

ROADMAP			
TITLE OF THE INITIATIVE	Report on the effectiveness of Commission Recommendation 2014/70/EU laying down minimum principles for the exploration and production of hydrocarbons (such as shale gas) using high-volume hydraulic fracturing		
LEAD DG – RESPONSIBLE UNIT	DG ENV.F.1	DATE OF ROADMAP	08/ 2015
This indicative roadmap is provided for information purposes only and is subject to change. It does not prejudice the final decision of the Commission on whether this initiative will be pursued or on its final content and structure.			

A. Context and problem definition

(1) What is the political context of the initiative?
(2) How does it relate to past and possible future initiatives, and to other EU policies?
(3) What ex-post analysis of existing policy has been carried out? What results are relevant for this initiative?
<p>The Commission adopted in January 2014 a Communication and a Recommendation on the exploration and production of hydrocarbons (such as shale gas) using high-volume hydraulic fracturing ("the Recommendation"). This Recommendation complements existing EU legislation that applies to shale gas activities; such legislation was developed at a time when high volume hydraulic fracturing was not used in Europe. The Recommendation sets minimum principles for strategic environmental assessments and planning, underground risk assessment, well integrity, baseline reporting and operational monitoring, capture of methane emissions, and disclosure of chemicals used for the fracturing of each well.</p> <p>Member States having chosen to explore or exploit unconventional hydrocarbons such as shale gas were invited to give effect to the Recommendation by 28 July 2014. According to the Recommendation, the Commission will review the Recommendation's effectiveness 18 months after its publication, i.e. from August 2015. The review will include an assessment of the Recommendation's application, will consider the progress of the information exchange on best available techniques and the application of relevant BAT reference documents, as well as any need for updating the Recommendation's provisions. Furthermore, an updating of the Recommendation or the development of legally binding provisions may be necessary in view of technical progress, the need to address risks and impacts of exploration and production of hydrocarbons other than high volume hydraulic fracturing (especially in order to assess the effectiveness of the scope of the Recommendation taking into account risks and impacts of projects covered by the Recommendation compared to other hydrocarbon exploration and production projects), unexpected challenges in the application of EU legislation or exploration and production of hydrocarbons using high volume hydraulic fracturing in offshore operations. The Commission will decide whether it is necessary to put forward legislative proposals with legally-binding provisions on the exploration and production of hydrocarbons using high volume hydraulic fracturing.</p>
What are the main problems which this initiative will address?
<p>This report is a follow-up of the 2013 Commission Work Programme item "Environmental assessment framework to enable a safe and secure unconventional hydrocarbon (e.g. shale gas) extraction" ("the environmental assessment framework"). This assessment framework aimed to :</p> <ul style="list-style-type: none"> - ensure that environmental risks arising from individual projects and cumulative developments are adequately identified and managed including, where possible, in relation to policy aims such as climate change mitigation and the protection of human health. - help establish a common approach across the EU by providing maximum clarity, coherence and certainty to market operators who wish to invest in unconventional hydrocarbons developments across the EU under comparable and coherent regulatory conditions.
Who will be affected by it?
<p>The outcome of the review presented in the report cannot be foreseen at this stage, but given the original goals aimed to protect the health of the general public and the state of the natural environment, those potentially affected are widespread. Member States, EEA governments and the energy sector operating in Europe could also be affected, to the extent that long-term clarity and predictability (i.e. business certainty for the relevant sectors) would be provided and to the extent that the review enhances transparency as to the effects of the operations concerned, public knowledge would also be improved.</p>
Is EU action justified on grounds of subsidiarity? Why can Member States not achieve the objectives of the proposed action sufficiently by themselves? Can the EU achieve the objectives better?
EU action in this domain is justified, because impacts can be not only local and regional but also have cross-

cutting, transboundary environmental implications: impacts on surface and groundwater, as well as on air quality tend to extend beyond national borders, such that impacts in one country can give rise to, or exacerbate pollution problems in neighbouring countries.

B. Objectives of the initiative

What are the main policy objectives?

The objective of the review of this initiative is to assess whether the Recommendation on the exploration and production of hydrocarbons using high volume hydraulic fracturing, complementing the current legislative framework consisting of existing Union environmental legislation, remains appropriate and sufficient for the safe and secure development of such hydrocarbons and for providing predictability and information for citizens, the business certainty and regulatory environment that allows operators to progress, and which equips the public authorities with sufficient control and redress, should that become necessary.

Do the objectives imply developing EU policy in new areas?

No; but given that hydrocarbons exploration or production involving the use of (high-volume) fracturing such as shale gas is still an emerging topic in Europe, the review may or may not conclude that further action is warranted.

C. Options

- (1) What are the policy options (including exemptions/adapted regimes e.g. for SMEs) being considered?
- (2) What legislative or 'soft law' instruments could be considered?
- (3) How do the options respect the proportionality principle?

The review will assess the Recommendation's application and effectiveness. In doing so, it could come to a range of conclusions which may or may not require follow-up, which could include the following:

- No EU wide principles on high-volume hydraulic fracturing are needed, hence the Recommendation should be repealed
- A conclusive assessment of the Recommendation is not possible at the moment since there is not sufficient experience with its application available yet
- The Recommendation is effective, no further action is needed,
- Further action is needed, which could be addressed by a range of policy options:
 - Guidance note on the application of the EU environmental legislation to hydrocarbons using fracturing,
 - New Recommendation introducing additional or more precise provisions and/or adjusting its scope, based on the experience of MS with the application of the existing Recommendation, as well as any technical developments,
 - Directive focusing on transparency and predictability of hydrocarbon development (collection and dissemination of baseline information, monitoring results, information on substances used, permitting arrangements),
 - Framework Directive on the risk management of hydrocarbons, including legally binding overarching objectives,
 - Directive or Regulation setting specific provisions on the risk management of hydrocarbons and linked issues.

These policy options are only indicative. Any follow-up initiative likely to have a significant impact would require a new Roadmap.

D. Initial assessment of impacts

What are the benefits and costs of each of the policy options?

Should the report conclude that further action is needed, and if the follow-up initiative is likely to have a significant impact, options would be outlined in a new Roadmap and assessed for their enforceability, timeliness of implementation and expected effectiveness in

- preventing, managing and reducing environmental impacts and risks;

- providing legal certainty and predictability to competent authorities and operators;
- responding to public concerns.

The Impact Assessment (IA) prepared for the Recommendation provides an illustrative example of the typical costs of policy options: In the case of shale gas production, the annualised compliance costs of operators to meet the requirements of legally binding instruments are in the range of 1.4% to 1.6% of expected annual revenues. Compliance costs for non-binding instruments depend on the level of uptake of such instruments by Member States, i.e. no costs incurred in case of total absence of uptake and costs comparable to those of a legally binding instrument in case of full uptake. Data on compliance costs for other unconventional fuels (tight gas and tight oil, coal bed methane) would have to be developed in the course of a new IA, should this be deemed necessary in view of the outcome of the review process. Administrative costs for Member States depend on current permitting practice. Integrated permitting may lower administrative costs compared to current practice in some Member States.

Depending on the outcome of the review process that may conclude to propose further action (which may require the development of a new IA), the benefits of corresponding policy options would be to avoid costs resulting from negative impacts on public health and costs for remedial actions. This would be further detailed in the Roadmap for such a possible new initiative, should the latter be likely to have a significant impact.

Could any or all of the options have significant impacts on (i) simplification, (ii) administrative burden and (iii) on relations with other countries, (iv) implementation arrangements? And (v) could any be difficult to transpose for certain Member States?

Simplification and administrative burden: The objective of possible further action would be to identify the pathway that provides the necessary protection of the natural environment and human health, while enabling the relevant economic operators to conduct operations against a background of regulatory certainty, while also providing the public authorities in the Member States with the mechanisms to address all foreseeable eventualities in a manner that ensures a level playing field for the industry across the EU.

No impacts on third countries are expected other than providing a basis for enhanced cooperation on risk management measures of mutual benefit, or facilitating the adoption of similar risk management measures by other jurisdictions, e.g. the EU/EEA's 'neighbourhood'. Any possible reinforcement of environmental safeguards in the area of shale gas could translate itself into common principles, e.g. in the EU/US context.

No transposition difficulties can be anticipated at this stage.

- (1) Will an IA be carried out for this initiative and/or possible follow-up initiatives?
- (2) When will the IA work start?
- (3) When will you set up the IA Steering Group and how often will it meet?
- (4) What DGs will be invited?

Depending on the outcome of the review process, the report may conclude that further action is needed. Any follow-up initiative likely to have a significant impact would be described in an additional Roadmap and subject to an Impact Assessment (IA). The IA work would then start after the adoption of the review report. In that case, the IA steering group that supported the environmental assessment framework could be reconvened: ENER, CLIMA, GROW, TRADE, MARE, SANTE, JRC, TAXUD, EEAS, REGIO, EMPL, SG, RTD, AGRI, ECFIN.

- (1) Is any option likely to have impacts on the EU budget above €5m?
- (2) If so, will this IA serve also as an ex-ante evaluation, as required by the Financial Regulation? If not, provide information about the timing of the ex-ante evaluation.

No impacts for the EU budget are foreseen at this stage.

E. Evidence base, planning of further work and consultation

- (1) What information and data are already available? Will existing IA and evaluation work be used?
- (2) What further information needs to be gathered, how will this be done (e.g. internally or by an external contractor), and by when?
- (3) What is the timing for the procurement process & the contract for any external contracts that you are planning (e.g. for analytical studies, information gathering, etc.)?
- (4) Is any particular communication or information activity foreseen? If so, what, and by when?

(1) The work will take into account information gathered during the development of the environmental assessment framework.

(2) The Commission launched a study on the application of the Recommendation in relevant Member States. The overall objective of this study is to support the Commission in the monitoring of the implementation of the

Recommendation as well as of the EU legislation applicable to hydrocarbons exploration and production activities in the EU that may involve the use of high volume hydraulic fracturing. The study will take into account the information provided by Member States about the measures they had put in place in response to this Recommendation up to December 2014. Studies have also been initiated on the management of environmental impacts and risks from tight gas, tight oil and coal bed methane as well as from conventional hydrocarbons, all of which will provide complementary technical information. Progress with the review of the Best Available Techniques Reference document (BREF) on the management of waste from extractive industries and the development of a BREF on hydrocarbons exploration and production as well as the progress of the European Science and Technology Network on Unconventional Hydrocarbon Extraction will also be taken into account.

(3) No further procurements planned at this stage.

(4) The Commission published the responses of Member States on the application of the Recommendation in February 2015.

Which stakeholders & experts have been or will be consulted, how, and at what stage?

Stakeholders and experts will be consulted as part of the study on the application of the Recommendation in relevant Member States. The study contractor will collect views of relevant stakeholders' groups on the effectiveness of the approach chosen at EU level to regulate activities that may use high volume hydraulic fracturing, including collecting stakeholders' views on the implementation of the dissemination of information to the public. All relevant stakeholder groups (e.g oil and gas industry, water and waste management industry, chemicals industry, non-governmental organisations, labour unions, scientific community) will be targeted in a balanced manner. Member States will also be kept informed on the progress with the review, as part of the existing Technical Working Group of Member States on environmental aspects of unconventional fossil fuels. A Eurobarometer survey of public opinion has been conducted in relevant regions. A stakeholder event took place on 29th June 2015 and collected views and evidence from the main stakeholder groups (industry, non-governmental organizations, labour unions, scientific community) on the effectiveness of the current Commission policy approach to unconventional fossil fuels such as shale gas.