Moai
Special Hydraulic Fracture

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a pretentious “eco” green or a scenery full of wind turbines of more than 100 metres in height. We fight for a free world where people can re-establish their relationship to nature that prevailed during centuries past. We fight for a world where capitalism and domination disappear, which is only possible by renouncing the commodities that the energy and technological system provide for us. A world without fracking, or petroleum, or renewable barbarities: a free and wild world.

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What is Fracking?

Fracking or hydraulic fracture is an unconventional method of extraction of natural gas, also known as “shale gas”. This gas, fundamentally composed by methane, is found stored in small pores or impermeable rock bubbles, normally of schist or slate, located thousands of metres below the surface. “Unconventional gases” are denominated to those that for their cost or difficulty of extraction are less profitable. However, with the advance of extractivist technologies, these gases can be catalogued as conventional in a short period of time.

The hydraulic fracture consists in “breaking” or “fracturing” the mother rock that contains the gas for its extraction. For this a perforation technique is used: firstly the surface is drilled for up to 5,000 metres vertically and after that several horizontal kilometres are also perforated (from 1.5 to 5 km). After this water with sand are injected with great pressure (98%). It should be noted that this water and sand also contain a series of chemical additives (2%). This provokes small explosions that fracture the rocks and liberate the gas, which ascends from the surface through a pit. The sand mixture is in charge of keeping the fracture open in order to constantly keep obtaining gas. Part of the injected mixture returns to the surface (between 15 to 85%[1]), whilst the rest ends up in uncertain places.

[1] The numbers of return of contaminated water are proportioned by the own extractivist businesses, are not validated by any independent study. Therefore it is probable that the percentage of water that isn’t recovered is bigger than as indicated.

The usual step in these types of exploitations is to build platforms that contain between 6 and 12 pits of extraction, in order to allow the surface of the terrain that occupies the platform to be composed by tens of hectares. To this we must add that the pits have a very brief useful life, which allows the occupied surface by the platforms to occupy a huge area of a territory.

Why Fracking?

Currently, even though natural gas consumption is booming, electrical energy (primarily generated thanks to petroleum and the consumption of fossil fuels) represents around 80% of the global energy consumption. On the other hand, the extraction of conventional natural gas possesses an energy return on investment (EROI) of between 1 to 6 and unconventional or "shale gas" between 0.7 and 13.3. These are ridiculous numbers compared to the current energy return on investment of petroleum, which can have rates of 100.

Then, why invest millions of euros in its extraction? This is easy to explain if we analyse the current energy crisis.[2] There are many studies, books and publications that have invested their efforts into demonstrating and studying that we have reached the peak oil process and that the new petroleum pits discovered possess less fuel of worse quality, bigger cost of extraction and, therefore, less EROI. This theory is easily predictable by simply analysing the spectacular increase of the price of fossil fuel.

[2] One of the key concepts to understand the gravity of the energy crisis is the EROEI (Energy Return on Energy Investment. The TRE is the relationship between energy that a well provides us and the energy that we have to spend to obtain it. Hence, conventional petroleum has an EROI of 20, which means that for each unity of energy destined to the production of petroleum (in the elaboration of materials used in wells, its installation, perforation, operation, the maintenance, etc) 20 unities of energy are obtained. The critical value of the TRE is 1: when the TRE arrives at an equivalent, lots of energy is renewed as the one invested and the system stops having any sense as an energy source.

ergies, accompanied by a light decrease in the levels of consumption.

Renewable energies can pose, with a big economic investment in investigation and development, an alternative to the extraction of gas through hydraulic fracture, but they will never be an alternative to capitalism. The ideal world that these groups offer needs more roads, industries, trucks, primary resources, big factories, video surveillance and electricity cables passing through the woods to fully function. Renewable energy is also completely dependent on fossil fuels (plastics, transportation through roads, vehicles, etc...) and continues forcing human beings to work to produce cars, wind turbines, solar panels, etc; which impedes the liberation of the individual, who is still tied up and trapped in a sick, unhappy and monotonous job and lifestyle.

On the other hand, these groups don't tend to propose any political change accompanied by their "renewable revolution" in order to continue a capitalist system where the only things that matter are money and economy, thus ignoring values like friendship and nature. This approach not only represents no real alternative to the system of domination, but can also drastically benefit it. In a world where contamination reaches extreme levels, cancers increase enormously and the disasters provoked by petroleum and nuclear energy are part of our everyday lives, the best alternative to maintain the system of domination is through renewable energy. In fact, it's what is slowly extending the system. Small steps are being taken to improve the profitability of renewable energies, creating electric vehicles, etc... This way the State and businesses clean their image towards the people that they have to exploit, whilst they also pretend to care about the planet's health without changing the system of domination.

We don't want a world where the same contradictions continue to be applied, where people's lives are completely domesticated, robotized and alienated and where the relationship between human beings and nature is inexistent. We don't want cities painted

In regards to the methods of struggle: the first thing that we must clarify is that *fracking is a global problem originated by a global energy scheme.* It is not only about a project in a specific area. Due to this it is important to conduct the fight against fracking on a global level and not only focus it on a specific platform, valley, etc… (No Fracking, not here or anywhere)

The town halls and Autonomous Communities[4] belong to a State that encourages and support this global plan of energy development based on the hydraulic fracture. Due to this it lacks sense, from a logical perspective, to use or beg these institutions to stop fracking. On the one hand, it is obvious that if we intend to stop fracking, any type of dialogue with the State contributes towards an anticipated defeat. On a moral level it is a lost battle. It is true that in some cases the collection of signatures and pressure from political groups have managed to stop some local projects. However, these are underwhelming victories, as no global opposition is ever presented, only local. On the other hand, if the governments indeed stop specific projects it is only because these are not fundamental projects for their energy development. In the case of fracking in the [Spanish] State, several specific permissions can be obtained this way, because there are countries with enormous levels of poverty that exist, with bigger gas reserves and less popular pressure, allowing businesses to easily extract gas from those places. Therefore, the only way to oppose these mega-projects effectively and coherently is through a real fight, not collaborationist, that at the same time develops a global criticism towards capitalism.

In regards to alternatives: This is probably the most delicate and controversial point. The only proposal by "eco" friendly parties, NGO's and ecologist collectives against fracking are renewable en-

[4] ed. – Autonomous Communities are the 17 separately-governed semi-autonomous regions of Spain, i.e. Catalonia, the Basque Country, Galicia, etc.

We survive in a system completely dependent on fossil fuel and electrical energy generated by the same, which also base their system of social domination on energy control. It would be stupid or ingenuous by our part to think that the big defenders of this system of social domination, which include huge petroleum companies, were not going to reinvent theirselves so that the end of cheap petroleum doesn't suppose a threat to their businesses, privileges and power of social control. It is here where fracking serves as a tool to delay the discovery of new alternative energy sources. By improving extractivist technologies and conducting explorations in many places of the planet, the gas reserves will be able to be maintain their energy system for a short period of time and prevent the explosion of a true energy catastrophe, which doesn't benefit in the slightest big petroleum multinationals.

Why Oppose Hydraulic Fracturing?

There are many varied motives to oppose the extraction of unconventional gas. It is obvious that such an aggressive extractivist method will provoke a series of environmental problems.

On the one hand it is of vital importance to highlight the contamination of aquifers and subterranean waters, created due to the filtration of the mixture that is injected in the pits for the extraction of gas. These 600 chemical substances injected into the surface, many of them carcinogenic, end up in subterranean waters and will consequently be consumed by all human beings and animals, thus generating a chemical contamination of all the affected ecosystems. These human beings will be affected by this consumption of contaminated water. This has already been demonstrated through the analysis in cow livestock in several areas of the United States, where many animals suddenly died after consuming water close to the gas platforms. The effects towards the human race

will take longer to appear, but can go from stomach infections to cancer, along with provoking death after constant consumption.

Another type of contamination that fracking provokes that isn't well known is the emission of radioactive substances to the atmosphere. Substances that are found naturally in the depths of the ground and contaminated water can also reach the atmosphere. One of these chemical substances is radon-222, which is the second highest declared cause of lung cancer.

The small explosions generated by the injection of pressured water are also capable of causing seismic movements into the ground, as demonstrated in places like England or the United States.[3] This could explain, along with popular opposition and French colonialism in Mali and Niger *[ed. – i.e. also over access to uranium and other fuel sources]*, the prohibition of this method in France, where the huge quantity of nuclear plants combined with earthquake risks could cause huge catastrophes.

Extractive platforms generate a series of environmental and pollutive consequences that are hard to list. It is not only about the visual impact of the platform, the waste from concrete, gas pipelines, etc. But also the creation of roads, transportation of materials, the canalisation of water into the platform, the large water waste, the deforestation of the terrain, the erosion, the creation of residual ponds and many more problems that would require a lot of paper to write down.

These ecological and health consequences should ideally be the main reason to face and stop these projects if we truly valued the health of our surroundings. However, these are not even the most important reasons to stop fracking: if companies were truly interested in investing into improved extractivist technologies in order to guarantee that no health dangers existed there would still be enough factors for us to oppose these projects. Fracking opposition, from our part, should include the fact that it is a new method of exploitation of natural resources that only contributes perpetuating an anti-ecological, exploiting, unfair and inhuman system. We don't only express our opposition to fracking as an aggressive method to extract gas, but also to the opposition of any type of extraction of gas.

[3] ed. – Fracking near Blackpool in the north of England by the company Cuadrilla was halted after causing two minor 2011 earthquakes, while the U.S. state of Oklahoma for example has seen a sever spike in quakes of 3.0 magnitude or higher since 2008, when fracking ramped up in the area. The number of 3.0 magnitude quakes rose from 2 in 2008 to 889 last year; as of this November, there have been 572 so far in 2016.

Permissions, Licenses & Businesses

Currently there are over 30 permits of exploitation conceded in the [Iberian] peninsula, concentrated around the north, primarily. These numbers are ever-changing due to the approval of new permissions, as there are already more than 50 solicitations; but also due to the opposition and resistance from some communities to allow these projects (albeit the latter is improbable and abstract).

These exploitations will be conducted, if we don't stop them, by businesses like SHESA (Society of Hydrocarbons of Euskadi); BNK Petroleum, with its Spanish counterpart Trofagas, Heyco, R2 Energy and San Leon Energy.

The False Opposition to Fracking

From the arrival of the plans of exploration of shale gas in the [Spanish] State, there are many voices (from individuals and collectives) that have risen up to try and prevent these exploitations of gas. For this reason, it is important to analyse determined strategies and alternative methods of fighting presented by numerous ecologist groups which, in our opinion, aren't effective or coherent and are even capable of benefiting the enemy that they intend to destroy.