



This project is funded by the Horizon 2020 program of the European Union, grant agreement nr. 640715

 › [TNO Insights](#) › Shale gas: what are the ef...

DOSSIER

SHALE GAS: WHAT ARE THE EFFECTS ON PEOPLE AND THE ENVIRONMENT?

1 June 2015 • 1 min reading time

On 1 June 2015, within the framework of the Horizon 2020 research programme, the European Commission has sanctioned the start of one of the first major European studies into the effects of shale gas production on people and the environment. TNO is coordinating the work of a consortium of eighteen research institutes from ten European countries in the project M4ShaleGas ('Measuring, monitoring, mitigating, managing the environmental impact of shale gas').

The research questions include:

- What impact does shale gas extraction have on the subsurface?
- What effects do above-ground activities and installations have on the landscape and groundwater?
- Which consequences do greenhouse gas emissions have on the quality of air?
- How does knowledge on shale gas extraction contribute to the public debate?

RESEARCH SHALE GAS EXTRACTION PROCESS

All components of the shale gas extraction process are subject to risks analysis and risk reduction. In the M4ShaleGas project all research institutes collaborate, collect the best practices from the United States, and run experiments to detect the behaviour of the European shale sedimentary rocks. In addition, models are developed to predict the impact of fracking

methods and measurements are designed to reduce the risk of environmental damage.

CONSORTIUM PARTNERS

The consortium partners are independent research institutes that provide the necessary scientific knowledge which will help the European Commission in drawing up policy on shale gas production in Europe. For data of existing shale gas activities abroad input is requested from current operators. An industry panel ensures that experiences of companies are shared with the consortium. The consortium does not interfere in the political and social discussion on utility and necessity of shale gas extraction, but can provide factual information.

Best practices from the Netherlands are also collected in the project and experiments conducted to find out the behaviour of European shale sedimentary rock.

Search within TNO Insights



TNO UPDATES

WOULD YOU LIKE TO BE KEPT INFORMED OF INTERESTING NEW ITEMS?

SUBSCRIBE)

CONTACT



DR. JAN TER HEEGE

- SHALE GAS
- GEOTHERMAL ENERGY

- **GEOMECHANICS**
- **ROCK PHYSICS**
- **GREEN ISLAND INDUSTRIES**

📍 Location Utrecht

☎ +31 6 52 77 91 24

in LinkedIn ↗

EMAIL



RELATED ARTICLES

FUTURE VIEW



Capacity
building

GEO-ERA: BASIS FOR TRANSNATIONAL GEOLOGICAL RESEARCH

15 FEB '17 - 4 MIN

Until now, geological information about the European subsurface has mostly remained confined to the Geological Survey Organizations of individual European countries....

[› Read more](#)



THIS IS HOW COOLING VEGETABLES WITH HOT AIR WORKS

1 JUN '15 - 2 MIN

Vegetables harvested in the hot climate of India quickly lose their freshness. To change this, TNO developed a cheap, economical and clean cooling system that operates...

[› Read more](#)

FOLLOW TNO ON SOCIAL MEDIA

Stay up to date with our latest news, activities and vacancies



LINKEDIN FACEBOOK RECRUITMENT TNO RESEARCH YOUTUBE INSTAGRAM