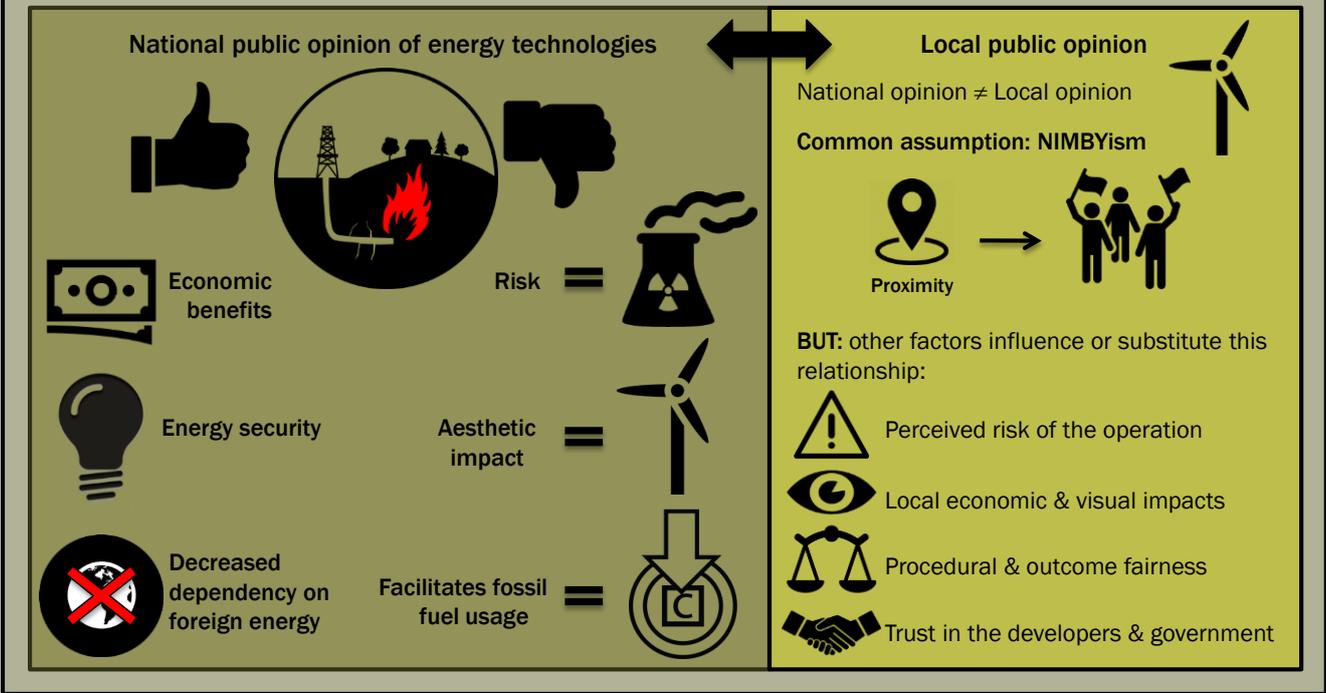


Public opinion of a desirable energy future for their country

Shale gas is one of the least preferred strategies for the reduction of CO₂ emissions, together with nuclear energy and carbon capture and storage (CCS).



Background

The European Commission's Energy Roadmap 2050 identifies natural gas as a replacement for coal and oil in the short- and medium-term and as a critical energy source for the transformation of the energy system to a system with lower CO₂ emissions with increasing contributions from renewable energy and increased energy efficiency. However, in the near future public opinion in Europe is unlikely to become more supportive of shale gas. At best, shale gas will reluctantly be accepted as a necessity. It is therefore vital that those who seek to develop shale gas technology in Europe have access to state of the art knowledge about public perceptions and engagement, and about techniques for the reliable measurement and monitoring of the public opinion.

Study

We reviewed research on public perceptions of shale gas, as well as three large-scale technologies with technical and spatial similarities to shale gas: nuclear energy, (onshore) wind energy, and carbon capture and storage (CCS): risk, visual impact, and continuation of unsustainable practices associated with fossil fuels.

We identified the main factors shaping general versus local public opinions, addressed their different nature, and the issue of measuring both, which requires different techniques.

We provided recommendations for public perceptions research and public engagement efforts related to shale gas development in Europe.

Results

Values and world views play a major role in what people see as a desirable energy future for their country. In the context of energy systems, relevant societal values include long-term improvement, efficiency, security, health, reliability, transparency, social justice, and fairness.

Shale gas, CCS, and nuclear energy have in common that respondents to national representative research in the context of climate and energy systems change generally regard these technologies as the least preferred strategies for the reduction of CO₂ emissions.

The relation between attitude towards a project and proximity to the project site is explained by other factors than NIMBYism.

Science-based Recommendations

Acceptability of Shale Gas in Europe

It may be possible for shale gas to fit with people's value systems as a transition technology, but only if it can be shown to contribute to ending the fossil fuel era by softening negative impacts of a swift energy transition. To foster public acceptability of the vision as stated in the European Commission's Energy Roadmap, the most important question to be discussed at European and Member State level appears to be:

What checks and balances are in place to guarantee that shale gas exploitation will be a temporary activity that will not be continued longer than strictly necessary?

Public perceptions research

Measuring uninformed, as well as informed opinions, can be useful, but only with appropriate public opinion research methods. Always seek academic expertise.

A major advantage of methods for informed public opinion measurement is that such methods may also serve as public engagement tools to discuss shale gas in the context of climate change, energy transition, and alternative technologies. Though not necessarily more pro-shale gas, discussions following such a method are likely to be more nuanced and views tend to be less polarized than in traditional public meetings, enabling a more rationalized and balanced discussion about shale gas.

Measuring local public perceptions requires an entirely different approach than measuring national public perceptions. Social Site Characterisation offers a method to inform and enable early public engagement, without raising unnecessary concerns.

Public engagement efforts

The following lessons can be learned from literature on public engagement:

- Put stakeholder relations first – talk process, not project.
- Be honest and explicit about the goals of public engagement. Do not overpromise. There is no way to guarantee that political decisions will follow the logic or the recommendations of a public engagement process.
- Fit the methods for public engagement to the goals. Do not use formats that will make citizens feel listened to, involved, and empowered, if you do not plan to grant them any of these things.
- Define key milestones and evaluation moments during the engagement process.

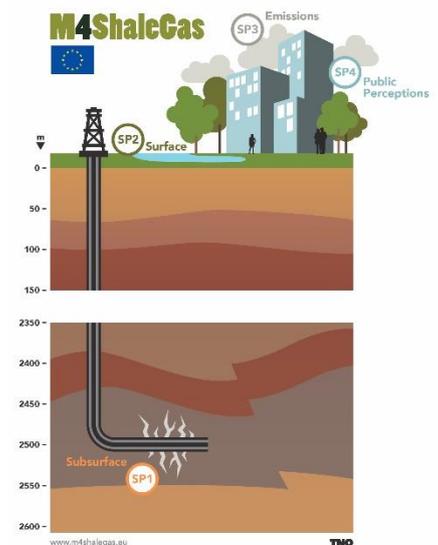
To enable structural improvement based on previous experiences, there is a need for a common normative framework for evaluation of public engagement efforts.

Little attention has been given to implementing organisations of public engagement efforts, particularly how their internal institutional dynamics, organisational practice, characteristics, competences and resources affect the resulting engagement and communication strategy. Improving the process of public engagement requires a better understanding of these issues, as well as of current limitations of public engagement toolkits as identified by implementing organisations:

- Mechanisms for negotiation and cost-benefit sharing
- How to conduct early community involvement
- How to handle conflict escalation

The Project

M4ShaleGas examines the potential environmental impacts and risks related to **shale gas** exploration and exploitation in Europe with the goal to build a technical and social knowledge base on best practices and innovative approaches for **measuring, monitoring, mitigating, and managing** these impacts.



4 sub-programs:

- SP1-subsurface
- SP2-surface
- SP3-air emissions
- SP4-public perceptions

Funding:

The project that has received funding by the European Union's Horizon 2020 research and innovation programme under grant agreement number 640715.

Horizon 2020 Topic LCE-16-2014:

Understanding, preventing and mitigating the potential environmental impacts and risks of shale gas exploration and exploitation.

Project duration:

1 June 2015 – 30 November 2017

Coordination:

TNO



The content of this factsheet reflects only the authors' view. The *Innovation and Networks Executive Agency (INEA)* or *TNO* is not responsible for any use that may be made of the information it contains.