AUSTIN, Texas — In oil-rich parts of Texas, hydraulic fracturing has almost become a way of life. Drilling rigs and pumping equipment pepper the landscape, and enormous trucks carrying oil field supplies rumble down narrow, dusty roads.

In Europe, things could hardly be more different. Opposition to hydraulic fracturing — the process of injecting water, sand and chemicals into the earth to blast apart rock and retrieve oil or natural gas — is widespread and entrenched. Some countries, including France, ban the practice, which is also known as fracking.

“There is a head of steam up against fracking,” said Jonathan Stern, chairman of the natural gas research program at the Oxford Institute for Energy Studies in England.

In Germany, beer brewers recently urged a ban on fracking, citing concerns about groundwater contamination, according to the newspaper Bild.

Europe’s opposition is being put to the test, however, as pro-fracking forces lobby for exploring underground shale gas reserves. They argue that locally drilled natural gas can create jobs and increase energy security — a potent argument for a continent uncomfortably reliant on natural gas from Russia. Last week, a group of British business leaders, the Institute of Directors, put out a report saying that developing shale gas reserves could lead to tens of thousands of jobs.

“Shale gas could be a new North Sea for Britain,” Corin Taylor, the report’s author, said in a statement accompanying its release.

Mr. Stern noted that fracking is a long way from happening on a major scale in Europe, and some early results have not been promising. Several major international companies have scaled back their work in Poland after operations proved disappointing.
Even so, some countries are lifting their moratoriums on fracking in the hope of good results. Britain did so in December, though the prospect of exploratory drilling has brought protests. Romania also recently lifted its moratorium, and the gas-rich Netherlands will decide soon about whether to do the same.

Dutch politicians are awaiting the results of an independent study on shale gas that is due to be released this summer. Then the country will re-evaluate its moratorium, according to Bart Visser, a spokesman for the minister of economic affairs.

The study is about whether or not to allow test drilling in shale rock, Coby van der Linde, director of the Clingendael International Energy Program in the Hague, said in an e-mail. It will also determine the conditions under which the shale gas could be produced, she said.

At least one key political group is on the fence, according to Ms. Van der Linde. And the Dutch pro-environment party GroenLinks is firmly opposed to fracking.

“Whether or not it is an independent inquiry remains to be seen,” said Liesbeth van Tongeren, a member of Parliament and spokeswoman for GroenLinks on energy issues. She expressed concerns about water, truck traffic and fracking’s effect on the climate.

Groups with “dollar signs in their eyes” are promoting fracking, she said.

Some guidance on fracking may also be forthcoming on the European Union level. By the end of the year, the European Commission will craft a shale gas initiative that could lead to a risk-management strategy for fracking. A meeting in Brussels is being held on this issue next week.

As Europe makes its decisions on fracking, some are looking to the United States for ideas about the regulation of fracking. Each state in the United States generally has its own approach, slightly different from the others, and national regulations, applying to federally owned lands, are still being formulated.

John Tintera, former executive director of the Railroad Commission of Texas, the curiously named agency that regulates drilling in the leading oil-producing state, said he had been to Romania twice already to discuss fracking, and would soon go to Ukraine and perhaps Turkey.
When talking to Europeans, “the first thing they want to know is, can hydro-fracturing be done safely?” said Mr. Tintera, who is now a partner at Sebree & Tintera, an energy consulting firm based in Texas. “The second thing they want to know is, how do you ensure that?”

The answers, Mr. Tintera said, are that fracking can be done safely and that a comprehensive regulatory framework is necessary. Such regulation includes “boots in the field,” or trained inspectors, he said.

Mr. Stern, of the Oxford Institute for Energy Studies, said that Europe had “massively overhyped” both the downsides and the upsides of fracking and shale gas exploration. Europeans hold a bifurcated view of what has happened in the United States, he said: Some Europeans admire the U.S. fracking successes and believe that Europe should follow its example, perhaps with additional caution. In others’ minds, fracking in the United States has “all been a big disaster.”

Asked to predict the future of fracking in Europe, Mr. Stern forecast that in five years’ time, a few countries would be producing “very modest amounts of shale gas.” Those countries might be Poland, Britain and perhaps Romania or Bulgaria.

But “if there are any environmental problems, the whole thing will stop and not restart,” he said.