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Discourses and values underpin public debate on fracking in Spain: A case study at the crossroad

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In the EU context extraction of shale and oil gas by hydraulic fracturing (fracking) differs from country to country in terms of legislation and implementation. While fossil fuel extraction using this technology is currently taking place in the UK, Germany and France have adopted respective moratoria. In between is the Spanish case, where hydrocarbon extraction projects through fracking have to undergo mandatory and routine environmental assessment in accordance with the last changes to environmental regulations. Nowadays Spain is at the crossroad with respect to the future of this technology. We presume a social conflictt in our country since the position and strategy of the involved and confronted social actors -national, regional and local authorities, energy companies, scientists, NGO and other social organization- are going to play key and likely divergent roles in its industrial implementation and public acceptance.

In order to improve knowledge on how to address these controverted situations from the own engineering context, the affiliated units from the Higher Technical School of Mines and Energy Engineering at UPM have been working on a transversal program to teach values and ethics. Over the past seven years, this pioneering experience has shown the usefulness of applying a consequentialist ethics, based on a case-by-case approach and costs-benefits analysis both for action and inaction. As a result of this initiative a theoretical concept has arisen and crystallized in this field: it is named Inter-ethics. This theoretical perspective can be very helpful in complex situations, with multi-stakeholders and plurality of interests, when ethical management requires the interaction between the respective ethics of each group; professional ethics of a single group is not enough. Under this inter-ethics theoretical framework and applying content analysis techniques, this paper explores the articulation of the discourse in favour and against fracking technology and its underlying values as manifested in the Spanish traditional mass media and emerging social media such as Youtube.

Results show that Spanish public discourse on fracking technology includes the costs-benefits analysis to communicate how natural resources from local communities may be affected by these facilities due to environmental, health and economic consequences. Furthermore, this technology is represented as a solution to the "demand of energy" according to the optimistic discourse while, from a pessimistic view, fracking is often framed as a source "environmental problems" and even natural disasters as possible earthquakes. In this latter case, this negative representation could have been influenced by the closure of a macro project to store injected natural gas in the Mediterranean Sea using the old facilities of an oil exploitation in Amposta (Proyecto Cástor). The closure of this project was due to the occurrence of earthquakes whose intensity was higher than the originally expected by the experts in the assessment stage of the project.