Public perceptions review (2011-2015): findings
- Polish society generally enthusiastic about shale gas
- German society generally opposed to shale gas
- In the UK many remain undecided
- In the Netherlands high acceptance for test drilling and high opposition against shale gas exploitation
- Fear of water pollution and seismic activity
- Hope for economic gains and energy security

Public perceptions of shale gas in Poland, Germany, the United Kingdom and the Netherlands

Public perceptions review (2015-2017): findings
- Large number of social science studies on shale gas development in all four countries
- Public debate in Poland phases out
- Public debate shift towards renewable energy sources in Germany and the Netherlands
- Public debate on shale gas in the UK has gained momentum
- Fear of water pollution and seismic activity
- Hope for economic gains and energy security

Social License to Operate: findings
- SLO present in the UK debates on shale gas
- SLO as a useful device for negotiating what environmental and energy justice involve
- SLO can be a tool for community empowerment
- A shared understanding of SLO should be worked out by industry together with communities and other stakeholders
- SLO is based on trust, obtained through interactions and never once and for good

Background
To understand the potential for shale gas development in Europe, one needs to account for differences in public perceptions of fracking in various EU Member States. Concerns and expectations related to shale gas exploration and production are unevenly distributed across EU countries. While some countries expect economic gains and a positive impact on their country's energy security, others take a more cautious approach and highlight environmental and health risks. Shale gas basins are unevenly distributed among the European Member States and are not restricted within national borders which makes close cooperation between the involved Member States essential. As the European continent is densely populated, it is most certainly of vital importance to include both technical risks and risks as perceived by the public.

Study
The first report presents public perceptions of shale gas in Poland, the UK, Germany and the Netherlands. The third report is an update review for years 2015-2017. They share a similar structure. The first part offers an overview of the current literature available on public perceptions of shale gas and on social aspects of development. The following section focuses on opinion polls and survey studies on public attitudes. The third part deals with positions on shale gas extraction of main stakeholders (industry, ENGO’s and citizens’ associations, experts, governments and political parties) and provides a review of communication activities. The last section reviews EU-level data on public attitudes. The second report elaborates on the concept of a Social License to Operate (SLO) and its applicability to shale gas exploration in the EU. It features an overview of the concept’s origins, current interpretations, and its relation to other concepts, such as corporate social responsibility and environmental or energy justice.

Results
Surveys and opinion polls between 2011 and 2015 show that proportion of supporters and opponents of shale gas varies across the case study states. Even though the number of academic publications dealing with public perceptions of unconventional gas production in the EU has increased between 2015 and 2017, the general controversy surrounding shale gas in the EU seems to have cooled down in the last two to three years. In both the Netherlands and Germany, the topic is unlikely be on the political agenda for the next few years, until the present bans and restrictions of hydraulic fracturing activities will be revisited again. In Poland, shale gas exploration has all but stopped. The only exception is the UK, England in particular, where shale gas exploration is going ahead. In light of UK leaving the EU in the foreseeable future, the current status of shale gas development in the EU suggests that there will be no shale gas exploration in the EU by 2020. The SLO as a concept faces criticism due to the relative vagueness of the term. This vagueness can be an advantage as it allows SLO to function as a useful device for different actors to fill it with the content that is most important to them, e.g. procedural justice, ecological issues. The concept is mainly operationalized from an industry standpoint. But SLO is also suitable for communities as a procedural bottom-up tool.
Recommendations 1: perceptions

- There are a number of important differences between the four-case study EU Member States, and our reviews are not a substitute for further research in Europe.
- Communication and engagement activities should be organized at various scales: the local scale is as important as the national scale as communities experience environmental and social costs most directly.
- We found many studies that apply media analysis, a mix of approaches with a strong focus on quantitative surveys and qualitative interviews. Future work might consider techniques such as deliberative workshops or ethnographic approaches, which can offer more insight into co-produced meanings, complex and contingent judgements.
- The continually shifting shale landscape, including oil and gas price fluctuations, political change, and growing evidence of negative environmental impacts, mean that research should continue to chart public perceptions and acceptability.

Recommendations 2: engagement

- The SLO should be implemented as a framework to empower local communities.
- In order to better benefit from the concept of SLO, the industry should arrive at a shared understanding of the concept of the SLO together with other stakeholders and establish common procedures for building trust and social capital.
- The SLO should be built with the long-term perspective of maintaining relations of trust with local and national publics.
- Social and political aspects of shale gas development in Europe influence conditions of the industry in Europe and its potential to develop and for this reason, the voice of various stakeholders should not be neglected.
- Projects in the EU that address shale gas development or other controversial technologies for resource exploration should involve social science research in order to understand better the underlying social and political challenges.

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

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Coordination:
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