



The shale gas debate in the Netherlands and the role of the independent Netherlands Commission for Environmental Assessment

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In 2011 shale gas appeared to have got a foot in the door in the Netherlands. Without attracting much attention, a few companies acquired licences to start exploring for shale oil and gas. Two years later, however, there was great controversy. Political parties, NGOs and local communities were totally opposed to shale gas exploration. At the moment, shale gas exploration is still being considered. Based on advice by the NCEA, an SEA is being carried out for the shale gas structure vision, in order to investigate the desirability of shale gas in the energy mix and the suitability and availability of locations. This article gives a short overview of the Dutch shale gas debate, events in the past years, and the added value of the NCEA, especially in its role of independent commission in this controversial topic.

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Licences for exploration of shale gas

According to geological surveys, a shale layer extends under about half of the Netherlands at a depth of about 3 kilometres. It is thought that this layer might have the right characteristics for shale oil or gas. In 2009 concessions were granted for shale gas exploration at four different locations in the provinces of Brabant and Flevoland. One company wanted to start a test drilling in the city of Boxtel. Test drillings require a licence from the Ministry of Economic Affairs (which includes energy), but an EIA procedure is not required. Apart from the licence to drill, the municipal government has to issue a licence for the use of her land. These licences were granted, but shortly afterwards, opposition to shale gas began to be voiced.

Moratorium on shale gas

Shale gas was becoming a political problem due to negative press publications on adverse effects (safety and environmental) in America. Approximately half of the political parties in the Netherlands were opposed to it. Several provincial and municipal governments declared themselves “shale gas free”. Large and small NGOs adopted it as their main issue and entire branches of industry (for example the beer and soft drinks industry) were opposed. In mid-2011 the Minister of Economic Affairs decided to postpone all test drillings.

Investigation of “safety”

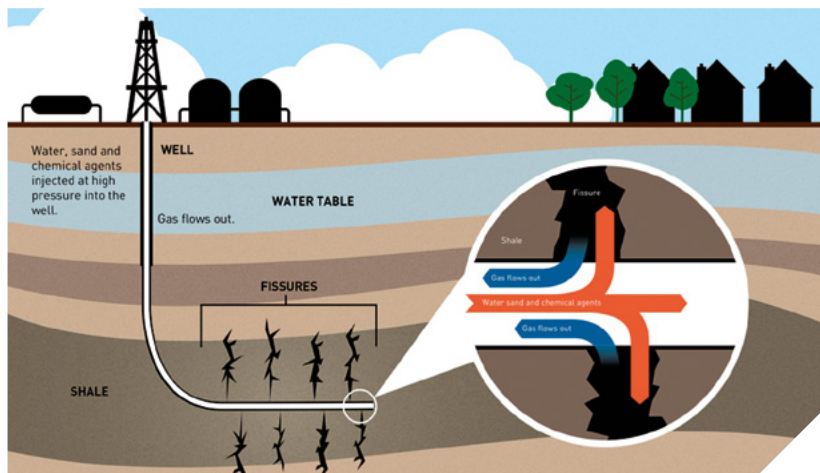
The Minister decided to start a large-scale investigation, with the main question: can shale gas exploration be carried out safely for nature, environment and people? The investigation was carried out by a consortium of engineering and consultancy companies in the form of a desk study and was based on experience abroad. A steering group composed of a mix of proponents and opponents would define the questions that had to be answered and would act as a guidance group.

Shale gas potential in the Netherlands



A diverse mix of opponents of shale gas

Rumours about soil and water pollution resulting from shale gas operations in the United States alarmed people. The film “Wasteland” articulated their fear. An important issue was hydraulic fracturing - “fracking” - the technique that fractures the shale layer and thus liberates the gas, by injecting a mix of water, silica and chemicals under high pressure. Civilians and drinking water companies in the Netherlands were afraid that underground reserves of drinking water might be contaminated. Furthermore, residents near future test drilling



locations were afraid that the operation would be unsafe in general. And last but not least, several NGOs and left-wing

political parties had concerns that the exploitation of shale gas would hamper the transition towards renewable energy.

Even before the first results were published, the consortium was compromised. Although the consortium consisted of established, well-known, large companies, the general public did not believe they could be objective, because the companies involved had done advisory work for oil and gas companies. Even the presence of the guidance group failed to reassure the general public about the objectivity of the study.

At this point the Minister decided to call in the Netherlands Commission for Environmental Assessment (the NCEA). Normally, the NCEA is formally involved later in the process of licensing specific oil and gas projects, and at this stage of decision-making its involvement is not mandatory. But the task at hand fitted like a glove: the NCEA was asked to judge if the study was sound and thus if its findings offered a good basis for decision-making. Most important for the Minister, however, was the fact that the NCEA is known to be an independent authority on environmental issues and as such acknowledged by NGOs and local, provincial and national authorities. Thus, if the NCEA considers the information to be correct, its assessment will probably be accepted by the general public. The debate can then shift to political issues instead of the validity of the information.

Findings of the NCEA on the scope of the study

It took a long time for the first results of the study to be made public. In the meantime, the debate in the

press and social media was continuing and not in favour of shale gas. The NCEA requested to see the draft results of the study, to better understand how the study was being approached. The documents detailing the scope of the study were made available to the NCEA. Unfortunately this did not reassure the NCEA that the study was contributing to the goal of facilitating the public debate. The study was very technical and only partly addressed the concerns felt by the general public. Important information needed for decision-making on shale gas, especially to strike a right balance between conflicting interests, appeared to be lacking. The NCEA decided to present its interim findings, in which it advised on two main points regarding the scope of the study in relation the public debate:

1. Do not forget the above-ground impact of shale gas exploration and exploitation;
2. Do not forget to discuss the need for shale gas: its position in the “energy mix” and the balance between environmental impacts and benefits.

The results of the study

The study was finally made public. A lot of basic information on the subsurface risks was made available. The NCEA endorsed the general conclusion that shale gas operations can be performed without exceptional risks, as long as the operators use state of the art techniques and operate within the legal constraints applying in the Netherlands.

However, as the NCEA had feared in its interim findings, the scope of the study was considered too narrow (see box) and the opponents were not placated.

In its final advice the NCEA stressed the following point: on the basis of this information it is not possible to declare shale gas exploration “safe” and merely continue permitting specific projects. The NCEA advised the Minister to take an intermediate step. It advised preparing a “structure vision” with a strategic environmental assessment (SEA) to investigate and discuss thoroughly whether shale gas is useful and desirable in the Netherlands and, if so, where exploration and exploitation can be done safely and under which conditions. The Minister was convinced and accepted the advice.

SEA for structure vision

In September 2014, the NCEA issued its advice on the Terms of Reference for the SEA*. It focused on the questions of desirability and siting. To decide on whether shale gas exploration is desirable, attention needs to be paid to issues such as the balance between economic and environmental aspects at regional, national and – where relevant – international level. To decide on the locations, the SEA report needs to provide, among other things, a well-argued set of criteria which will lead to the exclusion of areas (e.g. nature conservation areas and urban areas).

The research for the policy document and the SEA report is currently in progress. Preliminary results are expected in the summer of 2015. Thereafter the NCEA will review the SEA report and advise on the quality of its content.

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* www.commissiener.nl/english/advice/projectexamples

The NCEA’s findings on the scope of the safety investigation study

Quality of environment at the surface

The study concentrated on the impacts on the subsurface, such as earthquakes and pollution of groundwater. These are important issues, but to be able to balance the interests of economics, environment, heritage, and nature, other information is also essential. The NCEA advised that the quality of the environment and living conditions in towns and villages and other impacts on the surface should be part of the study.

Spatial planning

As the shale layer extends under about half of the Netherlands it is important to reflect on where exploitation can be permitted. Anywhere? Or should there be restrictions for residential areas and protected areas (nature reserves and drinking water catchment areas)?

Usefulness and necessity of shale gas

The study was very technical. The general public are not only solely concerned about technical issues, but also about the position that shale gas and fossil energy in general should have in the Netherlands. In order to assuage these concerns, and to secure the support of the general public, the NCEA advised that the usefulness and necessity of shale gas should be investigated.

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