

SCRAPING THE BOTTOM OF THE BARREL – UNCONVENTIONAL OIL COULD COST US THE EARTH

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With oil prices soaring, investing in unconventional fuel sources - such as oil sands or oil shale – could appear to be an attractive option, but according to a new report released today by WWF and the Co-operative Financial Services (CFS), such investments are both environmentally and economically unsustainable and can only serve to undermine international efforts to combat climate change.

Extracted from tar-soaked shale or sand, unconventional oil is an energy and resource intensive product, creating up to eight times as many emissions as conventional oil production does, while also using three barrels of water to produce just one barrel of oil and destroying large tracts of arboreal forests in the process. Scientists have predicted that, if fully exploited, the emissions from these oil sources could accelerate climate change to levels that would threaten a mass species extinction.

“Unconventional fuel sources may seem attractive in the short term but ultimately the environmental and economic costs are unthinkable,” says James Leaton, Senior Policy Officer at WWF-UK. “ In addition to the rising cost to consumers and businesses from high oil prices, the environment is paying at both a local and global level. The solution is to develop alternatives, such as renewable energy, rather than continue to indulge our addiction to oil.”

More than US\$125 billion of unconventional oil projects have been announced for development by 2015. High energy, labour and material costs mean that developing an oil sands project is up to 20 times as capital intensive as conventional oil projects. In addition to investing heavily in the development of US oil shales, Shell has announced an intention to produce 670,000 barrels of oil daily from Canadian oil sand by 2020, while ExxonMobil and BP are also both hoping to produce several hundred thousand barrels each per day.

“The current rush to invest in unconventional fossil fuels is wholly inappropriate and due to their carbon intensity, these projects risk dangerous levels of climate change,” says Paul Monaghan, Head of Social Goals and Sustainability at The Co-operative. “Our long-term future and economic stability depends on the development of a low carbon economy within our lifetimes. We intend to use this report as the basis of our shareholder engagement with oil companies, and will be working with our 6.5 million customers to ensure that the UK and the EU have a robust legislative framework in place that will prevent these climate hostile fuels from entering the domestic market. ”

WWF and CFS are calling for a global halt to the licensing of new unconventional oil and for strong legislation, similar to the Emissions Standard currently in force in California, to be introduced in North America and Europe, prohibiting the sale of fuels with higher emissions than traditional oil. Because the lifecycle emissions of oil sands and oil shale are higher than those produced by conventional oil extraction, if this standard were replicated elsewhere, it would effectively outlaw unconventional oil products.

“Companies and investors claim to recognise the need to tackle climate change and support international efforts such as Kyoto. In oil sands we have an activity that is going against this imperative and undermining Canada’s Kyoto commitments, so it is time for investors to challenge this strategy.” James Leaton continues. “Technologies

which could potentially mitigate the environmental impacts of these projects, such as carbon capture and storage (CCS), are still too far away from being a viable solution on a large scale. The scope for development of CCS must not lock us in to a carbon intensive future, when it is clear that the developed world needs to start cutting emissions now.”

Ian Jones, Head of Responsible Investment at The Co-operative Investments added: “We intend to use this report as the basis of our shareholder engagement with oil companies to try to persuade them to take a more progressive path.

”The extraordinary lengths some oil and gas companies go to in attempting to make these climate-hostile fuels somewhat less so should be re-directed to bringing forward low-carbon energy. Most oil companies have hardly begun to factor in the externalities that are currently imposed on the environment, yet are rapidly expanding unconventional oil developments in the hope of future technological solutions, subsidies, and favourable government intervention. Shareholders should challenge those oil companies that fail to steward investment responsibly.”

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Notes to Editors:

Report available on request

The report shows that if all 1.1 trillion barrels of probable extractable North American unconventional oils were exploited within the next century, it would result in emissions of 980 Gt CO₂, equating to an estimated increase in atmospheric CO₂ levels of between 49 and 65 parts per million. The consequences of these additional emissions could be catastrophic given that global atmospheric levels are already at 430ppm CO₂e and exceeding 450ppm CO₂e significantly increases the risk of dangerous climate change.

Dangerous climate change is defined as warming of more than 2°C above pre-industrial levels, whereby stresses upon the world’s water resources, food production capacity and ecosystems increase significantly. To stand a reasonable chance of avoiding this, atmospheric concentrations of key greenhouse gasses must not exceed 450ppm CO₂e. Achieving this will require global emissions to peak by around 2015 and at least halve by 2050, with developed nations making more substantial cuts of around 80%.

Canadian oil sand reserves are thought to be 1.7 trillion barrels, with 315 billion probable reserves using technology currently under development. US oil shale deposits are estimated at 1.5 trillion barrels, with 800 billion barrels estimated to be recoverable.

The Co-operative Investments has organised an institutional investor event, in conjunction with UKSIF, on 16th September to present the report’s findings and garner support for collective shareholder action. This is in line with its customer-led Ethical Engagement Policy to use its influence as a shareholder to push for positive change in the companies in which it invests.

The majority of unconventional fuels production is presently destined for the US. California has already developed legislation that stipulates a Low Carbon Fuels

Standard, which would effectively prohibit fuels with lifecycle carbon emissions greater than those resulting from conventional oil by 2020. Other states are considering following suit. Producers and shippers are currently assessing pipeline proposals to Canada's west coast, the US east coast and Gulf of Mexico, to broaden the potential market for oil sands. The 2008 Conference of US Mayors also passed a resolution backing lifecycle assessment of fuels, and restricting public procurement of unconventional fuels. US investors received over 25% support for a resolution asking ConocoPhillips and Chevron for a report on the potential environmental and social impacts of their oil sands plans.

If everyone used natural resources and generated carbon emissions at the rate we do in the UK we would need three planets to support us. The way we live is leading to environmental threats such as climate change, species extinction, deforestation, water shortages and the collapse of fisheries. WWF's One Planet Future Campaign is working to help people live a good quality of life within the earth's capacity. As a part of this campaign, WWF is working to develop a One Planet Finance system, promoting a sustainable economy, allowing the investments made by individuals and institutions to contribute to this vision. It is essential to direct investment away from carbon intensive activities and towards a low carbon future. For more information visit www.wwf.org.uk/oneplanet