



## **Environmental Pillar Policy on**

# Shale Gas, Shale Oil, Coal Bed Methane and 'Fracking'

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The Environmental Pillar has grave concerns about hydraulic fracturing (fracking) of shale gas, shale oil, and coal bed methane (CBM) in Ireland. In particular, because of its impacts in the following areas:

- Climate: there is no scientific agreement that unconventional gas (such as shale and CBM) will have significantly lower total greenhouse gas emissions compared to other conventional fossil fuels (e.g. coal);
- Energy: development of shale gas and CBM will be at the expense of cheaper and safer policies to save energy and speed up the transition to renewable energy and the reduction of greenhouse gas emissions;
- Water pollution: fracking could cause the contamination of surface and groundwater (including drinking water) with toxic chemicals used in fracking fluids,<sup>1</sup> and increasing the concentration in such water of methane and hazardous and radioactive materials that naturally occur in shale and coal;
- Water use: fracking involves pumping vast amounts of freshwater underground, much of which becomes irretrievable and / or contaminated; because vast quantities of fresh water are required in fracking operations, this will create significant social and environmental pressures at least at a local and regional level, and particularly in regions suffering from water scarcity;
- Air pollution: Unconventional gas drilling/operations produces soot and smog precursors, particulate matter, methane and natural gas;
- **Soil pollution:** fracking carries the risk of leakages from polluted tailing ponds, wastewater and well blowouts;
- Land use: fracking disrupts the landscape and impacts upon rural and conservation areas;
- **Noise**: shale gas development generates noise pollution from equipment and transport that affects local residents, agricultural livestock and wildlife;
- **Seismic activity**: fracking increases the risks of earthquakes, which in turn increases the risk of damage to, and leakages from, gas wells;

<sup>&</sup>lt;sup>1</sup> Volatile Organic Compounds; Carcinogens, Mutagens, Toxic to Reproduction Chemicals; Persistent, Bioaccumulative and Toxic Chemicals; Endocrine Disrupting Chemicals.



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- Cumulative and combined health and environmental impacts on communities and workers in the unconventional gas industry: for example, fracking causes additional exposure to toxic chemicals;
- Socio-economic impacts on communities: fracking can drive "boom and bust" cycles in local economies, undermining more sustainable agricultural and tourism economies.

All of these effects have direct and indirect impacts on individual and public health. Many of these impacts are not only local, but can be felt regionally and even globally. Without a comprehensive scientific assessment of the impacts of fracking in Ireland and across Europe, an unconventional gas boom would be an enormous experiment on the environment and human health.

#### The Environmental Pillar further notes the following:

1. In order to limit global warming below 1.5 degrees Celsius, and thereby prevent dangerous climate change, fossil fuels must be phased out as quickly as possible. We believe renewable energy, energy savings and a significant reduction of CO2 emissions provide the only viable path to an environmentally sustainable and healthy future. Exploiting unconventional fossil fuels such as shale gas, shale oil and coal bed methane will increase total greenhouse gas emissions since further development of these fuels will increase the world's dependency on fossil fuels and consequently slow down the large-scale deployment of clean energy renewables and energy savings.

2. Fracking is a high-risk activity that impacts human health, food production and the wider environment. Fracking for unconventional fuels runs counter to the EU's commitment to achieving a high level of environmental protection, as enshrined in Article 37 of the Charter on Fundamental Rights. Also article 35 of the Treaty commits the EU to ensuring a high level of human health protection in all of the Union's policies and activities. Both Ireland and the EU are tasked with developing environmental policies based on "the precautionary principle and on the principles that preventive action should be taken, that environmental damage should as a priority be rectified at source and that the polluter should pay" (Article 191, Treaty on the Functioning of the European Union). We therefore believe that the development of unconventional gas within Ireland and across the EU runs counter to EU Treaty obligations.

3. The Environmental Pillar believes the above mentioned principles are violated due to the absence of:

- A comprehensive and detailed **analysis** by an independent entity **of the Irish and EU regulatory framework,** as it applies to both exploration and exploitation phases;



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- Sections in the **Water Framework Directive** or any relevant subsidiary laws (e.g. groundwater, EQS) covering fracking specificities;

- A scientific study of fracking-related air pollution and the long term health impacts;

- A scientific study of fracking-related **water contamination** and the long term health impacts (both from contamination by the naturally occurring hazardous and radioactive materials released in the fracking process, and from methane and other fracking fluid contaminants interacting with water disinfectant products, etc.);

- A full assessment of the capacity of all relevant **water treatment plants,** to handle flow back waste water, and of water treatment costs, based on the polluter pays principle;

- A full assessment of **the monitoring and enforcement capacities** of the Irish Government and other Member State authorities across all the different impact areas;

- A scientific assessment of **cross-border risks** of water contamination and air pollution, with public input;

- A full cost-benefit analysis of the socio-economic and environmental impacts;

- A European Commission **Green paper** with full public participation of all relevant stakeholders, on the areas pertaining to the impacts of fracking activities that are not covered by existing EU regulations;

- A clear and binding set of European **Best Available Technology Reference Standards (Brefs)** for fracking operators.

4. To date, there is no consistent process in Ireland or Europe that properly includes citizens and communities in decision-making related to shale gas, shale oil or coal bed methane. Free and fully-informed consent of local communities is not applied for most fracking projects prior to both exploration and exploitation phases, while they should be placed at the heart of the discussions.

5. Companies involved in fracking are not disclosing an exhaustive and detailed list of the chemicals used for each project, thus making it impossible to assess the environmental and health risks from exploitation and exploration (including full life cycle impacts). Currently the different deadlines and requirements in the REACH legislation mean that the information about chemicals is not automatically available to the public, and REACH controls on fracking may not come into force for a long time.



Until all these problems are adequately addressed, we believe that no further shale gas, shale oil and coal bed methane activities should proceed. We call on the Irish Government and the European Commission to suspend all on-going activities, to abrogate permits, and to place a ban on any new projects, whether exploration or exploitation.

The EU Commission, as guardian of the treaties, should ensure timely and full legal compliance of Member States with all EU laws that pertain to shale gas, shale oil and coal bed methane, and bring forward legal proposals to cover those aspects not yet effectively addressed in EU law.

We also call on the Irish Government, the EU, its Member States and European Financial Institutions to cease providing financial or political support to shale gas, oil and coal bed methane development projects. Furthermore any financial and political assistance provided to shale gas projects in countries of the Global South should be redirected towards the production and promotion of renewable energy sources and energy savings, in line with the Millennium Development Goals



## The Environmental Pillar is a national Social Partner established by Government decision in 2009. It is an advocacy coalition of 27 national environmental NGOs.

*Environmental Pillar members:* An Taisce. Bat Conservation Ireland, BirdWatch Ireland. CELT - Centre for Ecological Living and Training. Coast Watch. Coomhola Salmon Trust. Crann. ECO UNESCO. Feasta. Forest Friends. Friends of the Earth. Global Action Plan Ireland, Gluaiseacht. Grian. Hedge Laying Association of Ireland. Irish Doctors Environment Association. Irish Natural Forestry Foundation. Irish Peatland Conservation Council. Irish Seal Sanctuary. Irish Seed Saver Association. Irish Whale and Dolphin Group. Irish Wildlife Trust. The Organic Centre. Sonairte. Sustainable Ireland Cooperative. VOICE. Zero Waste Alliance Ireland

Whilst this document was developed through the processes of the Environmental Pillar it does not necessarily represent the policies of all its members.

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