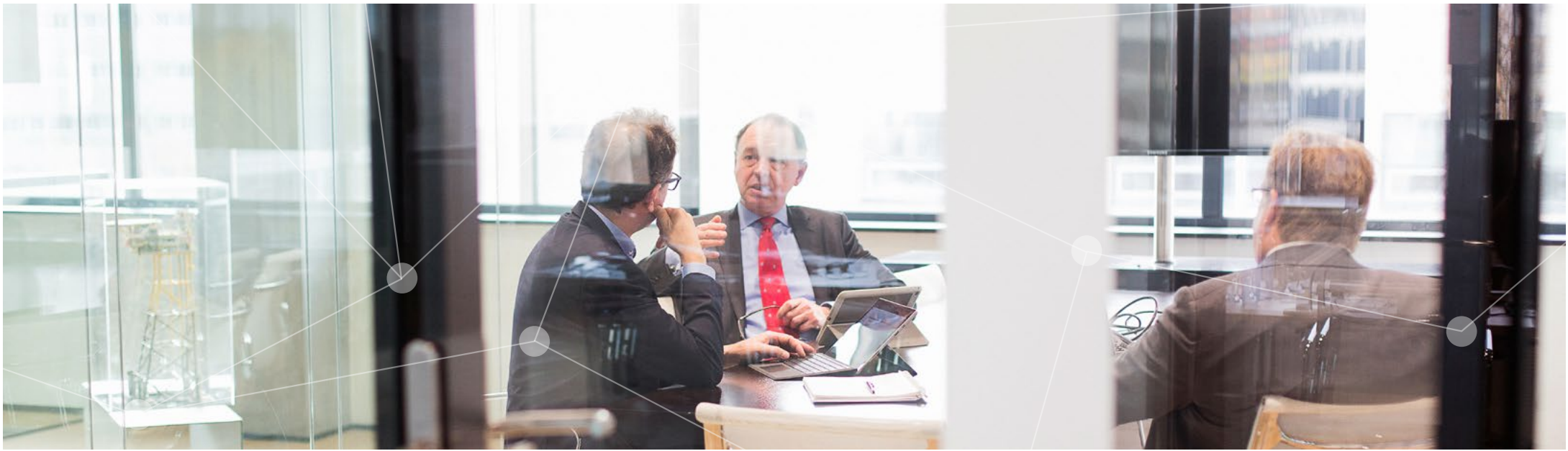
### Choice of issues

In this report in any case we address the issues that have high priority for stakeholders as well as for EBN. By 2016 we completely revised our materiality matrix to allow it to connect to the revised strategic priorities. This year a recalibration of the materiality matrix was carried out. No new topics have been selected for our matrix this year. The definition and formulation of various subjects has however been tightened up (see also table definitions material issues on page 96). The choice of subject for the annual report 2017 is described in the GRI-index in annex 9.5.

The materiality matrix also lists issues that relate to the activities of the operators and which EBN cannot or can only partially influence. We report on most social and environmental aspects in the separate publication 'EBN Sustainability Report'. We publish these on our website.

<b>Encouraging effective detection and extraction of oil and gas</b>	Encouraging effective detection and extraction of oil and gas (including optimisation of infrastructure) through deployment of NOV management and own investigations.
<b>Effective decommissioning and reuse</b>	Facilitating and encouraging effective reuse and decommissioning of existing oil and gas infrastructure, including through the development and implementation of a master plan.
<b>Collecting and bringing knowledge</b>	The active sharing of knowledge in partnerships and knowledge networks, among others through studies such as BOON, and Focus on Energy; the gathering of knowledge from chain partners through partnerships and knowledge networks.
<b>Effective advice and influence</b>	Encouraging employees to influence the operators (through NOV management), partners and other stakeholders through dialogue and advice.
<b>Guiding and coordinating innovation</b>	The smarter and more sustainable development of existing and new potential, by private research and by working with partners and research institutions.
<b>Sustainability in the value chain</b>	Working towards environmental impact of gas, including emissions and leaks.
<b>Development new energy</b>	Generating insights into opportunities and possibilities for the development of new energy and storage, such as geothermal energy, CAES, and CCS.
<b>Creation of economic value</b>	Optimising financial results, such as net income, natural gas income, sales, investment and depreciation.
<b>Attracting and developing talent</b>	Finding and hiring talented employees, offering them good development opportunities and inspiring them.
<b>Support for our work</b>	Working on support for our work. Propagating the social responsibility of EBN by, among other things environmental management, and projects within and outside the gas sector.
<b>Safeguarding (external) security</b>	Promoting a good safety culture, meaning safety risks such as earthquakes, spills and explosions are limited.
<b>Contributing to the energy transition</b>	Making a constructive contribution to the acceleration of the energy transition through the use of knowledge and expertise of the subsurface.





### **Transparency benchmark**

EBN participates annually in the transparency benchmark, a biannual study (from 2018) into the content and quality of social reporting. In 2017 (for the annual report 2016), EBN obtained a score of 185 points out of the possible 200. In 2019, EBN will again participate in the transparency benchmark for the 2018 report.

### **Tasks and responsibilities**

In 2016, we made a start on securing the responsibilities for G4 required aspects, indicators and objectives in our organisation. In 2017, we have given this further shape. The Executive Board bears the ultimate responsibility for all material aspects that impact the strategy and EBN's social policy. The Executive Board

has allocated the responsibility for the implementation of the policy and the data collection for each issue to various departments in 2016. This process has not yet been completed in 2017. After EBN's organisational change, the issues have to be reassigned. This process will therefore be continued in early 2018. EBN will also switch from GRI-G4 to the GRI Standards in 2018.

The report about EBN's non-financial performance will be developed further in 2018. We will classify the significant indicators that were selected with the materiality analysis under a number of themes. Subsequently, for each theme we will formulate relevant goals that will steer the various indicators, in part generically and in part specifically.

This all will result in a sustainability plan, which is prepared in close consultation with the industry. It remains our goal to create clarity with our partners about the interest of reporting in accordance with the GRI guidelines.

### **Scope**

EBN only has activities in the Netherlands. The (indirect) economic performances concern EBN and its share in participations. We account for this in the Results for 2017 section and in the Financial Statements. The social performance primarily concerns EBN. These performances are described in more detail in the section entitled 'The people of EBN'.



The environmental performances regarding emissions, energy consumption, waste, dumping and compliance mainly concern our oil and gas participations, (given the limited size of our organisation, EBN's environmental performance is not material); they are related to the performance of the entire industry active on Dutch soil. The individual environmental reports by the operators, formulated annually in the context of the Ministry of Economic Affairs and Climate Policy's 'Declaration of Intent, Execution of Environmental Policy Oil and Gas Producing Industry', constitute a guideline. The Dutch operators add the environmental and energy performances in the electronic Environmental Annual Report. These data form the basis for the performance, as presented in this report and the EBN Sustainability Report 2016-2017. This report is prepared annually by EBN. Operational performance indicators processed in this context are drawn up on EBN's instructions by the Netherlands Enterprise Agency (RVO).

#### **Frameworks, measuring methods and definitions**

All performances described follow specific frameworks. The relationship of certain indicators with the annual gas and oil production is evident and, for a number of indicators, the relationship with the number of drills is obvious. However, frameworks are also defined by laws and regulations. These frameworks are described

in further detail where relevant. The results provide an overview of EBN's share (unless otherwise specified) in the performances of the entire oil and gas production industry.

Dutch production of gas, oil and condensate comprises the fiscally reported gas, oil and condensate production figures reported by the operators. The injection and production volumes of gas in the gas storage facility are seen as internal company activities. The gas is fiscally reported the moment it is delivered to third parties.

The energy consumption of drilling activities is not included; the CO<sub>2</sub> and CH<sub>4</sub> emissions from drilling activities are.

EBN's share is calculated as EBN's percentage of the total gas, condensate and oil production in the Dutch gas, condensate and oil production in the environmental-technical and economic performances. For the social performances that specifically concern the activities of operators, the share of the entire industry (100 per cent) is presented, as it is irrelevant to mention EBN's share in these.

There were no changes to the measuring methods and definitions in the reporting year 2017. For more

information, we refer to the EBN Sustainability Report 2016/2017 that was published on our website in June 2017 ([www.ebn.nl/publicaties](http://www.ebn.nl/publicaties)).

#### **Disclaimer**

In this report, we report on efforts and achievements with regard to the objectives in 2017. We also present our plans and vision for the future. This future-oriented information is characterised by words such as continue, want, aim, predict, expect, target, objective, vision, planning, ambition, scenario, resolution and forecast. Inherent to future expectations is that the outcome is subject to risks and uncertainties and their achievement is therefore not assured.

#### **Assurance of non-financial information**

EBN has requested PwC to assess the sustainability information (in the Foreword, Key Figures, About EBN, Strategy and Results 2017 sections) and to issue an assurance report with a limited degree of certainty. You can find the assurance report on page 151.

#### **GRI-index**

You can find the GRI index in annex 9.5.

#### **Publication date annual report 2017**

EBN's annual report for 2017 is published on 6 April 2018.



# 8. Financial Statements

A decorative background consisting of several thin, light gray lines connecting five circular gray dots. The dots are positioned at various points across the page, creating a network of lines that frames the central text.

## General information

EBN B.V. (“EBN”) with its registered office and principal place of business in Utrecht (Chamber of Commerce 14026250), the Netherlands, was incorporated on 2 January 1973 in Maastricht. All shares in EBN are held by the Dutch State.

EBN focuses on the participation in oil and gas exploration and production activities in the Netherlands and the Dutch part of the continental shelf. In addition, EBN participates in underground gas storages and in transport and gas processing facilities.

The consolidated financial statements of EBN over the year 2017 are prepared and approved by the Executive Board according to its resolution of 13 March 2017. The financial statements were subsequently submitted to the Supervisory Board. Pursuant to Article 19.2 of the Articles of Association, the Supervisory Board also provides a preliminary recommendation to the shareholders.

The consolidated financial statements of EBN have been prepared in accordance with the International Financial Reporting Standards (IFRS) and interpretations of the International Financial Reporting Interpretations Committee (IFRIC) as applicable on 31 December 2017 and as endorsed by the European

Union and with Part 9, Book 2 of the Dutch Civil Code. EBN’s company profit and loss account is prepared in a simplified manner in accordance with article 402 Title 9 Book 2 of the Dutch Civil Code.

## Basis for consolidation

EBN’s figures and the figures of the entities it controls are included in the consolidated financial statements. EBN has control of a subsidiary if based on its involvement in the entity, it is exposed to, or entitled to, variable results and has the ability to influence those results on the basis of its control over the entity. The subsidiary’s financial statements are prepared based on the same principles as EBN’s. All transactions, balances, assets and liabilities within the group are eliminated on consolidation. The results of subsidiaries acquired or disposed of during the year are included in the consolidated statement of comprehensive income included as of the date of acquisition of control respectively the date of disposal, as appropriate.

EBN Capital B.V. (‘EBN Capital’) is the sole subsidiary of EBN.

## Joint arrangements

EBN conducts its activities through partnerships that are set out in contractual arrangements (agreements of cooperation or Joint Operating Agreements). EBN has assessed the control, voting rights, duties and obligations that arise from these agreements. The conclusion is that, except for NGT-Extension, EBN has joint control with one or more partners in the agreements and defines these as joint operations. Together with the other parties in the joint agreement, EBN is entitled to the assets and is liable for the debts relating to the agreements. EBN’s interest in the joint operations is recorded in the financial statements by including the assets, liabilities, income and expenditure for its share.

For the NGT-Extension joint venture EBN has no joint control within the meaning of IFRS 11, as a result of which its interest is recognised in accordance with IAS 28. Because facts and circumstances (including voting rights for decision making) lead to the conclusion that EBN exerts significant influence on NGT-Extension, NGT-Extension is processed and presented according to the equity method as associate.



The most important joint operations based on the carrying value of the tangible fixed assets at 31 December 2017 are as follows:

#### Associates

EBN has a 40% share in GasTerra B.V. ('GasTerra') based in Groningen and with main activity trading in natural gas.

In addition, EBN has a participation of 45% in NOGAT B.V. ('NOGAT') located in Zoetermeer and with main activity natural gas transport from the North Sea.

In accordance with IAS 28 the 12% stake of EBN in the NGT-Extension partnership is accounted for using the equity method and presented as associate. NGT-Extension is based in Zoetermeer and its main activity is the transport of natural gas from the North Sea.

#### Key accounting estimates and judgements

For the preparation of the financial statements estimates and judgements are made. These have consequences for the amounts reported for assets and liabilities, income and expenditure items and the related reporting of contingent assets and liabilities at the date of the financial statements. Results can be influenced by such estimates and judgements. The paragraphs below give an explanation of the matters that management considers most important and which, due to intrinsic uncertainties, are often the most difficult to estimate. In addition we refer to the section 'Impairment' which also includes information about assumptions and estimation uncertainties underlying the recoverable amount of a fixed asset.

Name	Interest	Operator	Operator's place of business
Groningen	40%	NAM	Assen
Norg	40%	NAM	Assen
Schoonebeek	40%	NAM	Assen
JDA Unit	40%	NAM	Assen
L05a	40%	Neptune	Zoetermeer
Bergermeer UGS	40%	TAQA	Alkmaar
Noord-Friesland	40%	NAM	Assen
K04b/K05a	50%	Total	The Hague
K04a	50%	Total	The Hague
A&B Unit	47%	Petrogas	Rijswijk
K18b	40%	Wintershall	Rijswijk
L09	50%	NAM	Assen
A18a	40%	Petrogas	Rijswijk
K05b	50%	Total	The Hague
L13	40%	NAM	Assen
Block M7	50%	ONE	Amsterdam

### *Decommissioning and restoration costs*

The provisions for restoration costs and the activation of restoration costs on the balance sheet is based on information from operators. EBN evaluates this information based on its own knowledge and experience and amends it where necessary. The ultimate decommissioning and restoration costs are uncertain and cost estimations can vary as a result of numerous factors, such as market prices, changes in legal requirements, new decommissioning techniques or experience. The anticipated timing and scope of the costs can change as a result of, for example, changes in gas and oil reserves and changes to legal and regulatory requirements and their interpretation. Significant estimates and judgements are made when establishing the provision for decommissioning and restoration costs. Substantial revisions of the provision can therefore influence future results. For more details on the course of this provision we refer to note 16.

### *Reserves*

The Unit of Production (UOP) depreciation is based on EBN's estimates of the gas and oil reserves and production profiles. EBN determines the gas and oil reserves in accordance with the definitions laid down by the Society of Petroleum Engineers (SPE), World Petroleum Council (WPC), American Association of

Petroleum Geologists (AAPG) and Society of Petroleum Evaluation Engineers (SPEE) in the Petroleum Resources Management System 2007 (PRMS) and the new guidelines from 2011. The reserves used for the depreciation are based on EBN's current estimations of proven and probable developed reserves (PRMS category 1) and the associated production profiles. Estimations of reserves are, by definition, inaccurate and based on interpretations that can, over time, change, on the basis of new information obtained from drilling new wells, reservoir production behaviour and changes in economic factors (such as price expectations). This can result in upward or downward revisions to the reserves. Changes in reserves have an effect on the future depreciation and the recoverable amount of production assets (see also notes to the principles of 'Tangible fixed assets').

### *Earthquake-related costs*

The provision for costs as a result of earthquakes in the province of Groningen is based on information from the operator, public information and EBN's information and insights. This provision relates mainly to damage repair as a result of earthquakes related to the production up to and including the balance sheet date, architectural reinforcements of buildings, strengthening the infrastructure, compensation measures and decline in value.

The assumptions used for the estimates for the provision are based on payments already made, experience, statistical information and calculation models, internal and external investigations and information from the operator. The ultimate amount of the costs depends among other things on the extent of the damage and advice, valuation by experts and/or bilateral agreements and can therefore differ from the current expected cost (see also note 16).

### *Recoverable value*

The calculation of the recoverable value of assets is partly based on estimates of reserves, production profiles, future selling prices, operating costs, exploration potential, expected future investments, expected future levies, earthquake-related expenditure and the discount rate. Future events can have an impact on these predictions and estimates, with the result that the estimates of recoverable values can change.

### **Summary of significant accounting policies**

The financial statements have been prepared in accordance with the historical cost convention, and on a 'going concern' basis, unless stated otherwise.

### **Conversion of foreign currencies**

The functional currency and presentation currency of EBN is the euro. Commercial transactions and

borrowings in foreign currencies are converted at the spot exchange rates as applicable on the transaction dates. Balance sheet items denominated in foreign currencies are converted at the spot exchange rates applying on the balance sheet date. Differences in exchange rates resulting from settlement of these transactions and conversion of balance sheet items are charged to the profit for the year.

#### **Distinction between current and long term assets and obligations**

An asset is classified as current if it is expected to be realised within 12 months after the balance sheet date. A liability or debt is classified as current if it will be settled within 12 months of the balance sheet date. If an unconditional right to postpone payment for at least 12 months exists then such debt is classified as long-term.

#### **Property, plant and equipment**

Property, plant and equipment are valued at the acquisition cost less depreciation and any impairment losses. Replacement investments are capitalised in accordance with the IAS 16 general capitalisation criteria.

The estimated costs for decommissioning, decommissioning and removal of platforms and other installations

are capitalised as part of the purchase value of the tangible asset in question.

Property, plant and equipment is no longer included in the balance sheet when it is disposed of or when no future economic benefits are expected from its further use, or in case the licence is relinquished or sold. Any profit or loss ensuing from the asset that is no longer included in the balance sheet is incorporated into the result.

#### ***Exploration and evaluation assets***

Expenditure for the following activities are capitalised as part of the exploration and evaluation assets under construction: acquisition of exploration licences, exploration drilling including test, sampling and activities in relation to evaluation of the technical and commercial possibility of extracting hydrocarbons. If it turns out that an exploration well is dry then costs incurred are charged to the consolidated statement of comprehensive income and disclosed under write-downs in the operating expenses (note 4).

The following costs are not capitalised: topographical, geological, geochemical and geophysical surveys (unless they are related to existing and proven reserves).

Exploration and evaluation costs that are on the balance sheet for more than 12 months are charged to the consolidated statement of comprehensive income (under write-down in note 4) unless:

- they are in an area where substantial investments are required before production can start, or
- commercially recoverable quantities have been found, or
- further exploration or evaluation activities take place, that is, additional exploration wells are drilled or firm plans to do so in the near future exist.

EBN regularly assess whether activation of the expenditure for exploration drilling still meets the criteria listed above and whether the drilling activities can continue. Exploration wells that have been on the balance sheet for more than 12 months are re-evaluated to determine whether any facts or circumstances have changed and whether the above criteria still apply.

Exploration and evaluation costs under construction and investments under construction are categorised as drilling or production, transport and storage facilities from the start of production or commissioning.

### ***'EBN's reimbursements'***

EBN reimbursements – 'farm in' costs in exploration licences – are capitalised and depreciated based on the Unit of Production (UOP) method.

### ***Depreciation***

Property, plant and equipment for gas and oil drilling are depreciated based on the Unit of Production method. This method is based on EBN's estimations of the proven developed reserves (PRMS category 1) and production profiles in accordance with the definitions laid down by the Society of Petroleum Engineers (SPE), World Petroleum Council (WPC), American Association of Petroleum Geologists (AAPG) and Society of Petroleum Evaluation Engineers (SPEE) in the Petroleum Resources Management System 2007 (PRMS) and its new 2011 guidelines.

The UOP rates for the financial year indicate the ratio between the production over the year and the proven and probably developed reserves (PRMS category 1) at the beginning of the year. These reserves are determined by increasing the reserves as established at the end of the financial year with the production for the year.

The other property, plant and equipment are depreciated over the estimated useful life on a straight-line

basis. Twenty years is taken as the initial basis for main transport pipelines and thirty years for facilities for underground storage of natural gas. A ten-year useful life applies to industrial buildings. Land is not depreciated.

The estimated remaining useful life of property, plant and equipment is reviewed each year based on the pattern of future use. If changes occur, the depreciation method is adjusted in order to reflect the adjusted useful life and the associated future usage pattern. The effect thereof is incorporated in the consolidated statement of comprehensive income of the current and/or future periods (prospective).

### ***Borrowing costs***

Financing costs of projects are capitalised. The interest rate used for the financial year is based on the average interest rate applicable to concurrent borrowings in the past financial year.

### ***Associates***

An associate is an interest in an entity on which EBN can exert significant influence, but over which it cannot exercise decisive control.

Associates are processed on the basis of the equity method. This means that EBN's share in an associate

is recognised as EBN's share in the net assets of this entity, less any impairment.

EBN's share in the profit or loss of an associate is included in the consolidated statement of comprehensive income. When EBN's share in the loss of an associate exceeds the carrying amount of that associate – including any other long-term receivables that are part of the net investment – the carrying amount is reduced to nil. No further losses are accounted for unless EBN has assumed responsibility for the associate through a guarantee or other commitments. Unrealised gains and losses on transactions with associate are eliminated in proportion to EBN's share in these associates.

### ***Impairment***

An assessment is made annually at balance sheet date as to whether the carrying amount of a non-current asset (property, plant and equipment or associates) exceeds its recoverable amount (higher of fair value less cost to sell and value in use). In that case, an analysis to identify possible impairment requirements is carried out.

When an asset does not generate sufficient independent cash flows, the recoverable amount (see also section 'Estimates and judgements') is determined for the



cash flow generating unit to which the asset belongs. In general, EBN's cash-generating unit is a sales contract. In addition, 'hubs' (main platform and satellites) can be used as a cash generating unit. For value in use, estimated future cash flows are discounted at a rate before taxes, based on the market interest rate plus a mark-up for the risks specific to the asset. EBN uses the WACC (Weighted Average Cost of Capital) for this calculation. This is 6% for midstream activities (2016: 6%) and 7% for exploration and production activities (2016: 8%), after tax. A discount rate before tax is also determined, on the basis of an iterative method.

When the recoverable amount of an asset is less than the carrying amount, the carrying amount is written down to the recoverable amount. Impairment can be reversed, either wholly or partially, in the event of a change in the estimate that is of significance for determining the recoverable amount. Impairment is presented as a separate item in the consolidated statement of comprehensive income.

For more detail about the assumptions, uncertainties in estimates and a sensitivity analysis with respect to impairment losses we refer to note 5.

### **Stock**

Underground gas stocks and supplies of materials are valued at the average purchase prices or lower net realisable value. The stock of above-ground condensate and oil is valued at the average purchase prices or lower net realisable value.

### **Receivables**

Receivables are recognised at amortised cost less any adjustment for bad and doubtful debts. On first recognition, receivables are presented at fair value.

### **Cash and cash equivalents**

Cash and cash equivalents are cash in hand, bank balances and short-term money market instruments which can be converted into cash at short notice, of which the amount is known and that bear no material risk of change in value.

### **Shareholder's equity**

EBN's equity consists of share capital, retained earnings and any dividend declared. The Dutch State is EBN's sole shareholder. Interim dividend payable to the shareholder is included as an obligation in the period over which it is due, in accordance with the EBN's Articles of Association. The exception to this is the proposed final dividend. That is only recognised as an obligation after adoption by the General Meeting of Shareholders.

### **Provisions**

Provisions are recognised in the balance sheet if the following conditions are satisfied:

- there is a legal or constructive obligation as a result of a past event, and
- it is likely that cash outflow will be required to settle the present obligation, and
- a reliable estimate of the amount of the obligation can be made.

If the effect of the time value of money is material, provisions are determined by calculating the present value of the forecast cash flows at a discount rate before tax.

Once the present value has been calculated, any increase in provisions as a result of the passing of time is presented as interest expense.

The provision for decommissioning and restoration costs is designed to cover the estimated costs of decommissioning, decommissioning and site recovery based on the current requirements, technology and cost estimates. The amount of this provision is based on information from the operator, and any changes in estimates will, after EBN has made its own assessment, result in a corresponding change in the capitalised decommissioning and restoration costs of the relevant property, plant and equipment.

The provision for ground subsidence is designed to cover certain additional liabilities arising during the production phase.

The provision for costs as a result of earthquakes in the province of Groningen is based on information from the operator, public information and EBN's information and insights. This provision relates mainly to damage repair as a result of earthquakes related to the production up to and including the balance sheet date, architectural reinforcements of buildings, strengthening the infrastructure, compensation measures and decline in value. The assumptions used for the estimates for the provision are based on payments already made, experience, statistical information and calculation models, internal and external investigations and information from the operator.

#### **Liabilities**

Loans are recorded at amortised cost price. On first recognition, such items are presented at fair value less costs. Borrowings in foreign currencies are converted at the exchange rates applicable on the balance sheet date. Interest expense is charged to the result in the period to which it pertains, using the effective interest rate method.

#### **Pensions**

The pension obligations of EBN are housed at the pension fund: Stichting Pensioenfonds ABP ('ABP').

In line with IFRS this arrangement can be classified as a defined contribution plan for multiple employers. This is because the pension fund is not able to break down the share of EBN in the underlying pension obligation, plan assets and cost of the scheme in a consistent and reliable manner.

The pension premium owed is a percentage of the premium base. The premium base is the pensionable income minus a franchise. The premiums are determined by ABP in accordance with the relevant applicable regulations in the way as described in the Actuarial and Operating Memorandum ("ABTN") and at a cost-covering level.

If ABP has a coverage ratio policy lower than 128%, then there is a shortage. In this case, ABP must prepare and submit a recovery plan to the supervisor (De Nederlandse Bank). This recovery plan must show that the financial position will improve within a maximum of 12 years with the coverage level back above 128%. Any adjustment of pension premiums (surcharge) as a result of this recovery plan is applied prospectively and within a certain bandwidth.

The coverage of ABP as at 31 December 2017 was 104.4% (2016: 91.7%).

#### **Contingent assets and liabilities**

Contingent assets and liabilities are not included in the balance sheet.

#### **Sales**

Sales from the sale of gas, oil and condensate is recognised at time of delivery. That is the time when ownership and the risks associated with the delivered goods pass to the customer.

Revenues from oil and gas production generated from assets in which EBN participates with other producers are accounted for in proportion to EBN's relative interest in these assets.

#### **Financial income and expenditure**

Interest income and expense are recorded based on the effective interest method. Interest expense also includes interest accrued on provisions.

#### **Share of profit from associates**

The share in the profit from associates is recognised as the share of the profit for the year under review corresponding with EBN's interest, after deduction of taxes.

## **Taxes**

Taxes is determined according to the 'balance sheet method'. Tax liabilities are specified in the consolidated statement of comprehensive income except if they relate to an item included in other comprehensive income.

Current tax expenses are taxes that are expected to be payable on the taxable profit for the year, based on the tax rates applying on the balance sheet date, net of any adjustments for taxes payable in respect of previous years.

Deferred tax assets and liabilities are recorded based on the expected tax consequences of temporary differences between the tax and the commercial carrying value of assets and liabilities relating to the ground subsidence and restoration costs. Deferred tax assets and liabilities are calculated on the basis of the tax rates that are applicable or materially determined on the balance sheet date, and in accordance with the tax regulations expected to apply when the specific deferred assets and liabilities are settled.

## **Financial derivatives**

Derivative financial instruments are recognised at fair value on initial recognition and then at the current fair value prevailing on each subsequent balance sheet

date. The current fair value is calculated with the appraisal model of Reuters, using yields from Reuters. Any resultant gains or losses are charged to comprehensive income.

For further information on the conclusion of the fair values see note 19 ('Fair value of financial instruments').

Derivatives which serve to hedge long-term instruments (and thus themselves are also long-term) are classified under the fixed financial assets or long-term liabilities.

## **International Financial Reporting Standards (IFRS)**

New and amended IFRS standards and IFRIC interpretations that came into force as of the financial year 2017 have been incorporated:

- Annual Improvements to IFRS – 2014–2016 cycle: Amendments to IFRS 12
- Amendments to IAS 12 Income Taxes – Recognition of Deferred Tax Assets for Unrealised Losses
- Amendments to IFRS 7 Statement of Cash Flows – Disclosure Initiative

The implementation of these standards has no significant effect on the financial statements. The following standards, amendments to standards

and interpretations that have not yet come into force or have not been endorsed by the European Union are not yet applied by EBN:

- IFRS 9 Financial Instruments
- IFRS 15 Revenue from Contracts with Customers
- IFRS 16 Leases
- IFRS 17 Insurance contracts
- Interpretation 22 Foreign currency Transactions and advance Consideration
- Amendments to IFRS 2 – Classification and Measurement of Share-based Payments Transactions
- Amendments to IFRS 4 – Applying IFRS 9 Financial Instruments with IFRS 4 Insurance Contracts
- Annual improvements 2014 – 2016 cycle
- Amendments to IAS 40 – Transfers of Investment Property
- Amendments to IFRS 10 and IAS 28 – Sale or contribution of assets between an investor and its associate or joint venture

## **IFRS 9 – Financial Instruments**

The new published accounting standard IFRS 9 must be applied as per 1 January 2018 and is not mandatory for the financial statements 2017. EBN has not early adopted this standard over the financial year 2017. IFRS 9 addresses the classification, measurement and derecognition of financial assets and financial liabilities, introduces a new impairment model for

financial assets and new rules for applying hedge accounting.

EBN will adopt IFRS 9 prospectively, with adjustments of estimated impact within equity. Based upon the assessment explained further, EBN concluded that the adjustments of estimated impact of adopting IFRS 9 will be limited.

EBN conducted an assessment of the impact and consequences of this new standard. The assessment is summarised as follows:

- Implementation of the new standard will not impact the classification of the financial assets and liabilities.
- EBN assessed the possible impact of the new impairment model for trade accounts receivable and other receivables. EBN will use a matrix for the calculation of a provision for these financial assets, whereas the historical realized credit losses will be used for the estimated expected credit losses on a portfolio basis.
- The new hedge accounting rules will not impact the financials, due to the fact that EBN not applies hedge accounting.

#### *IFRS 15 – Revenue from Contracts with Customers*

The new published standard IFRS 15 must be applied

as per 1 January 2018 and is not mandatory for the financial statements 2017. EBN has not early adopted this standard over the financial year 2017. IFRS 15 relates to the accounting and disclosures of revenue and replaces the standards IAS 18 and IAS 11 and related interpretations.

The standard offers a five steps model which must be applied by entities that enter into contracts to provide goods or services to their customers in the normal course of business:

1. Identify the contract(s) with the customer
2. Identify the performance obligation in the contract
3. Determine the transaction price
4. Allocate the transaction price to the performance obligations in the contracts
5. Recognise revenue when (or as) EBN satisfies a performance obligation

EBN conducted an assessment of the impact and consequences of this new standard. The assessment is summarised as follows.

EBN identified for the distinct revenues contracts, whereby EBN is the contracting party, with comparable features and assessed these contracts according to steps 2 up to and including step 5.

For its 'own' contracts, the transportation of natural gas is seen as inextricably linked to the supply of gas, as a result of which both obligations are treated as one performance obligation. Subsequent price corrections and settlement of more / less delivery can be considered as a variable component, but will not be accounted for differently according to IFRS 15 than in accordance with IAS 18. The transaction price includes transport costs (net) and the turnover will be disclosed net (not unlike under IAS 18). Delivery of natural gas is characterized by a transfer at specific moments, therefore the revenues from the sale of gas are recognized under IFRS 15 as well as IAS 18 at the time of delivery.

For contracts where EBN itself is not a contracting party but where the turnover is accounted for in accordance with the joint arrangements in line with IFRS 11, EBN has not carried out any impact analysis.

#### *IFRS 16 – Leases*

The new published standard IFRS 16 must be applied as per 1 January 2019. IFRS 16 relates to leases. EBN investigates the effects of this standard. On the basis of provisional outcome, EBN expects that IFRS 16 which applies to lease contracts in which the contracting party EBN itself is will have limited impact on future financial statements of EBN.



For contracts where EBN itself is not a contracting party but where the assets and liabilities are accounted for in accordance with the joint arrangements in line with IFRS 11, EBN has not carried out any impact analysis.

*Other standards*

Other standards, amendments to standards or new IFRIC interpretations do not apply to EBN or have limited consequences for the financial statements in future financial years.

## Consolidated statement of comprehensive income

in EUR million

	<i>note</i>	<b>2017</b>	<b>2016</b>
<b>sales</b>	2	<b>3,015</b>	<b>3,094</b>
levies	3	826	848
operational costs	4	962	982
impairments	5	35	299
depreciations	5	434	490
<b>operating expenses</b>		<b>2,257</b>	<b>2,619</b>
<b>operating profit</b>		<b>758</b>	<b>475</b>
financial income	6	121	24
financial expense	6	-183	-105
share of profit from associates	7	34	35
<b>pre-tax profit</b>		<b>730</b>	<b>429</b>
taxes	8	-174	-96
<b>net profit</b>	9	<b>556</b>	<b>333</b>
other comprehensive income		-	-
<b>total comprehensive income</b>		<b>556</b>	<b>333</b>

## Consolidated balance sheet

in EUR million

assets	note	year end 2017	year end 2016
<b>non-current assets</b>			
property, plant and equipment	10	2,841	3,292
associates	11	107	108
deferred tax asset	8	80	11
derivatives	19	88	188
		<b>3,116</b>	<b>3,599</b>
<b>current assets</b>			
inventories	12	29	27
receivables	13	383	422
tax receivables	13	16	-
derivatives	20	-	22
cash and cash equivalents	14	2,004	1,566
		<b>2,432</b>	<b>2,037</b>
<b>total</b>		<b>5,548</b>	<b>5,636</b>

liabilities	note	year end 2017	year end 2016
<b>shareholder's equity</b>	15		
share capital		128	128
retained earnings		89	50
		<b>217</b>	<b>178</b>
<b>provisions</b>			
provisions	16	3,284	3,238
		<b>3,284</b>	<b>3,238</b>
<b>non-current liabilities</b>			
borrowings	17	1,078	1,173
derivatives	19	6	-
		<b>1,084</b>	<b>1,173</b>
<b>current liabilities</b>			
borrowings	17	130	369
tax payable	13	-	54
trade accounts payable	18	67	67
other	18	766	557
		<b>963</b>	<b>1,047</b>
<b>total</b>		<b>5,548</b>	<b>5,636</b>

## Consolidated statement of changes in shareholder's equity

in EUR million

	shared capital	retained earnings	total equity
<b>balance at 1 January 2016</b>	<b>128</b>	<b>56</b>	<b>184</b>
net profit	-	333	333
other comprehensive income	-	-	-
total comprehensive income	-	333	333
final dividend 2015	-	-56	-56
interim dividend	-	-283	-283
<b>balance at 31 December 2016</b>	<b>128</b>	<b>50</b>	<b>178</b>
net profit	-	556	556
other comprehensive income	-	-	-
total comprehensive income	-	556	556
final dividend 2016	-	-20	-20
interim dividend	-	-497	-497
<b>balance at 31 December 2017</b>	<b>128</b>	<b>89</b>	<b>217</b>



## Consolidated statement of cash flows

in EUR million

	noot	2017	2016
<b>Operating activities</b>			
net profit from continuing activities	9	556	333
conversion to net cash:			
- income from participations	7	-34	-35
- depreciation and impairment	5	469	789
- write-off	10	54	64
- changes in capitalisation of decommissioning and storage costs	10	84	-
- changes in provisions (additions, revisions and interest accrued)	16	158	175
- changes in fair value CCIRS	19	106	26
- changes in fair value repaid borrowings		16	-
- revaluation repaid borrowings		5	-
- revaluation of borrowings	17	-95	15
- other financial income and expense		22	12
- taxes	8	174	96
- change in working capital			
		- inventories	6
		- receivables	-15
		- other liabilities (excluding loans, debts to credit institutions and profit distribution)	61
	18	180	
- withdrawal from provisions	16	-111	-111
- interest			
		- received	3
		- paid	-14
- taxes		-	69
		- received	
		- paid	-104
		-313	
		727	1,037
<b>Net cash from operating activities</b>		<b>1,283</b>	<b>1,370</b>
<b>Investing activities</b>			
property, plant and equipment	10	-156	-281
dividend received	11	35	36
<b>Net cash used in investing activities</b>		<b>-121</b>	<b>-245</b>
<b>Financing activities</b>			
profit distribution and dividend paid	13, 15,18	-486	397
repayment for stock dividend		-	-17
changes in debts to associates	17	-92	-
changes in debts to credit institutions	17	-146	-601
<b>Net cash from financing activities</b>		<b>-725</b>	<b>-221</b>
change in cash and cash equivalents		438	905
Balance cash and cash equivalents at 1 January	14	1,566	661
Balance cash and cash equivalents at 31 December	14	2,004	1,566

## Notes to the consolidated financial statements

### (1) General information

All amounts in these explanatory notes are in millions of euros unless otherwise stated.

### Notes to the consolidated statement of comprehensive income

#### (2) Sales

EBN exercises one main activity, namely the exploration and production of natural gas and oil. All sales are realised in the Netherlands. The assets in which EBN participates are also located in the Netherlands. Information on the main debtors can be found in note 22.

The 2017 revenue from business operations was EUR 3,015 million. Compared to 2016 this is a decrease of EUR 79 million (-3%). This decrease in revenue was mainly caused by higher prices (+13%) and lower production (-16%).

#### (3) Levies

Levies amounted to EUR 826 million (2016: EUR 848 million) 3% less than in 2016. This item mainly comprises the special payments made to the Dutch State in respect of production from the Groningen

field in 2017, i.e. the MOR (yield increase regulations) payments, amounting to EUR 802 million and the State's share of EUR 17 million. The decrease in payments in 2017 resulted from lower prices applicable for Groningen.

#### (4) Operational costs

in EUR million	2017	2016
G&G costs	16	15
write-downs (unsuccessful wells)	54	64
earthquakes-related costs	349	173
production, transport and other operational costs	543	730
<b>total</b>	<b>962</b>	<b>982</b>

Geological and geophysical (G & G) costs comprise the costs of geological, geochemical and geophysical surveys (including seismic studies).

The earthquakes-related costs of EUR 349 million (2016: EUR 173 million) include actual costs and additions to the provision related to earthquakes in the province of Groningen.

Total salary costs as presented under operational costs are as follows:

in EUR million	2017	2016
gross salaries	8	8
social securities	1	1
pension costs	1	1
other operational costs	1	1
<b>total</b>	<b>11</b>	<b>11</b>

The average number of FTEs in 2017 was 77.7 (2016: 74.8)

#### (5) Impairments and depreciation

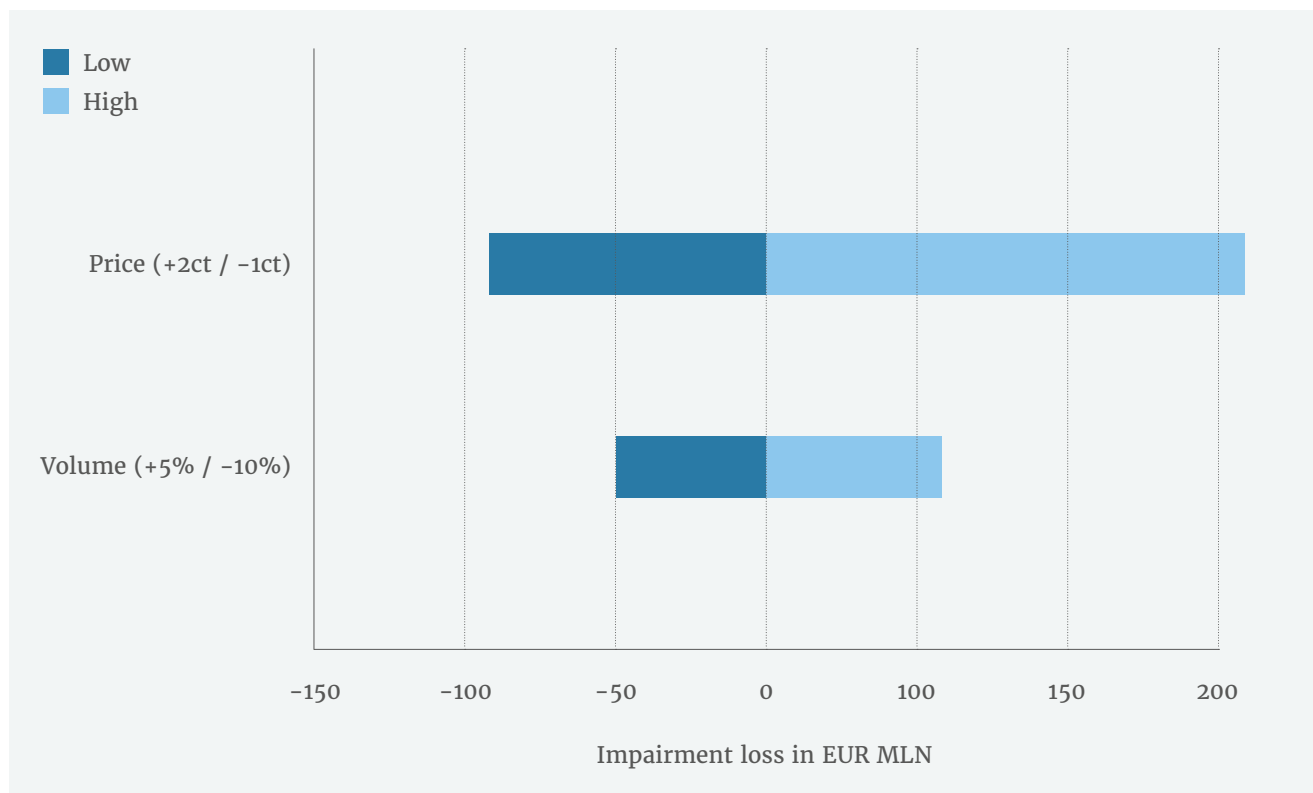
Because of the low gas and oil prices EBN has performed analyses to identify a possible impairment of some of its upstream and midstream assets. The recoverable amount is determined for the cash flow generating unit to which the asset belongs. In the case of EBN a cash flow generating unit in general corresponds to a sales contract. In addition, 'hubs' (main platform and satellites) can be used as a cash generating unit. The recoverable amount is based on the highest of the direct and indirect net realisable value.

Future cash flows are estimated on the basis of the most recent budgets and ditto price scenarios. For periods beyond the available projections, cash flows are extrapolated based on inflation.

For the indirect income method, the estimated future cash flows are converted into cash at a discount rate before taxes, based on the WACC (Weighted Average Cost of Capital). This is 6% for midstream activities (2016: 6%) and 7% for exploration and production activities (2016: 8%), after tax. A discount rate before tax is determined on the basis of an iterative method.

For 7 upstream gas cash flow generating units the carrying value at 31 December 2017 (EUR 390 million) is written down to its recoverable amount (in total EUR 316 million). This makes the impairment EUR 74 million in 2017. In 2016, the impairment was EUR 299 million for 11 cash flow generating units in upstream oil, upstream gas and midstream.

For 2 upstream gas cash flow generating units that have been impaired in previous years, the carrying value at 31 December 2017 (EUR 369 million) is reversed to its recoverable amount (in total EUR 408 million). The reversal of impairment in 2017 amounts to EUR 39 million. The reversal is caused by sustainable cost reductions.



The graph above shows the sensitivity, i.e. the impairment charge in changes in assumptions that management considers important (price and volume).

The total impairments can be specified as follows:

in EUR million	2017	2016
impairments	74	299
reversals	-39	-
<b>total</b>	<b>35</b>	<b>299</b>

The depreciation can be specified as follows:

in EUR million	2017	2016
depreciation of property, plant and equipment	314	389
depreciation of property, plant and equipment due to decommissioning and restoration	120	101
<b>total</b>	<b>434</b>	<b>490</b>

#### (6) Financial income and expense

in EUR mln	2017	2016
interest income on derivatives	16	19
revaluation income on derivatives	-	4
revaluation income on other financial instruments	101	-
other financial income	4	1
<b>total financial income</b>	<b>121</b>	<b>24</b>
interest on cash and cash equivalents	-4	-
interest expenses on borrowings	-16	-19
interest expenses on derivatives	-21	-26
revaluation expenses on derivatives	-112	-
revaluation expenses on other financial instruments	-	-14
interest expenses on discounted provisions	-26	-43
other financial expense	-4	-3
<b>total financial expense</b>	<b>-183</b>	<b>-105</b>
<b>nett financial expense</b>	<b>-62</b>	<b>-81</b>

The interest rate charges on derivatives were EUR 5 million lower than in 2016 due to repayments and lower interest rates.

The balance of the revaluations on derivatives and other financial instruments primary comprises the revaluation results on the non-current borrowings

and the directly related derivatives. In 2017, on balance, this is a negative result of EUR 11 million (2016: EUR 10 million negative), of which EUR 112 million revaluation expenses on derivatives and EUR 101 million revaluation expenses on other financial instruments. The balance of the result on the revaluation of loans and associated derivatives is specifically the result of developments in the yield curves of the CHF and JPY compared to the EUR.

#### (7) Share of profit from associates

in EUR million	2017	2016
GasTerra B.V.	14	14
NOGAT B.V.	15	15
NGT-Extension	5	6
<b>total</b>	<b>34</b>	<b>35</b>

#### (8) Taxes

in EUR million	2017	2016
current tax expenses current year	245	120
adjustment previous year	-2	-2
deferred tax expenses arising from temporary differences	-69	-22
<b>total</b>	<b>174</b>	<b>96</b>



The effective tax rate for 2017 amounts to 25.0% (2016: 24.4%). The decrease in the effective tax rate is the result of correction on the previous year. In 2017, the nominal corporation tax rate in the Netherlands was 25% (2016: 25%).

in EUR million	2017	2016
Total taxes	174	96
Pre-tax profit	730	429
Income from participations	-34	-35
	696	394
<b>total</b>	<b>25,0%</b>	<b>24,4%</b>

The balance of deferred tax assets and liabilities declined by EUR 69 million as a result of the following changes:

in EUR million	2017	2016
<b>balance at 1 January</b>		
deferred tax assets	131	149
deferred tax liabilities	-120	-193
<b>total</b>	<b>11</b>	<b>-44</b>
<b>movements as a result of:</b>		
- correction to the 2015 return (valuation of provisions)	-	33
- differences between commercial and fiscal valuation of property, plant and equipment 2017	63	73
- differences between commercial and fiscal valuation of provisions 2017	6	-51
<b>balance at 31 December</b>	<b>80</b>	<b>11</b>
<b>of which:</b>		
- deferred tax assets	137	131
- deferred tax liabilities	-57	-120
<b>movement in assets</b>	<b>6</b>	<b>-18</b>
<b>movement in liabilities</b>	<b>63</b>	<b>73</b>

Deferred tax assets and liabilities include future tax credits and liabilities arising from temporary differences between the amounts calculated in accordance with the commercial principles and those calculated in accordance with fiscal standards.

The deferred tax asset relates to the tax valuation of the provision and the deferred tax liability relates to the tax valuation of the property, plant and equipment.

#### (9) Net profit

A net result from continuing operations results in EUR 556 million in 2017. That is EUR 223 million (67%) higher than for 2016.

## Notes to the consolidated balance sheet

### (10) Property, plant and equipment

	total	production, transport and storage facilities	drilling	reimburse- ments	capitalisation of decommissioning and restoration costs	exploration and evaluation assets under construction	capital expenditure and wells under construction
<b>balance at 1 January 2016</b>							
cumulative cost	15,424	7,669	4,086	1,462	1,873	115	219
cumulative depreciations and amortisation	11,564	6,113	3,072	1,427	946	-	6
<b>carrying amount at 1 January 2016</b>	<b>3,860</b>	<b>1,556</b>	<b>1,014</b>	<b>35</b>	<b>927</b>	<b>115</b>	<b>213</b>
<b>changes in 2016:</b>							
<b>cost:</b>							
- investments	281	67	67	-	-	60	87
- commissioning	-	107	99	-	-	-17	-189
- capitalisation of decommissioning and storage costs	4	-	-	-	4	-	-
- write-downs	-64	-	-	-	-	-48	-16
<b>depreciation and impairments</b>							
- depreciations and amortisation	-490	-188	-192	-9	-101	-	-
- impairments	-299	-159	-131	-11	-4	-	6
<b>balance at 31 December 2016</b>							
cumulative cost	15,645	7,843	4,252	1,462	1,877	110	101
cumulative depreciations and impairments	12,353	6,460	3,395	1,447	1,051	-	-
<b>carrying amount at 31 December 2016</b>	<b>3,292</b>	<b>1,383</b>	<b>857</b>	<b>15</b>	<b>826</b>	<b>110</b>	<b>101</b>
<b>changes in 2017:</b>							
<b>cost:</b>							
- investments	156	31	30	-	-	40	55
- commissioning	-	34	83	-	-	-12	-105
- capitalisation of decommissioning and storage costs	-84	-	-	-	-84	-	-
- write-downs	-54	-	-	-	-	-52	-2
<b>depreciation and impairments</b>							
- depreciations and amortisation	-434	-155	-156	-3	-120	-	-
- impairments	-74	-20	-45	-	-9	-	-
- reversals	39	39	-	-	-	-	-
<b>balance at 31 December 2017</b>							
cumulative cost	15,663	7,908	4,365	1,462	1,793	86	49
cumulative depreciations and impairments	12,822	6,596	3,596	1,450	1,180	-	-
<b>carrying amount at 31 December 2017</b>	<b>2,841</b>	<b>1,312</b>	<b>769</b>	<b>12</b>	<b>613</b>	<b>86</b>	<b>49</b>

Investments in 2017 at EUR 156 million were 44% lower than in 2016 (EUR 281 million). Onshore investments amounted to EUR 25 million (2016: EUR 37 million). Offshore investments amounted to EUR 131 million (2016: EUR 244 million).

The decrease in the capitalised restoration cost of plants amounted to EUR 84 million in 2017 (2016: EUR 4 million increase). For further explanation, see note 16.

In 2017, an impairment loss was recorded of EUR 35 million (2016: EUR 299 million). For more details with regard to the impairment, see note 5.

The cumulative acquisition value of the assets that are already fully depreciated but still in use amounts to EUR 1,012 million (2016: EUR 1,118 million).

#### (11) Associates

EBN classifies as associates its 40% participation in GasTerra, its 45% participation in NOGAT and the 12% participation in the NGT-Extension.

The associates are recognised based on the equity method. The profits are distributed annually.

in EUR million	GasTerra	NOGAT	NGT-Extension	2017 total	GasTerra	NOGAT	NGT-Extension	2016 total
<b>balance at 1 January</b>	86	13	9	108	86	13	10	109
profit share	14	15	5	34	14	15	6	35
dividend received	-14	-15	-6	-35	-14	-15	-7	-36
change in deferred corporate tax assets	-	-	-	-	-	-	-	-
<b>balance at 31 December</b>	<b>86</b>	<b>13</b>	<b>8</b>	<b>107</b>	<b>86</b>	<b>13</b>	<b>9</b>	<b>108</b>

The following table shows summarised financial information on the GasTerra, NOGAT and NGT-Extension associates on a 100% basis.

in EUR million	GasTerra	NOGAT	NGT-Extension	2017 total	GasTerra	NOGAT	NGT-Extension	2016 total
assets								
current	1,789	38	-	1,827	1,976	39	-	2,015
non-current	13	49	65	127	19	49	75	143
liabilities								
current	1,586	35	-	1,621	1,779	37	-	1,816
non-current	-	24	-	24	-	23	-	-
net investments (100%)	216	28	65	309	216	28	75	342
EBN's share in associates	40.0%	45.0%	12.0%	-	40.0%	45.0%	12.0%	
carrying amount of the share in associates	86	13	8	107	86	13	9	108

in EUR million	GasTerra	NOGAT	NGT- Extension	2017 total	GasTerra	NOGAT	NGT- Extension	2016 total
net sales	9,601	47	63	9,711	9,865	44	75	9,984
net profit (100%)	36	33	40	109	36	32	50	118
other comprehensive income (100%)								
total comprehensive income	36	33	40	109	36	32	50	118
EBN's share in total comprehensive income	14	15	5	34	14	14	6	35

#### (12) Inventories

in EUR million	2017	2016
materials	24	23
gas	1	1
condensate and oil	4	3
<b>total</b>	<b>29</b>	<b>27</b>

#### (13) Receivables

in EUR million	2017	2016
accounts receivable from associates	105	112
other trade accounts receivable	267	299
<i>total trade accounts receivable</i>	<i>372</i>	<i>411</i>
other receivables and deferred items	11	11
<b>total</b>	<b>383</b>	<b>422</b>

Accounts receivable from associates refer to GasTerra, in which EBN has a 40% participation. The trade accounts receivable have dropped by EUR 32 million mainly due to lower volumes.

The tax receivables of EUR 16 million (2016: tax payable EUR 54 million) consists mainly of corporation income tax.

#### (14) Cash and cash equivalents

The cash and cash equivalents consist of bank balances EUR 306 million (2016: EUR 10 million), bank deposits EUR 880 million (2016: EUR 500 million), investments in money market funds EUR 249 million (2016: EUR 260 million) and commercial paper EUR 569 million (2016: EUR 796 million).

#### (15) Shareholder's equity

in EUR million	2017	2016
<b>balance at 1 January</b>	<b>178</b>	<b>184</b>
net profit	556	333
final dividend previous year	-20	-56
interim dividend	-497	-283
<b>balance at 31 December</b>	<b>217</b>	<b>178</b>

On the basis of article 20(2) of EBN's Articles of Association the net profit of EBN (after reduction by the statutory reserves and the interim dividend to the State) is made freely available to the General Meeting. After deduction of interim dividend of EUR 497 million the net profit is EUR 59 million. The General Meeting resolves to add an amount of EUR 59 million to the equity.

In 2017, the authorised, issued and paid up share capital amounted to EUR 128 million (2017: EUR 128 million) and comprised 284,750 shares (2016: 284,750 shares), each with a nominal value of EUR 450. The declared dividend for the previous year per share amounted to EUR 70 per share (2016: EUR 197).

No dividend will be paid out once the General Meeting of Shareholders has adopted the financial statements (2016: EUR 20 million).



The total result for 2017 was EUR 1,953 per share. That is an increase of 67% from 2016.

#### *(16) Provisions*

The provision for decommissioning and restoration costs covers obligations with a term depending on the useful life of the fields. The provision for ground subsidence also includes liabilities with a maturity depending on the life of the fields. The duration of the provision for costs as a result of earthquakes that take place up until balance sheet date depends on the speed of submitting the claims and settlement of submitted claims. The provision for earthquake-related costs is expected to have a maturity of 1 to 5 years.

The provision for decommissioning and restoration costs is based on information from the operators at 31 December 2017 and own analyses and is determined by estimating the costs on the basis of the current price level, taking into account an inflation of 1.4%, and discounting at a nominal interest rate of 1.081% (2016: 0.967%). The equivalent of the provision stated at the present value is recognised under property, plant and equipment and depreciated on the basis of the UOP method. Nominal interest is added to the provision at 0.967% (2016: 1.23%).

The provision for costs as a result of earthquakes in the province of Groningen is based on information from the operator, public information and EBN's information and insights. This provision relates mainly to damage repair as a result of earthquakes related to the production up to and including the balance sheet date, architectural reinforcements of buildings, strengthening the infrastructure, compensation measures and decline in value.

The provision for claims is built on the basis of the number of outstanding claims as at 31 December 2017 and an estimate of to be expected claims based upon historical information and internal models. The expected average payment amount is based on historical data.

The provision for preventive reinforcement has been built up on the basis of specific agreed arrangements that include an estimate for expected costs.

The provision for compensatory measures including decline in value, compensation for immaterial damage and lost living pleasure is based on the expected number of households entitled to the compensation. The estimate of the expected compensation amount is based on internal and / or external information.

Given the bandwidth of the various scenarios that could lead to a possible positive or negative effect on the amount to settle the liabilities, EBN has assessed that the provision disclosed in the financial statements is the most plausible and substantiated outcome on the basis of the currently available information.

The total of the provisions is increased by EUR 46 million. This is the balance of the following changes:

in EUR million	decommissioning	subsidence	earthquakes	other	total
<b>balance at 31 december 2015</b>	<b>2,679</b>	<b>106</b>	<b>388</b>	<b>1</b>	<b>3,174</b>
additions	9	7	106	58	180
withdrawals	-25	-	-68	-18	-111
revision	-6	-	-43	1	-48
interest	43	-	-	-	43
<b>balance at 31 december 2016</b>	<b>2,700</b>	<b>113</b>	<b>383</b>	<b>42</b>	<b>3,238</b>
additions	18	4	240	-	262
withdrawals	-37	-	-46	-28	-111
release	-	-	-	-12	-12
revision	-102	-	-17	-	-119
interest	26	-	-	-	26
<b>balance at 31 december 2017</b>	<b>2,605</b>	<b>117</b>	<b>560</b>	<b>2</b>	<b>3,284</b>

The revision in the provision for decommissioning and restoration of EUR 102 million is mainly caused by an adjustment of the discount rate and inflation. Additionally, the estimated costs for decommissioning and removing installations have been updated for the decrease in the estimated costs and new insight regarding cut off production dates.

The increase in the provision for earthquakes is related to additions for compensation of decline in value, immaterial damage and new claims based on new available information and insights.

*(17) Current and non-current borrowings*

In 2017 a private loan of JPY 10,000 million was repaid. No new debenture or private loans were issued. No security has been provided for the outstanding borrowings. Clauses are included in the agreements for the debenture and private loans that

restrict the security that can be demanded. EBN has a commercial paper programme of EUR 2,000 million. This is unchanged compared to 2016. At year-end 2017, no commercial paper is outstanding (neither at year-end 2016).

The cash loans concern deposits GasTerra has placed with EBN. This is based on a Deposit and Loan Facility Agreement which EBN and Nederlandse Aardolie Maatschappij (NAM) entered into with GasTerra in 2014. Under this agreement, GasTerra can propose to EBN and NAM (as joint parties) placing a deposit with EBN and NAM for a period from 3 days to 3 months. GasTerra can also request a loan from EBN and NAM (as joint parties) for a similar term under this agreement.

The collateral on derivatives concerns cash deposited by banks for the difference between the market value of the respective portfolio and the threshold as agreed per bank. This deposited collateral is interest bearing and is netted under cash and cash equivalents and will not be used for commercial purposes.

Agreements about the exchange of collateral are recorded in Credit Support Annexes (CSAs) as Annex to the International Swaps and Derivatives Association (ISDA) agreements with the respective banks.

in EUR million	2017			2016		
	total	non-current part	current part	total	non-current part	current part
debenture loans	1,078	1,078	-	1,173	1,173	-
private loans	-	-	-	81	-	81
total non-current borrowings	1,078	1,078	-	1,254	1,173	81
cash loans	108	-	108	200	-	200
collateral on derivatives	22	-	22	88	-	88
<b>total</b>	<b>1,208</b>	<b>1,078</b>	<b>130</b>	<b>1,542</b>	<b>1,173</b>	<b>369</b>

CSAs were concluded with all banks, except for one bank, and with one bank not all derivatives fall under the CSA.

On 18 August 2015, a committed revolving credit facility was agreed with three banks (ING Bank, BNP Paribas and Rabobank) for an initial period of five years. This facility offers EBN the possibility to make withdrawals up to EUR 400 million in credit for general business purposes. From the start, this facility was not used. The interest expense over any used part of the credit line depends on the relevant Euribor rate that applies for the respective credit period, increased with a margin. As compensation for the provision of this facility, the banks are owed an annual commitment fee over the outstanding and unused part of the facility. No security is provided to the banks for this facility, and no financial ratio covenants are included.

Clauses are recorded in the respective agreement that restrict the provision of security. In both 2016 and 2017, an option was used for renewal and the facility was extended by twice a year, until August 2022.

There are no further extension options.

#### *Non-current borrowings*

Non-current borrowings, including those borrowings with a due date within one year, are composed as follows:

in EUR million					2017	2016
JPY	10.000 million	1,775%	private loan	2007/2017	-	81
CHF	325 million	2,125%	debenture loan	2010/2020	278	303
CHF	125 million	2,125%	debenture loan	2010/2020	107	116
CHF	150 million	1,625%	debenture loan	2011/2023	128	140
CHF	235 million	0,625%	debenture loan	2012/2019	201	219
CHF	125 million	1,125%	debenture loan	2012/2024	107	116
CHF	175 million	0,500%	debenture loan	2014/2022	150	163
CHF	125 million	0,875%	debenture loan	2014/2026	107	116
					<b>1,078</b>	<b>1,254</b>

In addition to the repayment of the JPY 10.000 million private loan there is a difference in the amounts of outstanding non-current borrowings at the end of 2017 compared to 2016 because of exchange differences, which are incorporated in the consolidated statement of comprehensive income under financial income and expense (see note 6).

The principal sums of these borrowings and the associated interest expenses in foreign currency are fully converted to Euros via cross currency interest rate swaps. As a result, the rate effects on the non-current liabilities, such as those from the table appear, are neutralised. The average interest rate of all outstanding non-current borrowings per the end of the year, including the effects of the cross currency interest rate swaps, is 2.12% (2016: 1.98%). This increase is mainly due to the repayment of the JPY private loan and the derivative in 2017 with, on balance, a low variable EUR interest rate. All cross currency interest rate swaps have fixed interest rates, except those associated with the CHF 2014/2022 and CHF 2014/2026 loans. At year-end 2017, 25% (in 2016: 28%) of the financing through the outstanding cross currency interest rate swaps has variable interest rates.

The following table lists the outstanding debenture loans and private loans in order of their maturity.

in EUR million	2017	2016
within 1 year	-	81
within 1 to 2 years	201	-
within 2 to 3 years	385	219
within 3 to 4 years	-	419
within 4 to 5 years	150	-
after 5 years	342	535
<b>total</b>	<b>1,078</b>	<b>1,254</b>

More than 46% of the outstanding non-current borrowings have remaining terms to maturity of more than three years. Borrowings with a due date within one year are presented under current liabilities.

#### (18) Current liabilities

Trade accounts payable of EUR 67 million (2016: EUR 67 million) are joint interest billings of operators to be paid for in the month of December.

The other debts consist of:

in EUR million	2017	2016
payments to the State	314	283
interest payments	19	20
levies	352	181
other liabilities	81	73
<b>total</b>	<b>766</b>	<b>557</b>

The increase in the levies is due mainly to the outstanding MOR obligation.

#### Policy to control financial risks

##### (19) Risk management

###### General information

In addition to the strategic risks referred to on page 67 to 73, there are also financial risks. The main financial risks for EBN are liquidity and (re)financing risk, credit risk, interest rate risk, currency risk and market price risk. EBN's financial policy focuses on limiting the effects of currency and interest rate fluctuations on assets and liabilities. EBN uses financial derivatives to manage interest and currency risks, specifically those relating to the funding of its operations. The company does not take any speculative positions using financial derivatives.

#### *Liquidity and (re)financing risk*

Liquidity and (re)financing risk is the risk that EBN does not have, or cannot raise, sufficient financial resources to meet its financial obligations. The objective for EBN is that it will, under normal circumstances at all times, have at its disposal the required cash for operational processes.

The selection of the (duration of) cash management and financial instruments ensures that at all times sufficient immediately retrievable liquidity is present or can be made available to meet financial obligations.

High trust in EBN by the capital and money markets, and financial institutions, is crucial for optimal funding. Important tools for this are:

- optimal management of all financial stakeholders, and
- maintaining EBN's high level of creditworthiness in the long and short term, among others by a focused credit rating and dividend policy, and
- continuously monitoring and controlling financial credit ratios.

EBN has a commercial paper programme of EUR 2,000 million. EBN also has a committed revolving credit facility at reputable and creditworthy banks in the amount of EUR 400 million. This enables quick and

sufficient short-term funding where necessary.

For further information please see note 17.

In determining the duration of new long-term loans an endeavour is made to prevent the concentration of redemptions in a certain future year and so to spread the maturity profile.

The fact that the annual results are largely paid out to the shareholder, leads to an annual low numerical solvency ratio. However, there are significant and robust annual positive cash flows from operating activities, which are higher than the capital expenditures. Because of this, each year EBN generates a significant free cash flow, resulting in a solvency being considered excellent. The net debt is negative at both year-end 2016 and year-end 2017 and therefore represents a net receivable.

in EUR million	2017	2016
borrowings:		
non-current borrowings	1,078	1,173
current borrowings	130	369
<b>total borrowings</b>	<b>1,208</b>	<b>1,542</b>
cash and cash equivalents	-2,004	-1,566
financial derivatives	-82	-210
<b>net liabilities (A)</b>	<b>-878</b>	<b>-234</b>
shareholder's equity (B)	696	178
gearing ratio A/(A+B)*100%	0%	0%



The following table shows the expected annual contract-based cash flows from the repayments and interest payable on the borrowings and the associated derivatives:

In addition to the cash flows from borrowings and related derivatives there are cash flows from trade creditors and other current liabilities. These expire within one year.

in EUR million	Borrowing loans	Net interest loans & derivatives	2017 Payment at redemption	Cash flow derivatives	2017 Total cash out	2016 Total cash out
within 1 year	130	-21	-130	0	-151	-370
within 1 to 2 years	201	-21	-201	5	-217	-21
within 2 to 3 years	385	-17	-385	69	-333	-217
within 3 to 4 years	0	-7	0	0	-7	-333
within 4 to 5 years	150	-7	-150	5	-152	-7
after 5 years	342	-9	-342	10	-342	-493
<b>total</b>	<b>1,208</b>	<b>-81</b>	<b>-1,208</b>	<b>89</b>	<b>-1,201</b>	<b>-1,441</b>

in EUR million	Borrowing loans	Net interest loans & derivatives	2016 Payment at redemption	Cash flow derivatives	2016 Total cash out	2015 Total cash out
within 1 year	369	-21	-369	20	-370	-884
within 1 to 2 years	0	-21	-	-	-21	-81
within 2 to 3 years	219	-21	-219	23	-217	-21
within 3 to 4 years	419	-17	-419	103	-333	-217
within 4 to 5 years	0	-7	-	-	-7	-334
after 5 years	535	-16	-535	58	-493	-502
<b>total</b>	<b>1,542</b>	<b>-103</b>	<b>-1,542</b>	<b>204</b>	<b>-1,441</b>	<b>-2,039</b>

#### *Credit risk on financial instruments*

Credit risk is the risk for EBN that a counterparty does not fulfil its contractual financial obligations. As a result of cash management transactions credit risk at counterparties occurs. This can relate to bank balances, deposits, bonds (including commercial paper), money market funds and derivatives. By the sometimes high liquidity position and market values of derivatives too much of a concentration of funds at a too limited number of parties would mean a significant financial risk for EBN. The policy is therefore focused on reducing counterparty risk by only doing business with parties with a high credit rating to a level deemed acceptable in relation to the creditworthiness of the relevant counterparty.

The allowed limits per counterparty that apply to the total of balances on bank accounts, deposits and bonds (including commercial paper) plus the market value of derivatives minus associated collateral, depend on the credit rating of the counterparty. To be able to place funds in these instruments at least a P-1, A-1 and F1 short term rating from Moody's, Standard and Poor's and Fitch respectively and a minimum long-term rating of A2 from Moody's and A from Standard & Poor's and Fitch applies. In addition, there is the possibility, under additional conditions, to place funds at fully public companies that have a long

and short-term credit rating that is one level lower than the level shown above.

For money market funds a minimum credit rating of Aaa from Moody's and AAA from Standard & Poor's and Fitch applies and EBN's participation per money market fund is maximized to 5% of the fund.

If derivatives transactions are carried out in the context of long-term financing this is only done with a counterparty possessing a minimum of A2 Moody's or A Standard & Poor's and Fitch long term rating, with which EBN has entered into an 'International Swaps and Derivatives Association' (ISDA) agreement. New long-term derivatives are concluded with a Credit Support Annex (CSA). This is a contract in which it is agreed with the counterparty to deposit collateral if a derivatives position has a substantial value, to reduce the counterparty risk.

In 2017, as in 2016, there were no credit losses on financial instruments.

With the exception of one bank, Credit Support Annexes (CSAs) are entered into with all banks with which current derivatives are concluded.

In respect of cross currency interest rate swaps with a nominal value of EUR 779 million (CHF 960 million), CSAs have been agreed with the relevant counterparties. For that reason, at the end of 2017 on balance, there was EUR 22 million collateral placed at EBN by banks (at the end of 2016: EUR 88 million). The collateral on derivatives concerns cash deposited by banks in the amount of the difference between the market value of the respective portfolio and the threshold agreed in the CSA. This paid collateral largely bears interest and is netted under cash and cash equivalents and will not be used for commercial purposes. The corresponding liability is included in current liabilities as part of borrowings. The maximum credit risk on the outstanding derivatives as at year-end 2017 is EUR 60 million (EUR 82 million market value derivatives minus EUR 22 million collateral).

With the valuation of the derivatives, the credit risk on counter parties is taken into account in case of a positive market value and the credit risk of banks on EBN in case a negative market value. If the market value of the total of derivatives per counterparty is positive, then a Credit Valuation Adjustment (CVA) is included in the valuation; if it is negative then a Debt Valuation Adjustment (DVA) is included (IFRS 13.4.8 portfolio exception). These adjustments are based on Credit Default Swap (CDS) spreads associated with the

weighted average remaining term of the portfolio and the market value of the derivatives for each counterparty. Consequently, the valuation of the derivatives has decreased by EUR 0,6 million at the end of 2017 (the decrease in 2016 was: EUR 3,5 million).

#### *Credit risk on receivables*

The credit risk on receivables from sales is low. EBN mainly sells to counterparties with a high credit rating. 27% of the receivables are from GasTerra (long term credit rating Standard & Poor's AA +) and 69% of the receivables from NAM (Joint Venture Shell and Exxon Mobil). In 2016 this was 32% and 60% respectively. EBN monitors the creditworthiness of all customers on a periodic basis and applies credit limits per customer.

#### *Interest rate risk*

Interest rate risk is the risk of financial results or changes in the balance sheet caused by fluctuations of market interest rates. Next to achieving minimal net interest charges, the goal of EBN's interest rate risk policy is to limit interest rate risks arising from the company's funding. A maximum of 60% of the non-current borrowings and financial derivatives shall have a variable interest rate in accordance with internal guidelines. At year-end 2017, 25% (2016: 28%) of this non-current debt position was at a variable interest rate.

The following table shows the interest rate sensitivity of the financial instruments on the shareholders' equity and the result. The analysis of the sensitivity of borrowings and related financial derivatives to interest rate movements is based on a direct change of 1 percentage point in the interest rates compared to 31 December 2017. All other variables remain unchanged. A reduction of 1 percentage point in interest rates would result in an estimated decrease of EUR 19 million in net financing costs, based on the portfolio of financial instruments at 31 December 2017. An increase in interest rates by 1 percentage point would result in an estimated increase of net financing costs of EUR 18 million. The main reason for these effects is that a change in the fair value of derivatives as a result of a change in interest rate is charged directly to the consolidated statement of comprehensive income.

#### Currency risk

The currency risk is the risk of financial results or changes in the balance sheet caused by fluctuations in a currency rate on the foreign exchange market. EBN aims to eliminate or reduce these fluctuations.

The foreign currency risk management instruments include spot, forward exchange transactions and cross currency interest rate swaps.

2017 in EUR million	carrying amount	fair value	effect of the change in interest rate +1%	effect of the change in interest rate -1%
cash and cash equivalents	2,004	2,004	-	-
receivables	417	417	-	-
current borrowings	-130	-130	-	-
other current liabilities	-517	-517	-	-
non-current borrowings	-1,078	-1,136	-	-
cross currency swaps positive used for non-current borrowings	82	82	-18	19
cross currency swaps positive used for current borrowings	-	-	-	-
<b>total</b>	<b>778</b>	<b>720</b>	<b>-18</b>	<b>19</b>

2016 in EUR million	carrying amount	fair value	effect of the change in interest rate +1%	effect of the change in interest rate -1%
cash and cash equivalents	1,566	1,566	-	-
receivables	422	422	-	-
current borrowings	-369	-370	-	-
other current liabilities	-678	-678	-	-
non-current borrowings	-1,173	-1,259	-	-
cross currency swaps positive used for non-current borrowings	188	188	-26	28
cross currency swaps positive used for current borrowings	22	22	-1	1
<b>total</b>	<b>-22</b>	<b>-109</b>	<b>-27</b>	<b>29</b>

EBN fully hedges currency risks arising from sales and purchases at the time the trade receivables or trade liabilities arise. Expected transactions that have not yet taken place are not hedged. At year-end 2017, there was one outstanding USD trade receivable of USD 3,8 million, which was hedged by means of a forward exchange transaction (at year-end 2016, there were no outstanding trade receivables or liabilities in foreign currencies). In case of investments or funding in foreign currency, the currency risk is immediately hedged. In case of funding in foreign currency, both the currency risk on the principal and interest obligations are fully covered.

Currency risks on current borrowings in foreign currencies are hedged with forward exchange contracts. At year-end 2017 there were no forward exchange contracts relating to current borrowings issued in foreign currencies (year-end 2016: nil).

Currency risks on non-current borrowings in foreign currency are hedged with cross currency interest rate swaps (see note 17).

The sensitivity of the financial instruments to exchange rate fluctuations is shown on the shareholders' equity and the results. It is based on a 10% movement in all exchange rates in relation to the

2017 in EUR million	carrying amount	fair value	effect movement in exchange rate +10%	effect movement in exchange rate -10%
cash and cash equivalents	2,004	2,004	-	-
receivables	417	417	-	-
current borrowings	-130	-130	-	-
other current liabilities	-517	-517	-	-
non-current borrowings	-1,078	-1,136	-127	104
cross currency swaps positive used for non-current borrowings	82	82	127	-104
cross currency swaps positive used for current borrowings	-	-	-	-
<b>total</b>	<b>778</b>	<b>720</b>	<b>-</b>	<b>-</b>

2016 in EUR million	carrying amount	fair value	effect movement in exchange rate +10%	effect movement in exchange rate -10%
cash and cash equivalents	1,566	1,566	-	-
receivables	422	422	-	-
current borrowings	-369	-370	-9	7
other current liabilities	-678	-678	-	-
non-current borrowings	-1,173	-1,259	-141	115
cross currency swaps positive used for non-current borrowings	188	188	141	-115
cross currency swaps positive used for current borrowings	22	22	9	-7
<b>total</b>	<b>-22</b>	<b>-109</b>	<b>-</b>	<b>-</b>

euro compared to the levels at 31 December 2017, with all other variables remaining unchanged. A change of +10% means that the euro weakens in relation to the foreign currencies. A change of -10% means that the euro strengthens in relation to the foreign currencies.

#### *Fair value of financial instruments*

Derivatives which serve to hedge long-term instruments (and thus themselves are also long term) are classified under the fixed assets or long-term liabilities.

The table summarises the carrying amounts and estimated fair values of financial instruments.

Fair values of listed non-current borrowings are based on published rates (level 1 according to IFRS). The other fair values are calculated on the basis of available market information, including interest rate and exchange rate levels (level 2 according to IFRS). All financial assets and liabilities at fair values with changes in value recognised in comprehensive income of profit are classified at level 2. These valuation techniques are assessed annually. The valuation techniques were not adjusted in 2017.

The fair value of the non-current borrowings amounts to EUR 1,136 million as at 31 December 2017

in EUR mln	31 december 2017		31 december 2016	
	carrying amount	fair value	carrying amount	fair value
<b>assets</b>				
current receivables	417	417	422	422
non-current financial derivatives	88	88	188	188
current financial derivatives	-	-	22	22
cash and cash equivalents	2,004	2,004	1,566	1,566
<b>liabilities</b>				
listed non-current borrowings	1,078	1,136	1,173	1,259
other non-current borrowings	-	-	-	-
non-current financial derivatives	6	6	-	-
other current borrowings	130	130	369	370
other current liabilities	833	833	678	678

(2016: EUR 1,259 million). The valuation technique is in line with level 1 (as in 2016).

The carrying amount of the aforementioned non-current borrowings amounted to EUR 1,078 million (2016: EUR 1,173 million).

The non-current borrowings in foreign currency are recognized at 'mid-market' rates, as published by Reuters. The corresponding derivatives are recognized

at market value. As a result of this, fluctuations in market interest rates in foreign currencies in relation to each other can cause temporary unrealised results in the income statement.



Current receivables, cash and cash equivalents and current liabilities are recognized at their carrying amount. In view of the short term to maturity of these instruments, these amounts approximate their fair values.

The following table summarises the carrying amounts of financial derivatives, specified according to type and objective:

in EUR million	assets	liabilities	total
cross currency interest rate swaps	210	-	210
forward currency contracts	-	-	-
total financial derivatives in relation to borrowings	210	-	210
<b>Balance at 31 December 2016</b>	<b>210</b>	<b>-</b>	<b>210</b>
cross currency interest rate swaps	88	6	82
forward currency contracts	-	-	-
total financial derivatives in relation to borrowings	-	-	-
<b>Balance at 31 December 2017</b>	<b>88</b>	<b>6</b>	<b>82</b>

#### Market price risk

EBN has the policy not to hedge against the risk of fluctuations in oil and gas prices on the oil and gas markets. These market price fluctuations can significantly affect EBN's results. However, since these risks originate directly from the core activities of EBN they are not hedged.

#### Other notes

##### (20) Contingencies

As indicated in the summary of significant accounting policies EBN takes part in a multiple of joint operations. The basis for these joint operations is laid down in agreements of cooperation or Joint Operating Agreements, from which multi-year financial rights and obligations arise. The investment obligations at year-end 2017 amount to EUR 443 million and the majority of these obligations has a duration shorter than 1 year. At year-end 2016, the obligation amounted to 328 million.

Moreover, EBN's (in)direct share of proven and probable gas reserves of fields in which EBN participates at 31 December 2017 is 283 billion Nm<sup>3</sup> GE (2016: 301 billion Nm<sup>3</sup> GE).

As usual in the industry, including through the associated participation GasTerra, continuous renegotiations take place over the pricing of sales contracts. The results of these negotiations can have a significant positive or negative impact on EBN's results. It is not possible to make a reliable estimate of the outcomes of these renegotiations or related arbitration proceedings.

As a result of the earthquakes caused by gas production from Groningen, future obligations arose. These obligations primarily concern damage repair, preventive reinforcement of buildings and infrastructure, compensation measures to improve the safety and liveability of the earthquake area.

A provision is included on damage claims, a number of structural reinforcements of buildings and infrastructure, compensation measures, decline in value, compensation for immaterial damage and loss of living enjoyment (see note 16). The cost of the structural reinforcements of buildings and compensation measures cannot always be reliably estimated, a provision is thereby only included when concrete agreements are under negotiation or in the case of ongoing legal procedures where the chance that EBN is ordered to pay earthquake costs is greater than 50%. The total scope of the costs could therefore be higher.

Based on its participation in the Groningen licence, EBN will contribute 40% of these costs.

In addition, there is a rental obligation until 2026 for the business address of the company at Daalsesingel 1 in Utrecht of EUR 6,0 million (2016: EUR 6,7 million).

*(21) Notes on the statement of cash flows*

In the preparation of the cash flows statement the indirect method was applied with a comparison of opening balance sheet and closing balance sheet. Movements not resulting in an inflow or outflow of cash were subsequently eliminated. Information on movements in the statement of cash flows can largely be derived from the statements of movements in the relevant balance sheet items.

*(22) Related parties*

Gasterra and EBN are related parties. EBN has 65 (2016: 69) gas sales contracts with GasTerra. Of the net sales of EUR 3,015 million, EUR 1,083 million is realised through GasTerra (2016: EUR 3,094 million respectively. EUR 1,001 million). The receivables in 2017 include an amount of EUR 105 million (2016: EUR 112 million) for supplies to GasTerra.

Together with the Nederlandse Aardolie Maatschappij B.V. (NAM) EBN entered into a Deposit and Loan

Facility Agreement with GasTerra. Under this agreement, GasTerra can propose to EBN and NAM (as joint parties) placing a sum of money with EBN and NAM for a period of from 3 days to 3 months as a fixed term deposit. GasTerra can also request a loan from EBN and NAM (as joint parties) for a similar term under this agreement. For further information, please refer to note 17.

The State as a shareholder is classed as an associated party. All levies, corporation taxes and net profits are paid to the State. More information can be found in notes 3, 15 and 18 in these financial statements.

NOGAT and NGT-Extension as associates are classed as related parties. EBN pays transport costs to NOGAT and NGT-Extension in the framework of its joint operations. This happens in ordinary course of business and at market conditions.

*(23) Key management*

The total charge for remuneration, pensions and other salary costs of the key management (3 members of the management team, of which 1 is statutory director and 5 supervisory directors) amounted to EUR 1,0 million in 2017 (2016: EUR 1,0 million; 4 members of the management team and 5 supervisory directors). As from 31 August, one member of the management team resigned.

The total salary costs of the management team can be specified as follows:

in EUR	2017	2016
regular remunerations	892,770	975,661
pensions	59,607	53,292
<b>total</b>	<b>952,377</b>	<b>1,028,953</b>

Periodic remunerations as presented in the table above include compensations for the capping on the pension accrual.

The gross remuneration of the Supervisory Board (excluding VAT) can be specified as follows:

in EUR	2017	2016
Mr. H.M.C.M. van Oorschot	24,500	24,500
Drs. A.H.P. Gratama van Andel (until 30 March 2017)	7,582	22,263
Ir. J.G. Huijskes	20,000	20,000
Prof. Mr. E.M. Kneppers-Heijnert	20,000	20,000
Drs. W.S. de Vries (from 1 March 2017)	16,667	-
Mr. J.W. Weck	20,000	20,000
<b>total</b>	<b>108,749</b>	<b>106,763</b>

In 2017 there has been one change. Drs. W.S. de Vries has replaced Drs. A.H.P. Gratama van Andel as a supervisory director. In addition to their gross salary each supervisory director receives an expense allowance of EUR 2,400 per year.

*(24) Events after the balance sheet date*

On 8 January 2018, an earthquake with magnitude 3,4 on the Richter scale took place in Zeerijp. It is likely that this earthquake is the result of Groningen production before the balance sheet date. The expected financial consequences are therefore included in the determination of the provision for earthquake-related costs as at the balance sheet date.

Utrecht, 14 March 2018

*Executive Board*

Ir. J.W. van Hoogstraten

*Supervisory Board*

Mr. H.M.C.M. van Oorschot

Ir. J.G. Huijskes

Prof. Mr. E.M. Kneppers-Heijnert

Drs. W.S. de Vries (from 1 March 2017)

Mr. J.W. Weck

## Company profit and loss account

in EUR million

	<i>note</i>	<b>2017</b>	<b>2016</b>
<b>sales</b>	2	<b>2,971</b>	<b>3,042</b>
<b>operating expenses</b>			
levies	3	826	848
operational costs	4	936	955
impairments	5	35	299
depreciations	5	432	485
Total operating expenses		2,229	2,587
<b>operating profit</b>		<b>742</b>	<b>455</b>
financial income	6	124	28
financial expense	6	-182	-104
share of profit from associates	7	43	46
<b>pre-tax profit</b>		<b>727</b>	<b>425</b>
taxes	8	-171	-92
<b>total comprehensive income</b>	9	<b>556</b>	<b>333</b>

## Company balance sheet

in EUR million

assets	note	year end 2017	year end 2016
<b>non-current assets</b>			
property, plant and equipment	10	2,701	3,167
associates	A	317	395
deferred tax asset	8	75	6
		3,093	3,568
<b>current assets</b>			
inventories	12	28	26
receivables	13	383	420
tax receivables	13	20	-
derivatives	19	-	22
cash and cash equivalents	14	1,928	1,527
		2,359	1,995
<b>total</b>		<b>5,452</b>	<b>5,563</b>

assets	note	year end 2017	year end 2016
<b>non-current assets</b>	B, 15		
share capital		128	128
retained earnings		89	50
		217	178
<b>provisions</b>	16	3,218	3,188
<b>non-current liabilities</b>			
borrowings	17	1,078	1,173
other	18	6	-
		1,084	1,173
<b>current liabilities</b>			
borrowings	17	130	369
tax payable	13	-	54
trade accounts payable	18	67	68
other	18	736	533
		933	1,024
<b>total</b>		<b>5,452</b>	<b>5,563</b>



## Notes to the company financial statements

### General information

EBN's separate financial statements are prepared in accordance with the principles for financial reporting generally accepted in the Netherlands and the legal stipulations regarding the financial statements as defined in Part 9, Book 2 of the Dutch Civil Code.

For the determination of the basis for the valuation of assets and liabilities and determination of results of the separate financial statements the option provided for in article 2:362(8) of the Dutch Civil Code is used. The principles for the valuation of assets and liabilities and determining the result of the separate financial statements are therefore the same as those used in the consolidated financial statements. Participations where any significant influence is exerted on the commercial and financial policy are valued on the basis of the net asset value.

The consolidated financial statements are prepared in compliance with International Financial Reporting Standards ('IFRS') as adopted by the European Union (EU-IFRS) and with Part 9 of Book 2 of the Dutch Civil Code. For a description of the principles applied, please refer to pages 103 to 110. The separate profit and loss account has been formulated in accordance

### A) Financial fixed assets

Financial fixed assets comprise participating interests EUR 235 million and derivatives EUR 82 million. For details of derivatives please see note 19.

in EUR million	Group company	Associates	Loans	2017 total	Group company	Associates	Loans	2016 total
<b>balance at 1 January</b>	21	86	100	207	-11	86	102	177
changes	-	-	-	-	-	-	-2	-2
profit share	28	14	-	42	32	14	-	46
dividend paid	-	-14	-	-14	-	-14	-	-14
<b>balance at 31 December</b>	<b>49</b>	<b>86</b>	<b>100</b>	<b>235</b>	<b>21</b>	<b>86</b>	<b>100</b>	<b>207</b>

with the limitations permitted pursuant to article 2:402 of the Dutch Civil Code.

Participating interests are as shown in the above table.

The loans have been used for the investments in the Bergermeer gas storage.

### B) Shareholder's equity

The result after tax over 2017, after deduction of the interim special profit distribution, is included in the item retained earnings of shareholder's equity. For a further explanation of shareholder's equity we refer

to note 15 of the consolidated financial statements.

### Profit distribution proposal

The General Meeting has been proposed that the net profit as referred to in article 21.2 of EBN's Articles of Association is appropriated as follows: EUR 59 million is added to the shareholder's equity and for 2017 no dividend is proposed.

### Other notes

The financial fixed assets in the separate balance sheet include the valuation of the 100% participation EBN Capital B.V., which is consolidated in the consolidated financial statements. The differences in the other items between the consolidated and separate financial statements mainly concern the balance sheet positions of EBN Capital. The primary balance sheet positions within EBN Capital are property, plant and equipment (EUR 140 million) and the provision for decommissioning and restoration costs (EUR 66 million).

Given the minimal differences between the other balance sheet items included in the consolidated financial statements and the separate financial statements for further information, please refer to the explanatory notes to the consolidated financial statements. These are set out on page 115 to 134.

### Security

EBN has issued a liability statement for EBN Capital in compliance with Section 2:403 of the Dutch Civil Code.

### Fiscal unity

EBN forms a fiscal unity with EBN Capital for corporate income tax and value added tax. EBN and its subsidiary together are jointly and severally

responsible for the taxes payable by the fiscal unity. In the financial statements of EBN Capital B.V. the tax burden is calculated on the basis of the commercial result obtained by EBN Capital B.V. EBN B.V. settles this tax burden with EBN Capital B.V. via the current account.

### Events after the balance sheet date

For more information, please refer to note 24 of these financial statements.

### Fees paid to external auditors

The cost of external auditors, PricewaterhouseCoopers Accountants N.V., for 2017 were EUR 370,000 for statutory audit services (2016: EUR 370,000) and EUR 381,000 for other audit services (2016: EUR 396,000).

### Directors' remuneration

The remuneration of the directors of the company is as follows:

in EUR	2017	2016	
	J.W. van Hoogstraten	from 01 March 2016 J.W. van Hoogstraten	until 29 February 2016 A.J. Boekelman
regular remunerations	259,066	209,303	29,204
variable remunerations	37,587	30,800	27,706
pensions	16,256	13,323	2,220
<b>total</b>	<b>312,909</b>	<b>253,425</b>	<b>59,131</b>

In 2017 there are no payments to former directors who are no longer employed by EBN (2016: EUR 419,330).

By 2017 the remuneration to the Supervisory Board amounted to EUR 0,1 million (2016: EUR 0,1 million). See note 23 for further details about the remuneration of the individual supervisory directors.

Utrecht, 14 March 2018

*Executive Board*

J.W. van Hoogstraten

*Supervisory Board*

Mr. H.M.C.M. van Oorschot

Ir. J.G. Huijskes

Prof. Mr. E.M. Kneppers-Heijnert

Drs. W.S. de Vries (from 1 March 2017)

Mr. J.W. Weck

## **Other information**

### **Profit appropriation**

The profit appropriation takes place in accordance with the provisions laid down in article 20(2) of the Articles of Association of the Company and in accordance with current agreements with the shareholder.

To the shareholder:

- each year, once the financial statements have been adopted, a portion of the profit as final special distribution of profits, after deduction of provisional payments is paid out;
- the remainder of the net profit is made available to the shareholder.

# Independent auditor's report

To: the general meeting and supervisory board of EBN B.V.

## Report on the financial statements 2017

### Our opinion

In our opinion:

- EBN B.V.'s consolidated financial statements give a true and fair view of the financial position of the Group as at 31 December 2017 and of its result and cash flows for the year then ended in accordance with International Financial Reporting Standards as adopted by the European Union (EU-IFRS) and with Part 9 of Book 2 of the Dutch Civil Code;
- EBN B.V.'s company financial statements give a true and fair view of the financial position of the Company as at 31 December 2017 and of its result for the year then ended in accordance with Part 9 of Book 2 of the Dutch Civil Code.

### What we have audited

We have audited the accompanying financial statements 2017 of EBN B.V., Utrecht ('the Company'). The financial statements include the consolidated financial statements of EBN B.V. and its subsidiaries (together: 'the Group') and the company financial statements.

The consolidated financial statements comprise:

- the consolidated balance sheet as at 31 December 2017;

- the following statements for 2017: the consolidated statement of comprehensive income, changes in equity and cash flows; and
- the notes, comprising a summary of significant accounting policies and other explanatory information.

The company financial statements comprise:

- the company balance sheet as at 31 December 2017;
- the company profit and loss account for the year then ended;
- the notes, comprising a summary of the accounting policies and other explanatory information.

The financial reporting framework that has been applied in the preparation of the financial statements is EU-IFRS and the relevant provisions of Part 9 of Book 2 of the Dutch Civil Code for the consolidated financial statements and Part 9 of Book 2 of the Dutch Civil Code for the company financial statements.

### The basis for our opinion

We conducted our audit in accordance with Dutch law, including the Dutch Standards on Auditing. Our responsibilities under those standards are further described in the section 'Our responsibilities for the audit of the financial statements' of our report.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

### Independence

We are independent of EBN B.V. in accordance with the 'Wet toezicht accountantsorganisaties' (Wta, Audit firms supervision act), the 'Verordening inzake de onafhankelijkheid van accountants bij assurance-opdrachten' (ViO – Code of Ethics for Professional Accountants, a regulation with respect to independence) and other relevant independence requirements in the Netherlands. Furthermore, we have complied with the 'Verordening gedrags- en beroepsregels accountants' (VGBA – Code of Ethics for Professional Accountants, a regulation with respect to rules of professional conduct).

### Our audit approach

#### Overview and context

As stated on page 7 of the annual report is EBN B.V. a company that invests in the exploration, extraction and storage of gas and oil on behalf of the Dutch State. EBN is a partner in participation with various oil and gas companies. EBN's share in these joint arrangements is generally 40%, in some cases 50%, and comprises non-operates ventures (NOV's).

As partner EBN is involved in projects in which they invest, however the operator is responsible for the day to day operations. EBN's core activities are investing in and managing NOV's and the development and application of knowledge for these NOV's. EBN also has holdings in infrastructure: offshore pipeline systems and gas storage, as well as a 40% interest in Gasterra B.V. Via this gas wholesaler the gas production of EBN is sold.

EBN is dependent on the development of oil- and gas prices, as a result of which volatility in the annual results can occur. In addition, the results are impacted by impairments of property, plant and equipment and earthquake related expenses. These aspects have influenced the determination of our materiality as described in the section 'Materiality' of this audit opinion. The indicated items have also been subject to specific focus in our audit, reference is made to the section 'Key audit matters' of this audit opinion. The group comprises of two components, EBN B.V. and EBN Capital B.V., and therefore we considered our group audit scope and approach as set out in the scope of our group audit section.

As part of designing our audit, we determined materiality and assessed the risks of material misstatement in the financial statements. In particular, we

considered where the directors made important judgements; for example, in respect of significant accounting estimates that involved making assumptions and considering future events that are inherently uncertain. In paragraph 'key accounting estimates and judgements' of the financial statements the company describes the areas of judgment in applying accounting policies and the key sources of estimation uncertainty. Given the significant estimation uncertainty in the impairment assessment of assets and the determination of the provision for decommissioning and restoration and costs as a result of earthquakes, we considered these to be key audit matters as set out in the key audit matter section of this report.

As in all of our audits, we also addressed the risk of management override of internal controls, including evaluating whether there was evidence of bias by the directors that may represent a risk of material misstatement due to fraud.

The audit of a company operating in the energy industry with non-operated venture interests. We therefore included specialists in the areas of the oil & gas industry, treasury, IT and taxation in our team.



The outline of our audit approach was as follows:

**Materiality**

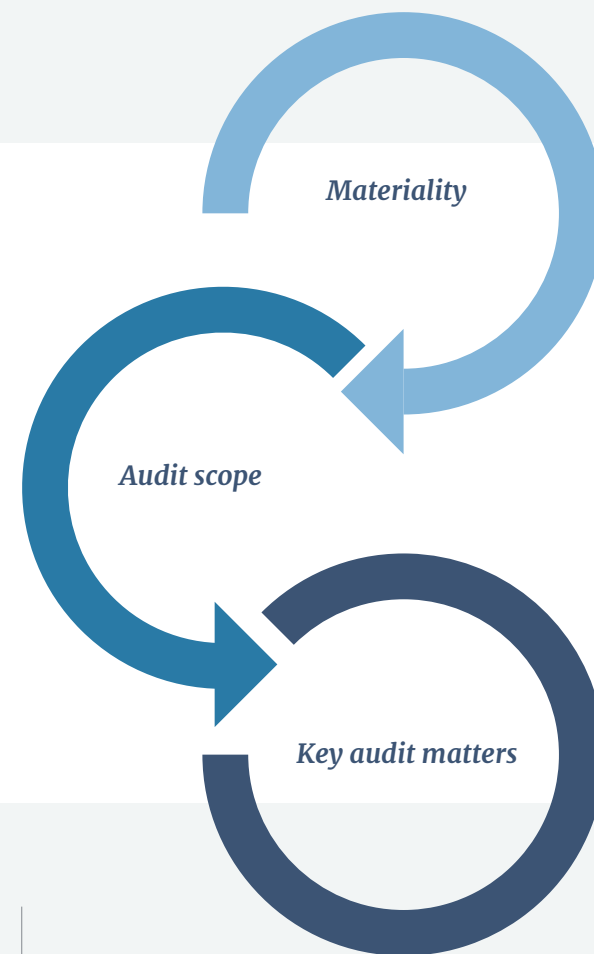
- Overall materiality: EUR 46.500.000 which represents 4% of the average profit before tax over the current financial year and the past 2 years, adjusted for impairments on property, plant and equipment and additions to the provision for costs related to earthquakes.

**Audit scope**

- We have performed audit procedures on both EBN B.V. and EBN Capital B.V. by which all group companies have been included in the scope of our audit

**Key audit matters**

- Valuation of property, plant and equipment and the underlying triggering event analysis include significant management estimates;
- Determination of the provision for decommissioning and restoration and costs as a result of earthquakes include significant management estimates.



**Materiality**

The scope of our audit is influenced by the application of materiality which is further explained in the section 'Our responsibilities for the audit of the financial statements'.

Based on our professional judgment, we determined certain quantitative thresholds for materiality, including

the overall materiality for the financial statements as a whole as set out in the table below. These, together with qualitative considerations, helped us to determine the nature, timing and extent of our audit procedures on the individual financial statement line items and disclosures and to evaluate the effect of identified misstatements, both individually and in aggregate, on the financial statements as a whole and on our opinion.

**Overall group materiality** EUR 46.500.000 (2016: EUR 63.000.000).

---

**Basis for determining materiality**

4% of the average profit before tax over the current financial year and the past 2 years, adjusted for impairments on property, plant and equipment and additions to the provision for costs related to earthquakes. These items are incidental by nature and have a specific audit focus, refer to 'Key audit matters'.

---

**Rationale for benchmark applied**

We have applied this benchmark, a generally accepted auditing practice, based on our analysis of the common information needs of users of the financial statements. On this basis we believe that profit before tax is an important metric for the financial performance of the company. The result of EBN have been volatile over the past few years, mainly due to external factors as fluctuating oil- and gas prices. Items like the number of participations, transactions, financing activities and the organisational structure are part of EBN's normal course of business and are not directly impacted by price or produced volumes. We therefore deem using an average profit as the basis for our materiality assessment appropriate for the activity level of EBN.

---

**Component materiality**

The financials of EBN Capital B.V. are audited using the materiality allocated to this component, which is less than our overall group materiality.

---

We also take misstatements and/or possible misstatements into account that, in our judgement, are material for qualitative reasons.

We agreed with the supervisory board that we would report to them misstatements identified during our audit above EUR 2.325.000 (2016: EUR 3.000.000) as well as misstatements below that amount that, in our view, warranted reporting for qualitative reasons.

**The scope of our group audit**

The financial information of this group is included in the consolidated financial statements of EBN B.V. One component is consolidated by EBN B.V., being EBN Capital B.V. Based on the statutory audit requirement of this component, an audit of their complete financial information is performed. These audit procedures, as well as the audit of the complete set of financial information of EBN B.V., are performed by the group audit team.

By performing the procedures above we have obtained sufficient and appropriate audit evidence regarding the financial information of the group as a whole to provide a basis for our opinion on the consolidated financial statements.

**Key audit matters**

Key audit matters are those matters that, in our professional judgement, were of most significance in the audit of the financial statements. We have communicated the key audit matters to the supervisory board. The key audit matters are not a comprehensive reflection of all matters that were identified by our audit and that we discussed. In this section, we described the key audit matters and included a summary of the audit procedures we performed on those matters.

The key audit matters were addressed in the context of our audit of the financial statements as a whole, and in forming our opinion thereon. We do not provide separate opinions on these matters or on specific elements of the financial statements. Any comments or observations we make on the results of our procedures should be read in this context.

## Key audit matter

---

*Valuation of property, plant and equipment and the underlying triggering event analysis include significant management estimates*

During the annual review process of the valuation of assets, management identified a triggering event for impairments, being the low oil- and gas prices.

As a result of this triggering event, EBN performed analyses to identify potential impairments for a number of her upstream and midstream assets. Each analysis includes various variables that are subject to (significant) estimates, including the price expectations, available reserves and production profiles, expected operational expenses and when applicable capital expenditures and the discount rate. Also refer to note 5 'Impairments and depreciation'.

The available oil and gas reserves include a certain amount of estimation uncertainty. In addition to the impact on the recoverable amount of the asset, available reserves also impact the Unit of Production (UoP), the basis for depreciations. As included in 'Key accounting estimates and judgement', estimates of reserves are by definition inaccurate and based on interpretations that can, over time, change, on the basis of various factors. Critical assumptions used in these estimates are the development of gas prices and production profiles.

We have marked this area as key audit matter due to the material importance of the property, plant and equipment, as a result of which a potential impairment or change in UoP can have a significant impact on the financial statements. Given the analysis of potential impairments and the assessment of available oil and gas reserves require significant estimates, we have identified a heightened risk on the valuation of the relevant property, plant and equipment.

## How our audit addressed the matter

---

In our audit we have given attention to managements' identification of triggering events and we have analysed the process for estimating reserves and production profiles and have evaluated whether these are classified in accordance with Petroleum Resources Management System. We agree on the existence of managements identified triggering events.

We have performed substantive audit procedures to verify the information used by management in the analysis to identify a potential impairment. We have, using internal valuation experts, discussed and tested the reasonableness of estimates and assumptions made by management. We have received sufficient appropriate audit evidence supporting these assumptions and estimates. We have amongst others compared the production and cost information from operators with authorised budgets. We have performed a reconciliation between the production expenses and expected volumes regarding the production profiles. With regards to the expected development of gas prices, we have assessed the future price curves and reconciled these to external sources. We have evaluated the reasonableness of both short term and long term prices.

We have re-calculated management calculations and compared to generally accepted valuation techniques.

## Key audit matter

---

### *Determination of the provision for decommissioning and restoration and costs as a result of earthquakes include significant management estimates*

The valuation of provisions for decommissioning and restoration and costs as a result of earthquakes is complex. Provisions related to these costs are 57% (EUR 3.165 million) of EBN's balance sheet total. Significant estimates and assumptions of management are needed to determine these provisions.

The main estimates in the provision for decommissioning and restoration are the expected costs per individual asset and the timing of the decommissioning activities; which is dependent on the expected end date of the production of the field to which the asset is related.

Estimates and assumptions for costs as a result of earthquakes comprise the total number of expected claims and the amount of these claims, the expected payment of compensation for the decrease in value of real estate and immaterial damage, the expected amount that needs to be paid for building new / strengthening of schools and infrastructure and the expected amount that needs to be paid for strengthening of houses. Expected costs as a result of earthquakes are dependent on cost estimations from various sources and the outcome of ongoing legal procedures.

Reference is made to 'Key accounting estimates and judgement' and note 16 'Provisions'.

We have marked this area as key audit matter due to the material importance of the provisions compared to the balance sheet total. Given the valuation requires significant estimates, we have identified a heightened risk on the valuation provisions for decommissioning and restoration and costs as a result of earthquakes.

## How our audit addressed the matter

---

Our audit procedures for the provision for decommissioning and restoration comprise amongst others the evaluation of estimates and assumptions of management. We have done this by reconciling the information used by management to information received from operators for estimated costs, comparing cost estimates between operators and reconciling to information with regards to oil and gas reserves. We have assessed the reasonableness of the used discount rate and have evaluated managements process for adjusting operator information and obtained audit evidence for adjustments made. We have verified cost estimates for earthquake damages, based on the operator information, but where management determines her own position, to external available information from other sources, previous paid claims and EBN's internal technical studies. We have re-performed managements' calculations and assessed whether these are performed in accordance with the standards and consistent with prior periods. We have assessed the acceptability of the supporting information from operators and deviations made by EBN.

We have assessed the reasonableness of the disclosures and the uncertainties included in those disclosures.



## Report on the other information included in the annual report

In addition to the financial statements and our auditor's report thereon, the annual report contains other information that consists of:

- Foreword;
- About EBN;
- Strategy;
- Results 2017;
- Governance and risk;
- Report from the supervisory board;
- About this report;
- Annexes.

Based on the procedures performed as set out below, we conclude that the other information:

- is consistent with the financial statements and does not contain material misstatements;
- contains the information that is required by Part 9 of Book 2 of the Dutch Civil Code.

We have read the other information. Based on our knowledge and understanding obtained in our audit of the financial statements or otherwise, we have considered whether the other information contains material misstatements.

By performing our procedures, we comply with the requirements of Part 9 of Book 2 of the Dutch Civil Code and the Dutch Standard 720. The scope of such procedures was substantially less than the scope of those performed in our audit of the financial statements.

The directors are responsible for the preparation of the other information, including the directors' report and the other information in accordance with Part 9 of Book 2 of the Dutch Civil Code.

## Report on other legal and regulatory requirements

### Our appointment

We were appointed as auditors of EBN B.V. on 16 November 2015 by the supervisory board following the passing of a resolution by the shareholders at the annual meeting held on 16 November 2015 and the appointment has been renewed annually by shareholders representing a total period of uninterrupted engagement appointment of 2 years.

## Responsibilities for the financial statements and the audit

### Responsibilities of the directors and the supervisory board for the financial statements

The directors are responsible for:

- the preparation and fair presentation of the financial statements in accordance with EU-IFRS and with Part 9 of Book 2 of the Dutch Civil Code; and for
- such internal control as the directors determine is necessary to enable the preparation of the financial statements that are free from material misstatement, whether due to fraud or error.

As part of the preparation of the financial statements, the directors are responsible for assessing the company's ability to continue as a going concern. Based on the financial reporting frameworks mentioned, the directors should prepare the financial statements using the going-concern basis of accounting unless the directors either intend to liquidate the company or to cease operations, or have no realistic alternative but to do so. The directors should disclose events and circumstances that may cast significant doubt on the company's ability to continue as a going concern in the financial statements.

The supervisory board is responsible for overseeing the company's financial reporting process.

**Our responsibilities for the audit of the financial statements**

Our responsibility is to plan and perform an audit engagement in a manner that allows us to obtain sufficient and appropriate audit evidence to provide a basis for our opinion. Our audit opinion aims to provide reasonable assurance about whether the financial statements are free from material misstatement. Reasonable assurance is a high but not absolute level of assurance which makes it possible that we may not detect all misstatements. Misstatements may arise due to fraud or error. They are considered to be material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of the financial statements.

Materiality affects the nature, timing and extent of our audit procedures and the evaluation of the effect of identified misstatements on our opinion.

A more detailed description of our responsibilities is set out in the appendix to our report.

The Hague, 14 March 2018  
PricewaterhouseCoopers Accountants N.V.

Original signed by  
I.J.C. Lefebure RA

Note: This independent auditor's report is an unofficial translation of the report issued with the Dutch version of the Annual report 2017 of EBN B.V. ("Jaarverslag 2017 EBN B.V.").

## Appendix to our auditor's report on the financial statements 2017 of EBN B.V.

In addition to what is included in our auditor's report we have further set out in this appendix our responsibilities for the audit of the financial statements and explained what an audit involves.

### The auditor's responsibilities for the audit of the financial statements

We have exercised professional judgement and have maintained professional scepticism throughout the audit in accordance with Dutch Standards on Auditing, ethical requirements and independence requirements. Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error. Our audit consisted, among other things of the following:

- Identifying and assessing the risks of material misstatement of the financial statements, whether due to fraud or error, designing and performing audit procedures responsive to those risks, and obtaining audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one

resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the intentional override of internal control.

- Obtaining an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the company's internal control.
- Evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by the directors.
- Concluding on the appropriateness of the directors' use of the going concern basis of accounting, and based on the audit evidence obtained, concluding whether a material uncertainty exists related to events and/or conditions that may cast significant doubt on the company's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report and are made in the context of our opinion on the

financial statements as a whole. However, future events or conditions may cause the company to cease to continue as a going concern.

- Evaluating the overall presentation, structure and content of the financial statements, including the disclosures, and evaluating whether the financial statements represent the underlying transactions and events in a manner that achieves fair presentation.

Considering our ultimate responsibility for the opinion on the company's consolidated financial statements we are responsible for the direction, supervision and performance of the group audit. In this context, we have determined the nature and extent of the audit procedures for components of the group to ensure that we performed enough work to be able to give an opinion on the financial statements as a whole. Determining factors are the geographic structure of the group, the significance and/or risk profile of group entities or activities, the accounting processes and controls, and the industry in which the group operates. On this basis, we selected group entities for which an audit or review of financial information or specific balances was considered necessary.

We communicate with the supervisory board regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

We provide the supervisory board with a statement that we have complied with relevant ethical requirements regarding independence, and to communicate with them all relationships and other matters that may reasonably be thought to bear on our independence, and where applicable, related safeguards. From the matters communicated with the supervisory board, we determine those matters that were of most significance in the audit of the financial statements of the current period and are therefore the key audit matters. We describe these matters in our auditor's report unless law or regulation precludes public disclosure about the matter or when, in extremely rare circumstances, not communicating the matter is in the public interest.

# Assurance report of the independent auditor

To: the Executive Board of EBN B.V.

## Assurance report on the sustainability information in the annual report 2017

### Our conclusion

Based on our review, nothing has come to our attention that causes us to believe that the sustainability information in the annual report 2017 of EBN B.V. does not present, in all material respects, a reliable and adequate view of:

- the policy and business operations with regard to sustainability; and
- the events and achievements related thereto for the year ended 31 December 2017

in accordance with the Sustainability Reporting Guidelines version G4 of the Global Reporting Initiative (GRI) and the internally applied reporting criteria.

### What we have reviewed

The sustainability information contains a representation of the policy and business operations of EBN B.V., Utrecht (hereafter: “EBN”) regarding sustainability and the events and achievements related thereto for 2017.

We have reviewed the sustainability information for the year ended 31 December 2017, as included in the following sections in the annual report 2017

(hereafter: “the sustainability information”):

1. Foreword + key figures;
2. About EBN;
3. Strategy;
4. Results for 2017.

The links to external sources or websites in the sustainability information are not part of the sustainability information itself reviewed by us.

We do not provide assurance over information outside of this sustainability information.

### The basis for our conclusion

We conducted our review in accordance with Dutch law, which includes the Dutch Standard 3810N ‘Assurance engagements on corporate social responsibility reports’ (‘Assurance-opdrachten inzake maatschappelijke verslagen’), which is a specified Dutch standard that is based on the International Standard on Assurance Engagements 3000: ‘Assurance Engagements other than Audits or Reviews of Historical Financial Information. This review is aimed to obtain limited assurance. Our responsibilities under this standard are further described in the section ‘Our responsibilities for the review of the sustainability information’ of this Assurance-report.

We believe that the assurance information we have obtained is sufficient and appropriate to provide a basis for our conclusion

### Independence and quality control

We are independent of EBN in accordance with the ‘Code of Ethics for Professional Accountants, a regulation with respect to independence’ (‘Verordening inzake de onafhankelijkheid van accountants bij assurance-opdrachten’ – ViO) and other for the engagement relevant independence requirements in the Netherlands. Furthermore we have complied with the ‘Code of Ethics for Professional Accountants, a regulation with respect to rules of professional conduct’ (‘Verordening gedrags- en beroepsregels accountants’ – VGBA).

We apply the ‘detailed rules for quality systems’ (Nadere voorschriften kwaliteitssystemen) and accordingly maintain a comprehensive system of quality control including documented policies and procedures regarding compliance with ethical requirements, professional standards and other applicable legal and regulatory requirements.

### Reporting criteria

EBN developed its reporting criteria on the basis of the Sustainability Reporting Guidelines version G4



of GRI, as disclosed in section “7. About this report” of the annual report 2017. The information in the scope of this assurance engagement needs to be read and understood in conjunction with these reporting criteria. The absence of a significant body of established practice on which to draw, to evaluate and measure non-financial information allows for different, but acceptable, measurement techniques and can affect comparability between entities and over time.

#### **Inherent limitations**

The sustainability information includes prospective information such as expectations on ambitions, strategy, plans and estimates and risk assessments based on assumptions. Inherently, the actual results are likely to differ from these expectations, due to changes in assumptions. These differences may be material. We do not provide any assurance on the assumptions and achievability of prospective information in the sustainability information.

#### **Responsibilities for the sustainability information and the assurance-engagement**

##### **Responsibilities of the Executive Board**

The Executive Board of EBN is responsible for the preparation of the sustainability information in

accordance with the Sustainability Reporting Guidelines version G4 of GRI and the internally applied reporting criteria as disclosed in section “7. About this report” of the annual report 2017, including the identification of stakeholders and the definition of material subjects. The choices made by the Executive Board regarding the scope of the sustainability information and the reporting policy are summarized in section “7. About this report”. The Executive Board is responsible for determining that the applicable reporting criteria are acceptable in the circumstances.

The Executive Board is also responsible for such internal control as it determines is necessary to enable the preparation of the sustainability information that is free from material misstatement, whether due to fraud or errors.

#### **Our responsibilities for the review of the sustainability information**

Our responsibility is to plan and perform the review engagement to obtain sufficient and appropriate assurance information to provide a basis for our conclusion.

This review engagement is aimed at obtaining limited assurance. In obtaining a limited level of assurance,

the performed procedures are aimed at determining the plausibility of information and are less extensive than those aimed at obtaining reasonable assurance in an audit engagement. The assurance obtained in review engagements aimed at obtaining limited assurance is therefore significantly lower than the assurance obtained in assurance engagements aimed at obtaining reasonable assurance.

Misstatements may arise due to irregularities, including fraud or error and are considered to be material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of the sustainability information. The materiality affects the nature, timing and extent of our review and the evaluation of the effect of identified misstatements on our conclusion.

#### **Procedures performed**

We have exercised professional judgement and have maintained professional scepticism throughout the assurance engagement, in accordance with the Dutch Standard 3810N, ethical requirements and independence requirements.

Our main procedures include:

- Performing an external environment analysis and obtaining insight into relevant social themes and issues, relevant laws and regulations and the characteristics of the organization.
- Identifying and assessing the risks of material misstatement of the sustainability information, whether due to errors or fraud, designing and performing review procedures responsive to those risks, and obtaining review evidence that is sufficient and appropriate to provide a basis for our conclusion.
- Developing an understanding of internal control relevant to the assurance engagement in order to design assurance procedures that are appropriate in the circumstances, but not for the purpose of expressing a conclusion on the effectiveness of the company's internal control .
- Evaluating the appropriateness of the reporting criteria used and its consistent application, including the evaluation of the results of the stakeholders' dialogue and the reasonableness of estimates made by the Executive Board and related disclosures in the sustainability information;
- Evaluating the overall presentation, structure and content of the sustainability information, including the disclosures.

- Evaluating whether the sustainability information represents the underlying transactions and events free from material misstatement.
- Interviewing management (or relevant staff) responsible for the strategy, policy and achievements of sustainability operations.
- Interviewing relevant staff, responsible for:
  - providing the information in the sustainability information,
  - carrying out internal control procedures on the data, and
  - consolidating the data in the sustainability information.
- Reviewing internal and external documentation to determine whether the sustainability information is substantiated adequately.
- An analytical review of the data and trends submitted for consolidation at corporate level.
- Assessing the consistency of the sustainability information and the other information in the annual report 2017 not in scope for this assurance report.
- Reconciling the 'Operational performance indicators up to and including 2016' to listings from the operators.
- Assessing whether the sustainability information has been prepared 'in accordance' with the Sustainability Reporting Guidelines version G4 of GRI.

Den Haag, 14 March 2018

PricewaterhouseCoopers Accountants N.V.

Original has been signed by I.J.C. Lefebure RA

(This assurance report is a translation of the original assurance report accompanying the original annual report 2017, both stated in Dutch. In case of any conflict between this translation and the original assurance report, the latter will prevail. The original assurance report can be found on the website of EBN B.V.)

# 9. Annexes

## 9.1 Interaction with our stakeholders

Stakeholder	Organisation	Form of interaction	Discussion points
<b>National government</b>	Shareholder: Minister of Economic Affairs and Climate Policy/Secretary General	Annual Shareholders Meeting Informal consultations Biennial coordination & strategy update	Annual report, results, dividend Corporate governance Current developments
	Policy maker Minister of Economic Affairs and Climate Policy/(Director-General Energy, Telecom and Competition)	Regular: Strategic consultation and Executive Board consultation Mining and gas supply system consultation Ad-hoc	Information to assess feasibility with respect to planned energy policy Cooperation Joint ventures Current developments Decommissioning and reuse
	Policy maker Minister of Infrastructure and Water Management	Workshops Interview Ad-hoc	Structural Vision Subsurface Decommissioning and reuse Mining and water protection
<b>Local authorities</b>	Provincial and municipal officials	Ad-hoc	Provision of information Development of geothermal energy
<b>Supervisor</b>	State Supervision of Mines	Regular meetings Ad-hoc	Safety, efficient extraction, decommissioning and reuse Development (ultra-deep) geothermal energy, HSE benchmark
	Authority for Consumers and Markets	Ad-hoc	Competition
<b>Operators/ licence holders</b>	Oil and gas companies operating in the Netherlands Foreign (non-) operators Geothermal energy operators	Regular meetings (TCMs, OCMs) Processing of investment proposals Strategic meetings Informal contacts Workshops Conferences Consulting ad hoc	Projects Cooperation Investments Cost management Reserves Decommissioning and reuse Long-term strategies operators Public support Promotion of exploration potential in the Netherlands HSE benchmark
	Branch organisation NOGEPA	Regular meetings Informal contacts Reports Workshops Conferences	Cooperation Cost management Decommissioning and reuse Public support Role of natural gas Energy transition Communication
	Branch organisation DAGO and Stichting Platform Geothermie	Regular meetings Informal contacts Workshops Consulting ad hoc	Geothermal energy development in the Netherlands Projects Cooperation Public support Communication and stakeholder
	Gasebouw (NAM, GasTerra, Shell, Exxon)	Regular meetings (CVG, RVC, AGM, AC, CBM, Budget Commission) Expert meeting Informal contacts	Cooperation Investments Cost management Role of natural gas Energy transition Earthquakes



<b>Stakeholder</b>	<b>Organisation</b>	<b>Form of interaction</b>	<b>Discussion points</b>
<b>Financial institutions</b>	Credit providers: ING, Rabobank and BNP Paribas	Annual meetings Ad-hoc	Financing need Credit conditions
	Capital market: banks and advisers	Ad-hoc	Financing need Capital market developments
	Money market: banks, commercial paper dealers and money market traders	Ad-hoc	Investment opportunities Money market developments
	Credit rating agencies S&P and Moody's	Annual review meeting Ad-hoc	Financial and operational developments and expectations
<b>Insurance</b>	Insurance brokers and companies	Ad-hoc	Damage claims Inspections of installations
<b>Wholesale</b>	GasTerra (gas buyer)	Regular meetings (CVG, RVC, AC, AGM) GILDE, KVG Ad-Hoc	Sales prices Processing and transportation Liability Guarantees Public support Role of natural gas Energy transition
<b>Gas transport</b>	Gasunie/GTS	Regular meetings GILDE, KVG Ad-Hoc	Input conditions Public support Role of natural gas Energy transition
<b>Gas storage</b>	Taqa (Bergermeer)	Regular meetings (TCMs, OCMs)	Projects Cooperation
	Gasgebouw (Norg, Grijskerk, Alkmaar)	Regular meetings	Projects Cooperation Investments
<b>Buyers</b>	Oil/condensate: Oil and gas companies (midstream)	Regular meetings Ad-Hoc	Sales prices Processing and transportation Liability Guarantees
	Gas: Energy companies	Via wholesale (GasTerra)	Sales prices Processing and transportation Liability Guarantees
<b>Supply</b>	E&P service companies Branch organisation IRO	Project basis (Joint Industry Projects or JIPs) Workshops Conferences	Projects Cost management Decommissioning and reuse

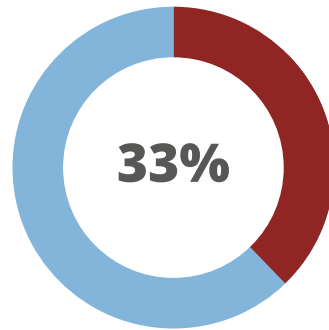


<b>Stakeholder</b>	<b>Organisation</b>	<b>Form of interaction</b>	<b>Discussion points</b>
<b>CCS</b>	Gasunie and Port of Rotterdam (Joint venture partners in project groep Porthos)	Project basis (Joint Industry Projects or JIPs)	JV terms Acquisition customers Project execution Agreements with service providers e.g. TAQA/ONE
<b>Social organisations</b>	NGO's	Incidental	EBN's role and strategy Gas in the energy transition Decommissioning and reuse Geothermal energy
<b>Residents</b>	Local resident participations Interest groups	Via operators	Impact on surroundings of drilling and production sites Safety and possible damage Use and need Involvement in decision making Local concessions Information sessions for local residents
<b>Knowledge and training centres</b>	Knowledge institutions: CIEP, EAE, TNO	Management of TKI-Gas Supervisory Committee (EAE) Strategic Advisory Board (EAE) Regular meetings JIPs (TNO) Ad-Hoc	Cooperation TKI projects
	Training centres: Universities Training centres Students	Student conference Internships EBN JIPs (3 TUs, UU, VUA, RUG, Leeds, Durham) Workshops Veerstichting foundation	Energy Transition (Energy Transition Scholarship) Social trade-offs around projects (All Energy Day 2017) Career opportunities Decommissioning and reuse
<b>Employees</b>	HR: GPTW, InContext, Arbobotler,	Four times a year, town hall Surveys 360, offsite retreats, personality tests	Satisfaction Wellbeing Physical and mental well-being, complaints.
	AWVN (branch org.), lawyers, tax advice, Training and education institutes Berenschot	Sickness absenteeism guidance, coaching, advice, PMO, workplace research Labour market development Advising Coaching, guidance Advice, project guidance	Social developments Training and courses Implementation strategy
	Works Council	Four times a year regular consultation with director (twice a year Supervisory Board member present) Ad-hoc consultation with director (formal and informal) Consultation with the employees Survey	Strategy and market developments General course of affairs EBN Request for advice on the implementation of a new strategy (reorganisation) Request for consent Regulations for working from home, Sick leave scheme, HR cycle, Time registration system Staff welfare Vacancies and staff turnover

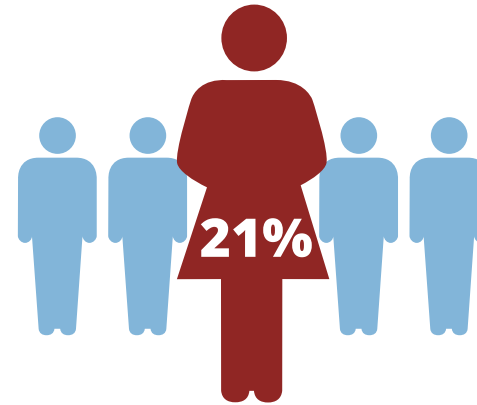
## 9.2 The people of EBN



Number of FTE employed at EBN  
(year-end 2017)



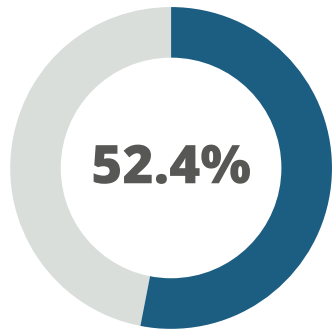
Percentage of women employed  
at EBN (year-end 2017)



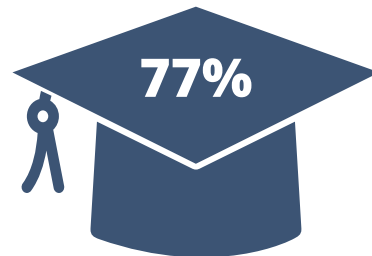
How many women are in scale 9 or higher and/  
or are hierarchical managers? (compared to the  
total number of employees in management and  
professional positions) (year-end 2017)



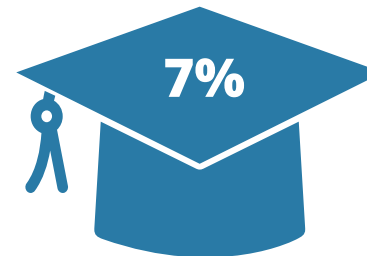
Average age  
(end of 2017)



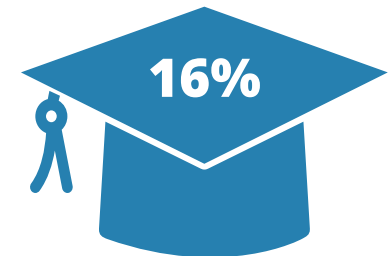
Percentage under the age of 45  
(end of 2017)



Academic  
(end of 2017)



HBO  
(year-end 2017)



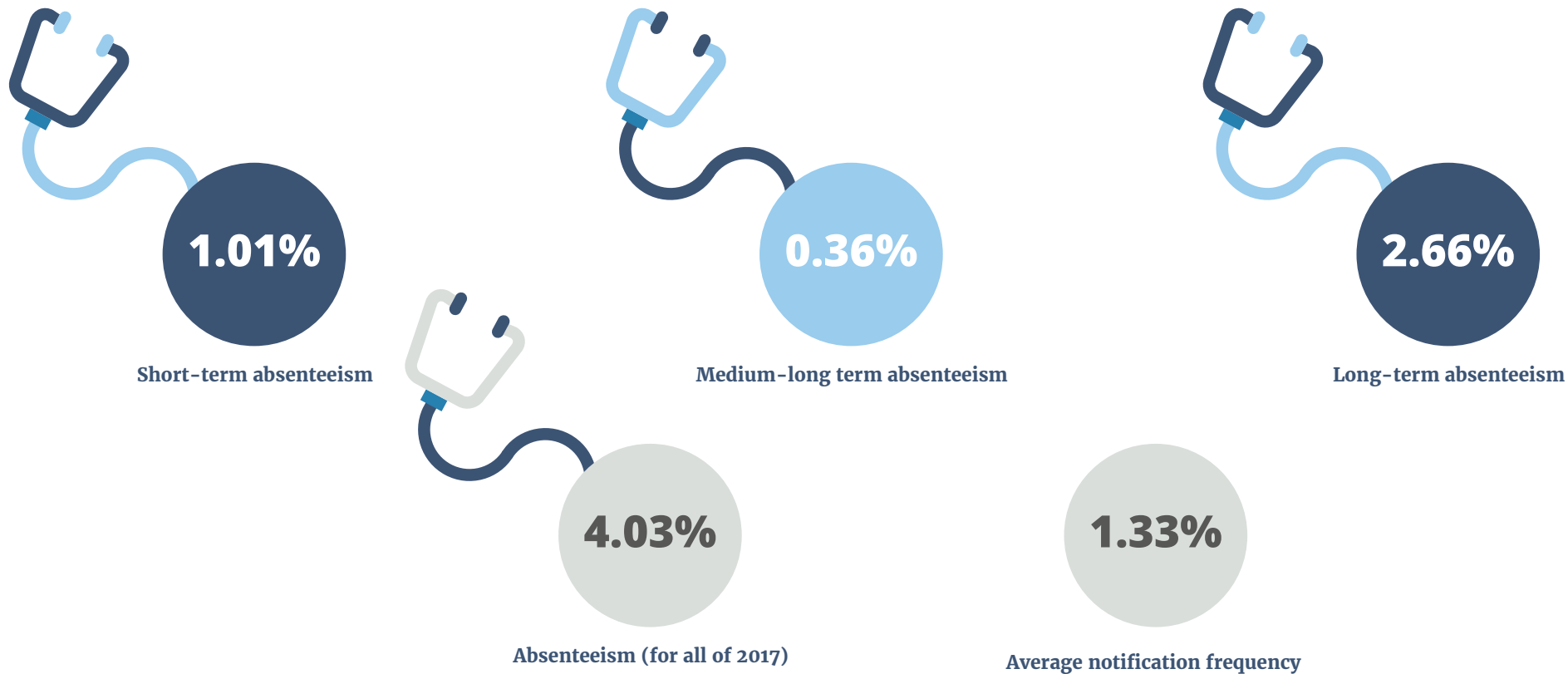
MBO  
(end of 2017)



Average training hours per year  
(end of 2017)



Total number of training days  
(end of 2017)



Number of externals in staff positions  
(average FTE 2017)<sup>3</sup>



Number of trainees/graduates  
(during 2017)



Number of trainees/graduates  
(average FTE 2017)

<sup>3</sup>EBN determines how many and what positions it has within its organisation; these are called staff positions. The scope of a staff position is expressed in FTE. EBN also puts externals on projects in project-based deployment which does not fall under staff positions and is not counted here.

### 9.3 Governancetabel

#### Governance table team of directors

Name	Age*	Profile/specific knowledge	Task at EBN	Appointment term	(Relevant) Ancillary positions
<b>J.W. van Hoogstraten</b>	53	<ul style="list-style-type: none"> <li>• Mining engineering &amp; petroleum extraction (engineer), TU Delft</li> <li>• Worked in the energy sector for various oil and gas companies</li> <li>• MD of TAQA Nederland</li> <li>• Chairman NOGEPA, the trade association of oil and gas producers in the Netherlands</li> </ul>	CEO: Jan Willem leads the team of directors and maintains contacts with the Supervisory Board and the shareholder. He fulfils the employer role for the programme managers, the AM/BD/Commercial field and the departments HR & facility, Legal and Communications & Public Affairs.	1 March 2016 – 1 March 2020	<ul style="list-style-type: none"> <li>• Member of the Supervisory Board of GasTerra B.V.</li> <li>• Member of the Board of Delegated Commissioners of GasTerra B.V.</li> <li>• Member of the Board of Beheer Maatschap Groningen</li> <li>• Member of the Advisory Board of Clingendael International Energy Programme</li> <li>• Member Strategic Advisory Board TNO Energy</li> <li>• Member of the Supervisory Board of the Nexstep association</li> </ul>
<b>A.J. Boekelman</b>	58	<ul style="list-style-type: none"> <li>• Econometrics (drs.), University of Amsterdam</li> <li>• Worked at Shell in Rotterdam and abroad, including as CFO of Shell Suriname and Group Controller of PDO Oman.</li> <li>• Employed at Nuon as Group Controller.</li> <li>• Worked in the non-profit sector as Director HR &amp; Finance at SNV Development Organisation.</li> </ul>	Finance Director: Jan is responsible for EBN's financial economic policy and for directing all financial related job areas. He fulfils the employer role for the Business Finance field and the Accounting & Reporting, Treasury and ICT departments.	From 2011	<ul style="list-style-type: none"> <li>• Chairman Audit Committee GasTerra B.V.</li> <li>• Member of the Supervisory Board of Oasen Drinkwater</li> </ul>
<b>B.C. Scheffers</b>	54	<ul style="list-style-type: none"> <li>• Geophysics (drs.), Utrecht University</li> <li>• Doctorate in technical physics (seismology) at the TU Delft.</li> <li>• Worked in various positions at TNO, including as Geophysicist, Group Leader and Director</li> <li>• Chief Inspector at State Supervision of Mines (2006-2007)</li> <li>• Technical Manager at EBN (2007-2011)</li> </ul>	Director Strategy & Technology: Berend is primarily responsible for assisting the CEO in developing, communicating, implementing and maintaining the strategic initiatives. Berend is chairman of the reserve board and fulfils the employer role for the fields Geoscience, Engineering and Data & Knowledge.	From 2011	<ul style="list-style-type: none"> <li>• Member of the Board of the TKI Gas Foundation</li> <li>• Member of the Supervisory Board of Stichting Delft Aardwarmte Project</li> <li>• Member of the Social Advisory Board of earth sciences studies at the University of Utrecht</li> <li>• Member of the strategic partner council New Energy Coalition</li> <li>• Chairman partner research council ESTRAC</li> <li>• Member of the Supervisory Board of the Nexstep association</li> <li>• Board member of World Energy Council</li> </ul>

\*ages per date of RvC meeting 14 march 2018

## Governance table supervisory board

Name	Age*	Profile/specific knowledge	Task at EBN	Year of appointment	Reappointments	End of term	(Relevant) ancillary positions
<b>H.M.C.M. van Oorschot</b>	65	<ul style="list-style-type: none"> <li>chairman SB</li> </ul>	Chairman of the Supervisory Board, member of the audit committee and member of the remuneration committee/ selection and appointment committee	2006	First: 2010 Second: 2014	2018	<ul style="list-style-type: none"> <li>Chairman of the Executive Board of NHTV in Breda (main position)</li> <li>Chairman of the Supervisory Board of Lysias Advies B.V.</li> <li>Member of the Supervisory Board of Elisabethziekenhuis hospital, Tilburg</li> <li>Member of the board of St. Petrus Donders Tilburg</li> </ul>
<b>J.G. Huijskes</b>	53	<ul style="list-style-type: none"> <li>profile knowledge of the oil and gas sector</li> </ul>	Member of the Supervisory Board, member of the audit committee and member of the remuneration committee/ selection and appointment committee	2016	-	2020	<ul style="list-style-type: none"> <li>Non Executive Director Gulf Key Stone Petroleum PLC.</li> </ul>
<b>E.M. Kneppers-Heijnert</b>	66	<ul style="list-style-type: none"> <li>profile Communication and HR</li> </ul>	Member of the Supervisory Board, member of the audit committee and member of the remuneration committee/ selection and appointment committee	2016-2020	-	2020	<ul style="list-style-type: none"> <li>Professor emeritus of business administration, in particular the legal aspects, University of Groningen, the Netherlands</li> <li>Member of the Supervisory Board of Wolters Kluwer Holding Nederland B.V.</li> <li>President Advisory Board foundation</li> <li>Stichting Instituut GAK</li> <li>Member of the board of foundation St. Fonds Bijzondere Voorzieningen Martini Ziekenhuis Groningen</li> </ul>
<b>W.S. de Vries</b>	64	<ul style="list-style-type: none"> <li>profile financial-economic, knowledge of the oil and gas sector</li> </ul>	Member of the Supervisory Board, chairman of the audit committee and member of the remuneration committee/ selection and appointment committee	1 March 2017	-	2021	-
<b>J.W. Weck</b>	70	<ul style="list-style-type: none"> <li>profile public sector organisations</li> </ul>	Member of the Supervisory Board, member of the audit committee, member of the remuneration committee/ selection and appointment committee	2016	-	2019	<ul style="list-style-type: none"> <li>Chairman of the Supervisory Board of Economische Impuls Zeeland N.V.</li> <li>Member of the Advisory Board of the Netherlands Institute for New Technology, Economic and Social Studies (Nintes)</li> <li>Member of the Board D&amp;I Company</li> <li>Chairman of the Supervisory Board of Stichting Buddy Network</li> </ul>

\*ages per date of RvC meeting 14 march 2018



#### 9.4 Remuneration report

This remuneration report contains an explanation of the remuneration policy in 2017 for the director and the Supervisory Board of EBN.

In 2017, Mr J.W. van Hoogstraten was director of EBN. The shareholder appointed Mr Van Hoogstraten as of 1 March 2016 for a period of four years, after which reappointment is possible. Simultaneously with the appointment of Mr Van Hoogstraten, the shareholder established the remuneration policy for the director. The shareholder did this on the recommendation of the Supervisory Board, where it took the advice of the remuneration committee into account. The Works Council was also given the opportunity to take a position on the remuneration policy. The remuneration policy adopted in 2016 by the Supervisory Board was used to determine the remuneration and further terms and conditions of employment of the director.

In line with the remuneration policy for the director a separate remuneration policy was drawn up for the three directors who are not executive directors. This remuneration report deals only with the remuneration policy for the statutory director.

#### General

The remuneration policy pursued at EBN is based on the following principles of the participations policy of the central government:

1. The remuneration policy should allow the participations to attract qualified directors, however, this must be done in an austere manner.
2. The total amount of the remuneration is determined by looking both at the private and public market; to this end, private and public reference groups are established, as well as the applicable ratio of private and public activities for the relevant participation.
3. The variable remunerations are capped at 20 per cent of the basic salary.

EBN, on the basis of the Mining Act, among other things, participates in exploration and production activities for oil or gas accumulations offshore and onshore. In addition to the basic principles, it is important for EBN that the director has specific knowledge and experience in the oil and gas sector.

In formulating the remuneration policy the fact that there is no longer any long-term variable remuneration is taken into account. A conversion factor of 0.4 is used to convert the long-term variable remuneration in accordance with government policy.

The Supervisory Board in determining the total remuneration has taken into account that the amount of remunerations can be a sensitive issue in public debate, so that an austere interpretation is self-evident. At the same time, the Supervisory Board in the interest of EBN must ensure that EBN has a director with the required qualities and experience.

#### Construction of remuneration package

For the remuneration of the directors of the company in 2017, please see page 138 of the financial statements, where a distinction is made between the fixed salary, variable remuneration and any other remuneration components.

For the fixed annual income applies that the Supervisory Board determines the possible annual growth of the fixed annual income. If the maximum of the fixed annual income is reached, further growth is limited to indexation of the fixed annual income.

Any indexation takes place as of 2016 in accordance with EBN's working conditions regulations (a combination of the derived Consumer Price Index, indexation in the Dutch oil and gas industry and indexation at the shareholder). Indexation may vary between 0 per cent and not more than the derived CPI rate.

### Variable income

The remuneration structure also has a variable component. The variable remuneration elements amount to a maximum of 14 per cent of the fixed annual income if objectives have been fully achieved. In exceptional circumstances, the Supervisory Board may grant an additional variable remuneration of 6 per cent, meaning the variable remuneration is a maximum of 20 per cent. This maximum variable remuneration policy is in line with the participations policy of the central government.

The objectives of the variable remuneration are determined annually by the Supervisory Board. The objectives include team-related objectives (for the entire team of directors) and objectives for all of EBN. The objectives are based on the company's strategy. The Supervisory Board makes the objectives both realistic and challenging. The objectives should be measurable and influenceable and are linked to the strategy. The progress is discussed with the Supervisory Board on the basis of quarterly reports.

The objectives are discussed in the remuneration committee in the first quarter of the year following the year which the objectives refer to. After this discussion the Supervisory Board determines the extent to which the objectives of the variable remuneration

are realised. Payment of the variable remuneration takes place after the General Meeting of Shareholders has adopted the financial statements.

For 2017, the remuneration committee has set the following objectives for EBN:

For the realisation of the objectives, all objectives are equally taken into account. The partial achievement of objectives is possible. The extent to which that is possible is determined beforehand. The remuneration committee is further entitled to adjust the overall score positively or negatively. Objectives 1 to 4 are

	Topic	Explanatory notes	Objective
1	EBN's profit	EBN's profit (after tax) shown in million EUR	≥161
2	Administration costs	EBN's costs for staff, hiring expertise, office, etc. shown in million EUR	≤15,8
3	Reserves maturation small fields	The net supplementation (maturation) of gas reserves in the Netherlands in GNm <sup>3</sup> GE.	≥9,7
4	Drilling	The number of drills at new locations in the Netherlands, onshore or offshore.	≥13
5	Score transparency benchmark	The transparency benchmark is an annual study into the content and quality of social reporting (max 200 points).	≥170
6	Setting up National Platform	EBN is launching a National Platform for decommissioning and reuse along with industry partners.	Yes
7	Participation EBN consortium UDG	Together with seven consortia, TNO, the Ministry of Economic Affairs and Climate Policy and the Ministry of Infrastructure and Water Management, EBN is joining the Green Deal Ultra Deep Geothermal.	Yes

determined on the basis of the work programme and budget drawn up in December 2016. Objective 5 is determined by the score from the previous year and a lower limit of 149 points. Objectives 6 and 7 are specifically included for 2017. As social results in any case objective 1 and 3 are designated, where the social results count for two sevenths.

The team-related objectives are derived from the EBN objectives and thus derived from the strategy. 35 projects have been designated for 2017, divided over the six themes and the corporate departments.

#### **Pension**

The director participates in a pension scheme of the General Pension Fund for Public Employees (ABP), in accordance with the terms for EBN employees.

#### **Other fringe benefits**

EBN offers a package of fringe benefits that also applies to the director. No option rights or shares are allocated to the director. The company has also not given the director any loans, advances or guarantees.

In addition to the fringe benefits, the director has an expense allowance and use of a car (for business and private use). EBN has taken out a directors' and officers' liability insurance policy for the director.

### **Other principles of the remuneration policy**

#### **Appointment term**

On the director's appointment an appointment term of four years applies. Reappointment can always take place each time for a maximum period of four years.

#### **Period of notice**

For the director, a three month period of notice of the employment contract applies and for EBN, a six month period of notice.

#### **Severance pay**

The director is only awarded severance pay in the event of involuntary dismissal. Unless there is manifest unreasonableness the pay for the director is a maximum of one fixed annual income, in accordance with the Corporate Governance Code. The said maximum payment includes the transition allowance insofar as this is owed to the director under the Work and Security Act (WWZ) since 1 July 2015.

#### **Claw back and adjustment variable remuneration**

The employment contract with the director contains a claw back clause (Corporate Governance Code provision II.2.11) and the employment contract contains a provision under which the Supervisory Board has the power to amend any variable remuneration if this leads to unfair outcomes

because of exceptional circumstances within the performance period (Corporate Governance Code provision II.2.10).

Including a claw back clause is in line with the central government's holdings policy.

#### **Balanced composition director**

The director consists of one natural person, so that a balanced distribution of the seats of the Executive Board cannot be applied.

#### **Variable remuneration over 2017**

The remuneration committee took note of the preliminary realisation of the objectives for 2017 in December 2017. The realisation of the objectives over 2017 is determined in mid March 2018.

#### **Remuneration ratio at EBN**

The median of the total remuneration of EBN employees is EUR 102k gross. This concerns the gross salary including variable remuneration, holiday pay, paid holidays, expense allowances and pension capping payment. If this amount is deducted from the gross salary received (including the aforementioned elements) of Mr Van Hoogstraten, being an amount of EUR 297 k gross, this results in a remuneration ratio of 1:2.9.

This remuneration ratio was determined for the first time this year so that no changes are made to the changes in this ratio compared to 2016, the previous financial year.

#### **Remuneration of the supervisory board**

The remuneration of the members of the Supervisory Board is fixed and independent of the results of the company. The shareholder determines the remuneration of the members of the Supervisory Board, simultaneously with the appointment. The remuneration of the Chairman of the Supervisory Board amounts to EUR 24,500 per year. The other members receive a remuneration of EUR 20,000 per year. All members of the Supervisory Board are entitled to reimbursement of expenses. The remuneration of the Chairman of the Supervisory Board differs from the other members of the Supervisory Board because of the extra tasks of the chairman.

No loans, advance payments or guarantees were provided to the members of the Supervisory Board by the company. A liability insurance was taken out for the members of the Supervisory Board.

The total remuneration of the Supervisory Board for 2017 is stated on page 133 under Key management.

Utrecht, 14 March 2018

#### **9.5 GRI-index 2017**

PwC has performed an assurance assignment aimed at obtaining a limited measure of assurance about the sustainability information in EBN's 2017 annual report. For the scope of this assurance assignment, we refer to the assurance report of the independent accountant on p. 166 of this report.

## GRI Index 2017

### CORE General Standard Disclosures

G4 code	Disclosure/Indicator	Explanatory notes	Reference	Page
<b>Strategy and analysis</b>				21
G4-1	CEO Statement		Foreword	3
<b>Profile</b>				7
G4-3	Organisation's name	Energie Beheer Nederland B.V. (EBN B.V.)	Profile	7
G4-4	Primary brands, products and/or services		Profile Business model	7 10
G4-5	Location Head Office	Utrecht	Organisation chart Contact information	9 177
G4-6	Countries where the organisation is active	The Netherlands	Profile Business model	7 10
G4-7	Ownership structure and legal form		Corporate governance	74
G4-8	Markets		Profile	7
G4-9	Size of the organisation		Key figures	6
G4-10	Information about size and features of staff base	<u>Non-reported:</u> a: According to type of employment and gender b: Permanent employees: full time or part time by gender c: Permanent and temporary employees by gender d: Region not applicable since the Netherlands is the working area and the head office is located in Utrecht e: Sole trader constructions do not apply to EBN, only employment relationships f: Seasonal work does not apply to EBN	Key figures The people of EBN <i>Partially reported: not by gender or employees category. In 2017, EBN examined whether a subdivision is relevant for a, b, and c. There are no relevant differences so that a subdivision has not proved relevant.</i>	6 53
G4-11	Percentage of employees under CAO	No CAO applicable		
G4-12	Description of the supply chain		Our position in the energy chain	13
G4-13	Significant changes during the reporting period with regard to organisation size, structure, ownership ratio or supply chain	No significant changes		



**CORE**      **General Standard Disclosures**

<b>G4 code</b>	<b>Disclosure/Indicator</b>	<b>Explanatory notes</b>	<b>Reference</b>	<b>Page</b>
G4-14	Precautionary principle: whether and how this is applied		Risk management	61
G4-15	Externally developed economic, environmental and social charters, principles, or other initiatives that the organisation approves and endorses	EBN as a policy participation is bound by the charters, principles and other initiatives of the Dutch state.		
G4-16	Participation in (international) associations	EBN participates in KVG N in the form of: financial, input into governance and KVG N working groups	Results section Our stakeholders <i>Interaction with our stakeholders</i> <i>Substantial contribution is qualitatively expressed in the investment in knowledge and hours</i>	35 50
<b>Materiality and scope</b>				
G4-17	Legal entities that are part of the financial reporting (scope)		Financial Statements	100
G4-18	Process content provision and how the reporting principles are applied		About this report	92
G4-19	Material aspects		Material themes	27
G4-20	Scope of material aspects within the organisation		About this report	92
G4-21	Scope of material aspects outside the organisation		About this report: Choice of issues, table	92
G4-22	Effect of revised information compared to previous reports	No revised information	About this report: choice of issues, table	92
G4-23	Changes that may restrict comparability with previous reports	Changes are explained in the text or as a footnote to table/chart	About this report	92
<b>Stakeholder engagement</b>				
G4-24	List of stakeholders		Our stakeholders Annex 1: Table Interaction with our stakeholders	155
G4-25	Inventory and selection of stakeholders		Our stakeholders	50
G4-26	How does the organisation involve stakeholders, by type, and how often		Annex 1: Table Interaction with our stakeholders	155
G4-27	The main subjects and issues that have emerged through the involvement of stakeholders and how the organisation has responded.	Sector Disclosure Oil & Gas asks that the perspective of the indigenous population be considered. In view of the working area of EBN Nederland, this does not apply.	Interaction with our stakeholders, different dialogues per strategic theme Annex 1: Table Interaction with our stakeholders	50 155

**CORE**      **General Standard Disclosures**

<b>G4 code</b>	<b>Disclosure/Indicator</b>	<b>Explanatory notes</b>	<b>Reference</b>	<b>Page</b>
<b>Reporting parameters</b>				
G4-28	Reporting period	1 January 2017 to 31 December 2017		
G4-29	Date of most recent report	Year under review 2016		
G4-30	Reporting cycle	Calendar year		
G4-31	Contact information		Credits	177
G4-32	a. The 'in accordance' option that is chosen b. Reference to GRI Content Index c. Reference to Assurance Report	According to the GRI-G4 guidelines at application level CORE	Assurance report About this report	151 92
G4-33	Assurance policy		About this report	92
<b>Governance</b>				
G4-34	Governance structure		Corporate governance	74
<b>Ethics and integrity</b>				
G4-56	Internally developed missions, codes of conduct, declarations of principle relevant to economic, environmental and social performance and the status of implementation		Integrity	79

## Specific Standard Disclosures

Indicator Description	Materiality + definition	Demarcation	Reference, DMA and performance	Page
<b>Economic</b>				
<b>Economic performance</b>		EBN/ O		
DMA	<u>Creation of economic value</u>		Business model	10
a. State why the issue is material and the impact of the issue.			Strategy	21
b. State how the organisation deals with the material issue and its impact.			Results for 2017	35
c. Evaluation of the management approach			Risk management	61
			Interaction with stakeholders	50
G4-EC1	<u>Creation of economic value</u>		Financial results	47
Direct economic value	Optimising financial results, such as net income, natural gas income, sales, investment and depreciation.		Financial Statements	100
			Sector Disclosure Oil & Gas sector: EBN only makes payments to the Dutch State.	
<b>Reserves</b>		EBN/O		
DMA	<u>Encouraging effective detection and extraction of oil and gas</u>		Business model	10
a. State why the issue is material and the impact of the issue.			Strategy	21
b. State how the organisation deals with the material issue and its impact.			Results for 2017	35
c. Evaluation of the management approach			Interaction with stakeholders	50
OG1	<u>Encouraging effective detection and extraction of oil and gas</u>		Results 2017, paragraph Our Dutch Gas	35,37
Volume and type of the expected and proven reserves and production	Working towards encouraging effective detection and extraction of oil and gas (including optimisation of infrastructure) through deployment of NOV management and own investigations.			

## Specific Standard Disclosures

Indicator Description	Materiality + definition	Demarcation	Reference, DMA and performance	Page
<b>Intellectueel:</b>				
DMA	<u>Guiding and coordinating innovation</u>		Business model	10
a. State why the issue is material and the impact of the issue.	<u>Gaining and passing on knowledge</u>		Strategy	21
b. State how the organisation deals with the material issue and the impact.	<u>Development of new energy</u>		Results for 2017	35
c. Evaluation of the management approach			Interaction with stakeholders	50
OG2 Total invested in renewable energy	<u>Guiding and coordinating innovation</u> The smarter and more durable development of existing and new potential, by private research and by working with partners and research institutions.	EBN	Results for 2017 <i>Qualitatively expressed in the investment in knowledge and hours</i>	35
OG2 Total invested in renewable energy	<u>Gaining and aggregating knowledge</u> The active sharing of knowledge in partnerships and knowledge networks, among others through studies such as BOON, and Focus on Energy; gaining knowledge from chain partners through partnerships and knowledge networks	EBN/O	Results for 2017 <i>Qualitatively expressed in the investment in knowledge and hours</i>	35
OG2 Total invested in renewable energy	<u>Development new energy</u> Generating insights into opportunities and possibilities for the development of new energy and storage, such as geothermal energy, CAES, and CCS.	EBN/O	Results: New Energy <i>Qualitatively expressed in the investment in knowledge and hours</i>	45
<b>Social: employer</b>				
<b>Training and courses</b>				
DMA	<u>Attracting and developing talent</u>		Business model	10
a. State why the issue is material and the impact of the issue.				
b. State how the organisation deals with the material issue and its impact.				
c. Evaluation of the management approach				

## Specific Standard Disclosures

Indicator Description	Materiality + definition	Demarcation	Reference, DMA and performance	Page
G4-LA9 Average number of training hours per employee.	<u>Attracting and developing talent</u> Finding and hiring talented employees, offering them good development opportunities and inspiring them at EBN.	EBN	The people of EBN <i>Partially reported: not by gender or employee category. In 2017, EBN examined whether a subdivision into gender was relevant. There appeared to be no significant differences as a result of which this subdivision proved irrelevant.</i>	53
G4-LA11 Percentage of employees that regularly has a performance/ development appraisal.		EBN	The people of EBN <i>Partially reported: not by gender or employee category. Since the score for performance interviews is 100%, the breakdown is not relevant. Development interviews normally take place in the summer months of the year, but in the summer of 2017 EBN was in the midst of the reorganisation that became effective from 1/9/2017. As a result, development interviews have not all taken place. A subdivision per employee category or gender is therefore not relevant this year in the area of development interviews.</i>	53
DMA a. State why the issue is material and the impact of the issue. b. State how the organisation deals with the material issue and its impact. c. Evaluation of the management approach	<u>Effective advice and influence</u>		Business model Interaction with stakeholders	10 50
Own indicator under development	<u>Effective advice and influence</u> Encouraging employees to influence the operators (through NOV management), partners and other stakeholders through dialogue and advice.	EBN	<i>Reason for omission: in verband met de herziening van de strategische prioriteiten van EBN is er nog geen kwantitatieve indicator beschikbaar. EBN is een betekenisvolle indicator aan het ontwikkelen waarover in 2018 zal worden gerapporteerd.</i>	
<b>Social: Society</b>				
<b>Local community</b>				
DMA a. State why the issue is material and the impact of the issue. b. State how the organisation deals with the material issue and its impact. c. Evaluation of the management approach	<u>Safeguarding external safety</u> <u>Support for our work</u>		Business model Strategy Results for 2017 Main strategic risks Interaction with stakeholders	10 21 35 67 50



## Specific Standard Disclosures

Indicator Description	Materiality + definition	Demarcation	Reference, DMA and performance	Page
Own indicator Number and severity of the earthquakes	<u>Safeguarding external safety</u> Promoting a good safety culture, meaning safety risks such as earthquakes, spills and explosions are limited.	EBN/O	Our Dutch Gas 2017 results Main strategic risks	37 67
G4-SO2 Activities with significant and potential negative impact on the local community.	<u>Support for our work</u> Working on support for our work. Propagating the social responsibility of EBN by, among other things environmental management, and projects within and outside the gas sector.	EBN/O	Business model Strategy Risk management Main strategic risks Interaction with stakeholders	10 21 61 67 50
DMA a. State why the issue is material and the impact of the issue. b. State how the organisation deals with the material issue and its impact. c. Evaluation of the management approach	<u>Contributing to the energy transition</u>		Profile Business model Strategy Results for 2017 Social results Interaction with our stakeholders	7 10 21 35 50 50
Own indicator under development	<u>Contributing to the energy transition</u> Making a constructive contribution to the acceleration of the energy transition through the use of knowledge and expertise of the subsurface.	EBN	Results for 2017 Interaction with our stakeholders <i>Reason for omission: in view of the revision of EBN's strategic priorities, no quantitative indicator is yet available. EBN is developing a meaningful indicator that will be reported on in 2018.</i>	35 50
DMA a. State why the issue is material and the impact of the issue. b. State how the organisation deals with the material issue and its impact. c. Evaluation of the management approach	<u>Effective decommissioning and reuse</u>		Business model Strategy Results 2017, Return to Nature Main strategic risks Interaction with stakeholders	10 21 43 67 50
OG11 Number of sites that have been decommissioned or where decommissioning has commenced.	<u>Effectieve ontmanteling en hergebruik</u> Facilitating and encouraging effective reuse and decommissioning of existing oil and gas infrastructure, including through the development and implementation of a master plan.	EBN/O	Results 2017, Return to Nature	43

## Specific Standard Disclosures

Indicator Description	Materiality + definition	Demarcation	Reference, DMA and performance	Page
<b>Millieu</b>				
DMA	<u>Verduurzaming in de waardeketen</u>		Business model	10
a. State why the issue is material and the impact of the issue.			Strategy	21
b. State how the organisation deals with the material issue and its impact.			Results for 2017	35
c. Evaluation of the management approach.			Social results Sustainability	50 52
All environmental indicators as stated in the EBN Sustainability Report 2015-2016*	<u>Sustainability in the value chain</u> Working towards environmental impact of gas, including emissions and leaks.	O	Sustainability EBN Sustainability Report 2016-2017 GRI Index 2016	52

### Demarcation

Own organisation = EBN Operators = O

*\*As indicated in the table the EBN Sustainability Report 2016-2017 that is published on the website is referred to for a number of indicators. This report is not parallel to the financial year. No assurance has been received on the EBN Sustainability Report 2016-2017.*

## 9.6 10-year key figures

in EUR mln	2017	2016	2015	2014	2013	2012	2011	2010	2009	2008
number of EBN participations in joint ventures:										
- production licences onshore	33	33	33	31	29	27	24	23	22	21
- production licences offshore	110	109	109	107	106	101	101	103	103	100
- production licences	44	46	48	55	56	48	47	48	45	41
sales (bln m <sup>3</sup> , 100%)	39	46	51	66	79	73	72	80	70	73
change in % compared to previous year (100%)	-15	-10	-22	-17	8	1	-10	14	-5	11
- sales Groningen (bln m <sup>3</sup> , EBN share)	9	11	12	17	21	19	18	20	15	15
- sales small fields (bln m <sup>3</sup> , EBN share)	7	9	9	10	11	11	12	13	14	15
total sales (bln m <sup>3</sup> , EBN share)	16	20	21	27	32	30	30	33	29	30
average selling price of gas (€ -cents per m <sup>3</sup> 35.17 MJ/m <sup>3</sup> )	15,68	13,68	20,26	22,23	25,52	26,76	22,63	18,58	20,72	26,91
sales from:										
- continuing operations	3.015	3.094	4.766	6.598	8.809	8.528	7.103	6.486	6.387	8.698
- discontinued operations	-	-	-	-	-	-	-	-	-	-
total sales	3.015	3.094	4.766	6.598	8.809	8.528	7.103	6.486	6.387	8.698
change from continuing operations in % compared to previous year	-3	-35	-28	-25	3	20	10	2	-27	43
net profit from:										
- continuing operations	556	333	450	1.614	2.327	2.360	2.131	2.076	2.211	3.269
- discontinued operations	-	-	-	-	-	-	-	-	-	-
total profit	556	333	450	1.614	2.327	2.360	2.131	2.076	2.211	3.269
net profit from continuing activities in % of sales	18	11	9	24	26	28	30	32	35	38
property, plant and equipment										
- capital expenditure onshore	25	37	102	290	275	202	228	224	238	129
- capital expenditure offshore	131	244	462	475	377	419	383	383	475	447
total capital expenditure	156	281	564	765	652	621	611	607	713	576
depreciations	434	490	557	660	652	745	617	499	462	501
impairments	35	299	660	-	-	-	-	-	-	-
shareholder's equity	217	178	184	199	219	200	204	174	158	160
gearing ratio (%)	-	-	87	90	87	88	91	91	93	91
outside capital	4.368	5.458	5.644	5.465	5.309	5.565	5.684	5.146	4.520	5.386

## 9.7 Glossary and reference list

<b>Aquifer</b>	An underground layer of water-bearing permeable rock from which heat can be extracted
<b>CCS</b>	Carbon capture and storage.
<b>Corporate Governance Code (old)</b>	Code of Conduct for Companies listed on the stock exchange.
<b>Corporate Governance Code (new)</b>	The Dutch Corporate Governance Code of the Monitoring Committee.
<b>Consortium</b>	An association or cooperation of a temporary nature, set up by a number of parties to carry out a specific project.
<b>DAGO</b>	Dutch Association of Geothermal Operators
<b>Dinantian</b>	The oldest era of the Carboniferous.
<b>Downstream activities</b>	Sale and transportation of geological resources
<b>DSA</b>	Decommissioning Security Agreement
<b>DSMA</b>	Decommissioning Security & Monitor Agreement
<b>Energy mix</b>	Proportion of energy used in the Netherlands from different sources of energy.
<b>E&amp;P</b>	Exploration and Production.
<b>EZK</b>	Dutch Ministry of Economic Affairs and Climate Policy
<b>Gasgebouw</b>	Public-private cooperation in the Groningen Partnership and GasTerra.
<b>Gas resources</b>	Subsurface gas resources that can be produced.
<b>GE</b>	Groningen equivalent (Nm <sup>3</sup> natural gas with calorific value of 35.17 MJ at 0 degrees Celsius and 101.325 kPa).
<b>Geothermal energy</b>	Thermal energy generated and stored in the earth.
<b>Green Deal</b>	Green Deals are agreements between the national government and other parties. A Green Deal helps to implement sustainable plans.
<b>HR</b>	Human Resources.
<b>ICT</b>	Information and Communication Technologies.
<b>IFRIC</b>	International Financial Reporting Interpretation Committee.
<b>IFRS</b>	International Financial Reporting Standards.
<b>IMS</b>	Integral Management System.
<b>IPO</b>	Interprovincial consultation
<b>IRO</b>	Association of the Industrial Council for Oil and Gas
<b>JIP</b>	Joint Industry Project.
<b>KNMI</b>	Royal Dutch Meteorological Institute
<b>KVGN</b>	Royal Association of Gas Manufacturers in the Netherlands
<b>Maatschap Groningen</b>	Joint venture for managing the production of the Groningen field.
<b>Midstream activities</b>	Transport and storage of geological resources

**Mining Act**

Dutch Act containing regulations governing the exploration, production and storage of minerals.

**MOR+SA**

Additional revenue scheme for Groningen + State share.

**CSR**

Corporate Social Responsibility.

**NAM**

Nederlandse Aardolie Maatschappij (Dutch oil company in which Royal Dutch Shell and Exxon Mobil have equal shares).

**Nm<sup>3</sup>**

Normal cubic metres; the standard unit in which natural gas is measured.

**Nexstep**

National Platform for reuse and decommissioning

**NOGEPA**

Netherlands Oil and Gas Exploration and Production Association.

**NOV management**

Non-operated venture management.

**ONE B.V.**

Oranje-Nassau Energy B.V.

**Operating partner**

See operator.

**Operator**

Party in the production process that carries out production activities on behalf of the partners.

**OvS**

Cooperation Agreement between EBN and licence holder(s)

**Sm<sup>3</sup>**

Standard cubic metre

**SodM**

State Supervision of Mines.

**Policy participation**

Shareholder status of the Dutch State.

**TNO**

Netherlands Organisation for Applied Science TNO.

**Treasury**

Management of a company's cash and cash equivalents.

**Triassic**

The Triassic is a geologic period that lasted from about 252.2 to 201.3 million years ago.

**Upstream activities**

Exploration and production of geological resources

**TWh**

Terawatt hour

**VNG**

Association of Dutch Municipalities

**VPB**

Corporation tax.

**WACC**

Weighted Average Cost of Capital

**Heat exchanger**

Removes the heat from the water and transfers it to the water in a heating network

**Zechstein**

The Zechstein or the Zechstein Group is a unit of rock layers in the substratum of large parts of Western and Central Europe.



### **9.8 Contact information**

Did our annual report get you thinking, raise questions or inspire you? Please do not hesitate to contact us to ask questions or to exchange views.

### **Visiting and postal address**

#### **EBN B.V.**

Daalsesingel 1  
3511 SV Utrecht

Phone: +31 (0)30 2339001

Fax: +31 (0)30 2339051

Email: [ebn.mail@ebn.nl](mailto:ebn.mail@ebn.nl)

