theguardian

A new study urges leaving fossil fuels in the ground. How will it affect business?

Climate researchers are urging that fossil-fuel extraction come to a complete halt if governments are to stall temperature rise. We asked business experts and investors to weigh in

Katharine Gammon | Jan. 08, 2015

Gas and oil extraction using hydraulic fracturing, or fracking, is on the verge of a boom. A new study says that fossil fuel extraction most cease if the planet is to avoid extreme climate change. Photograph: David McNew/Getty Images

To prevent the earth from overheating, countries must leave vast reserves of fossil fuels untouched underground. That's the conclusion of a new report published this week in the journal Nature. Trillions of dollars of known and extractable coal, oil and gas – including deposits in Canada and the Arctic – cannot be burned if the global temperature rise is to be kept under the agreed-upon goal of 2C.

While much of the carbon math is known – about three to five times more carbon in reserve than can be burned to stay within the world-set temperature limit – this is the first study to look at exactly where those fossil fuels are.

Around the world, 82% of current fossil fuels must be left underground. In the US, Australia and Russia, more than 90% of coal reserves must be unused, and in China and India, two-thirds of coal reserves are not to be burned in the scenario. The researchers question why fossil fuel companies continue to pour billions (approximately $670bn in 2013) into the search for new oil and gas when there is more underground than humans can safely use.

We asked green business experts and investors for their views. Add your voice to the conversation in the comments below.

Andrew Winston, CEO of Winston Eco-Strategies
What this study seems to do is to take the carbon math-data and actually overlay it over real places. So it's not in theory that we have to cut 80% of our carbon emissions by 2050 – there are a bunch of studies that say there's this three-to-five-times ratio of known reserves to what we can safely burn. But I haven't seen anything before that says: this is what it means for Canada, for the Arctic, for the US. That's why this is such a great piece of analysis.
It's great because it does the simple math that says we can't burn all of the reserves we're trying to excavate. There's a certain number of gigatons of carbon and a certain number we can't burn.

We are not suicidal as a species, so I think we will not burn it all. We may burn more than we should, and play with fire, but there's no way we can burn all this.

Since we're not going to burn it all, we know that there are massive quantities of investment going into assets that are stranded. The spending of hundreds of millions per year finding new reserves because they have to keep their reserve ratios up is fundamentally irresponsible. You're keeping a reserve ratio up of something you're never going to use.

I think we're going to look back and find this to be the greatest waste of capital. We're sinking trillions of dollars into finding unconventional oil and gas that we're never going to use rather than planning for the transition.

If the oil companies put that much money into renewable investment, energy transmission and storage, we could get pretty far. From the corporate, country and geopolitical perspective it's about where we are putting our bets.

Jonathan Grant, director of sustainability and climate change for PricewaterhouseCoopers
This is an issue that more investors and companies are considering, as some governments and pressure groups have called for the phase-out of fossil fuels by 2050. Some investors are looking for more consistency and transparency in how energy companies report on their reserves and the impact of carbon constraints on their business.

But many in the energy sector take the view that energy demand will continue to rise, and that the targets to phase out fossil fuels by 2050 appear implausible. They also comment that carbon capture and storage could increase the amount of "burnable" carbon. The issue stirred controversy at the climate summit in Lima, where there were big gaps between the science of climate change and the policy and business responses.

Ed Davey noted yesterday that the Paris summit is likely to fall well short of the 2-degree target, highlighting the gap between what is scientifically sufficient and what is politically possible. However there are many big businesses, including some energy companies, still calling for the trillion-ton carbon budget.

Danielle Fugere, president and chief counsel at As You Sow
I think the basics of this report we understood anyway. I think this report confirms the issues that the world is dealing with. Investors are starting to ask the hard questions: we see the writing on the wall. We see energy market fundamentals change. And that's why we are starting to ask companies the hard questions about these issues.

This year we filed a shareholder resolution against Chevron and Exxon, citing to these facts – if we are committing to a 2-degree scenario, the majority of fossil fuel resources cannot be burned. We looked at the increasing cost of finding these new reserves and the fact that demand is expected to slow because of competition in low-cost renewables and energy efficiency.

The basic fundamentals are not looking good, so we're asking companies: does it make sense to continue to expend resources on high-cost, high-carbon reserves when it looks like there is a high potential for those resources to be stranded in the future?

We asked Chevron and Exxon, instead of investing in those resources, to return capital to shareholders. We are also interested in getting those companies to be more diversified, as a way to protect investor assets.

We even talked yesterday with Exxon. They continue to believe that they can sell all the resources they develop. It's interesting – their view of the world is different. They think the developing world will continue to use fossil fuel energy as they've done in the past.

I think that investors are starting to perceive that market fundamentals are changing, whether or not governments readily jump on the 2-degree bandwagon. We see a whole number of factors moving markets away from fossil fuels – pollution, technology changes, efficiency increases, competition from low-cost renewables. We're seeing the market changing – the world is moving to cleaner resources, and these energy companies have to move with the market or they'll get replaced.

Leslie Samuelrich, president of Green Century Capital Management
We think that investors can potentially reduce financial risk by staying away from fossil fuel companies. The report amplifies the message that fossil-free investors have been hearing and responding to. It's like one more nail in the coffin of developing fossil fuels that the earth can't afford to burn and that investors shouldn't risk supporting.

In the short-term, investing in fossil fuels is becoming more and more expensive for companies. We did a report with another firm and 350.org that showed the big oil companies have tripled their capital spending in the last five years, as they pursue more dangerous and expensive projects to find oil.

All that money could be going back into shareholder pockets but instead is being used to pursue unneeded oil that may never be able to be burned. It's an irresponsible corporate strategy to be pursuing.

The more evidence and ammunition that independent reports can demonstrate for investors on this, the quicker we get to people moving out of investing in fossil fuels and investing in companies doing water conversation, renewable energy and energy efficiency.

http://www.theguardian.com/sustainable-business/2015/jan/08/new-study-urges-leaving-fossil-fuels-in-the-ground-whats-the-impact-for-business