

CSR SECTOR POLICY - Shale oil and gas – January 2022

1. Scope of the Policy

The present policy (the Policy) defines the involvement criteria applicable to financings and investments activities and more broadly involvements of the Bank (including advisory and intermediation services) relating to clients active in the sector of extraction of shale oil and shale gas, but generating less than 30% of their activity in this sector.

The Policy applies from the date it is published. Are excluded pre-existing activities in this sector, including commitments already made or business opportunities which are already at an advanced stage of negotiation.

The Policy will be updated from time to time.

2. Sector issues and objectives of the Policy

Natural gas is generally regarded as a transitional energy source and oil is expected to continue contributing to the global energy mix in the forthcoming years including in scenarios aiming to achieve internationally agreed objectives on climate change, air quality and universal access to modern energy¹. Once produced, shale gas and shale oil do not differ from natural gas or oil.

Shale oil and gas have been extracted for many years in the United States which are considered by the Policy to be the reference country for this activity². Extraction of shale oil and gas differ from conventional oil and natural gas reservoirs mainly in level of recourse to hydraulic fracturing that is more significant. Acquired experience confirms that the extraction of shale oil and gas results notably in environmental impacts or risks similar in nature or magnitude to impacts and risks inherent to the oil industry, with a higher sensitivity on water management and induced methane leakage. It is therefore key that this activity is conducted under best practice by experienced companies. Also, strict regulation is a necessary condition. The carbon intensity of the shale oil or gas production of the best North American players places them among the best performers worldwide.

On the other hand, satisfactory development of the extraction of shale oil and gas comes up against a lack of experience from potential operators and local administrations in other parts of the world. And due notably to chemical additives used for and waste water generated by hydraulic fracturing, potential mistakes may have severe environmental consequences such as: induced pollution of the water, the land or the air that may result, in case of a major accident, into social or biodiversity impacts. Therefore, potential impact on groundwater is a legitimate concern for local populations in particular in areas where experience is missing. The tight mesh size of wells may also be regarded as incompatible with highly populated lands or significant natural or cultural heritage sites.

Some surveys³ have questioned the estimation of fugitive emissions of methane, thus creating a controversy regarding the development of shale gas as a potential transitional energy source. However, some recent surveys⁴ indicate that gas is preferable from a climate perspective to other fossil fuels such as coal, provided fugitive emissions can be maintained below 3% of total gas production. Therefore,

 ¹ Cf. the Sustainable Development Scenario (SDS) of the International Energy Agency. <u>http://www.iea.org/weo/</u>
 ² In 2020, the share of shale gas and shale oil was close to respectively 80% and 2/3 of the total US Production.
 ³ Cf. <u>Methane and the Greenhouse-Gas Footprint of Natural Gas from Shale Formations</u>. Cornell University, 2011.

⁴ Cf. <u>Greater focus needed on methane leakage from natural gas infrastructure</u>. RA Alvarez, SW Pacala, JJ Winebrake, WL Chamides and SP Hamburg. Proceeding of the National Academy of Science, 2012

while the current rate is generally estimated to be below this level⁵, it appears important that methane emissions are reduced as much as possible. Consequently, some industry stakeholders have launched initiatives to tackle this issue, such as the ONE Future coalition in the United States, which has set the objective for its members to achieve a global emission rate below 1% by 2025.

The Policy comes as a supplement to the rules set by public energy policies and the investment policies of the Bank's clients and is not intended to replace them. It seeks to state the CSR⁶ analysis criteria and requirements of the Bank in the shale oil & gas sector according to the identified societal issues.

3. Reference frame

In appraising shale oil and gas financings and investments opportunities, the bank will be guided by the standards resulting from the following conventions, initiatives or sources of reference:

- National and European regulations, and international or regional conventions relating to greenhouse gas emissions,
- National strategies and regulations that will be adopted by States regarding the extraction of shale oil and gas,
- The United Nations Framework Convention on Climate Change and the related protocols and agreements,
- The IFC Performance Standards and Environment Health and Safety Guidelines,
- The International Energy Agency,
- The Natural Gas STAR Program,
- The ONE Future coalition,
- The American Petroleum Institute's (API) "Environmental Partnership".

4. Analysis criteria

The Bank will not develop relationship with clients that generate more than 30% of their activity in the extraction of shale oil and/or gas. The below analysis criteria apply to financings, investments and more generally involvement of the Bank with clients active in shale oil and gas, but generating less than 30% of their activity in this sector.

The issues relating to the shale oil & gas extraction sector lead Crédit Agricole CIB to adopt a cautious stand and restrict its involvement to clients that have at a minimum the following characteristics:

- The client or its contractor(s) should be experienced oil and gas operator(s), should have a good environmental track record, should preferably have experience in a same or similar area/geology, and should be experienced in hydraulic fracturing. Such experience may be organic or through reliance on an experienced sub-contractor.
- A regulation consistent with the reference frame should exist in the country where the operation is located, country referred to as the host country, (or, if missing, the client should commit to voluntary meet the regulation of a reference country in terms of shale oil and gas)
- Emission reduction strategies should be consistent with the objective of national or international initiatives intended to limit methane emissions (such as the ONE Future coalition)⁷. In particular, it should include adherence to all existing rules and regulations, the use of green completions, the installation of equipment designed to minimize emissions (vapor-recovery units, replacing high-bleed pneumatic controllers, etc.), and a leak detection and maintenance program designed to minimize and reduce methane emissions.
- Policy to ensure that a sufficient distance⁸ exists between where hydraulic fracturing occurs and water tables in order to avoid any contamination of groundwater by migration of chemical additives and waste water
- The primary source of water used should be known to the client and, independently of the respect of local regulations and of their monitoring, the client should commit that waste water will be treated according to a plan acceptable for the Bank, and more broadly to adhere to best industry practices (as defined in reference countries for shale oil and gas) to minimise environmental risks.
- Policy to ensure that this activity is consistent with the location of the project including but not limited to conditions imposed under UNESCO World Heritage list, Ramsar convention and Alliance for Zero Extinction.
- Policy of consultation of the local populations.⁹

⁶ Corporate Social Responsibility

⁵ For information on methane emissions in the United States, cf. Inventory of Greenhouse Gas Emissions. US Environmental Protection Agency and Anthropogenic Methane Emissions in the United States. The National Academies of Sciences Engineering Medicine. 2018.

⁷ Policy regarding flaring is covered by the CSR sector policy for oil and gas.

⁸ A minimal distance of 300 meters will be considered as good practice

⁹ IFC Performance Standards will be considered as good practice.

From an operational standpoint, the following aspects will be taken into consideration when assessing a client active in the sector of shale oil and gas extraction:

- regulation applying to greenhouse gas emissions in the host country including regulation to be enforced in a reasonable future (trading of emission certificates, carbon capture, offset,...),
- whether a regulation framework exists in the host country with respect to the shale oil and gas
 activity that is consistent with the reference frame including with respect to the rules in place in
 reference countries,
- policy of management of potential impacts from wells including risks of polluting the groundwater (quality of cementing of wells),
- policy of management of potential impacts specific to hydraulic fracturing including in relation to the use of chemical additives,
- whether the primary source of water is known to the client and the scope and quality of the monitoring by the appropriate regulatory authorities,
- policy of waste water treatment,
- management of nuisances to the public and landscape impacts,
- environmental legacy from past operations,
- efforts undertaken to limit methane emissions. Being a member of the "Natural Gas STAR Program", "ONE Future", the API's "Environmental Partnership", or other organizations that encourage best industry practices for reducing methane emissions and the setting of methane emission reduction targets will be regarded as a positive indication in this respect,
- more generally, a commitment from clients to reduce emissions on the scopes 1 and 2 will be considered as an important point.

5. Exclusion criteria

The Bank excludes any project financing or advisory mandate directly linked to the development, the construction or the extension of installation related to shale oil or gas extraction.

6. Implementation

The Policy will be communicated to the client.

The Bank expects its clients to adopt good practices and behaviour to limit social and environmental impacts in line with section 4 of this Policy. In particular, the Bank will not develop relationship with companies that generate more than 30% of their activity in the extraction of shale oil and/or gas. However, when the client is involved in the activity of shale oil and/or gas extraction, the above analysis criteria will be taken into account when assessing the positioning of the Bank vis-à-vis the client. Past developments and potential plans for improvement would be taken into account. The exclusion criteria will be assessed against the current project(s) of the client within the frame of the usual exchange of information with the client. The regular reviews of the relationship with the client will address an update of the compliance of the client with the principles of the present Policy.

The Bank will not participate to any envisaged financing or investment when the outcome of the general assessment is negative. Any potential exceptional situations will be handled in accordance to section 7 below.

Where the transaction is an advisory mandate not directly linked to the development, the construction or the extension of installation related to shale oil or gas extraction, the Bank will seek to promote the principles included in this Policy. The Bank will not enter into an advisory mandate when aware at the date of the mandate that the envisaged project exhibits an exclusion criterion.

7. Exceptions

Transactions that present uncertainty with respect to compliance with the Policy shall be referred to the CERES committee for recommendation. If the committee considers that the transaction does not conform to the Policy, such transaction will be subject to a final arbitration by the General management of Crédit Agricole CIB.

8. References and glossary

Reference countries: to date, the United States are considered as reference country.

Wetlands of international importance covered by the Ramsar Convention: <u>https://www.ramsar.org/sites/default/files/documents/library/sitelist.pdf</u>

Site listed on the UNESCO World Heritage list: http://whc.unesco.org/en/list/

Alliance for Zero Extinction: https://zeroextinction.org/

Natural Gas STAR Program: https://www.epa.gov/natural-gas-star-program

One Future coalition: <u>https://onefuture.us/</u>

API's Environmental Partnership: https://theenvironmentalpartnership.org/