What are the Alberta TAR SANDS?

How can they affect us in the UK e.g. in Cumbria?

and why should we be concerned?

The **TAR SANDS** are the **second largest oil reserve** in the world after Saudi Arabia, and are now the main source of oil for maintaining the very high-carbon economy of the USA. Located to the East of the Canadian Rockies, they cover an area **larger than the size of England**, and are rapidly being converted (**with UK help**) from pristine green Boreal Forest and peatlands (a globally important carbon sink) to a greyish brownish (via blackish) expanse of lifeless opencast strip mines and huge "tailings ponds" of toxic waste-water and sludge - visible from space. It is the most hugely environmentally destructive industrial project on earth. And most of us have never even heard of it!



But why should that worry us here in the UK such as in Cumbria?

Firstly bear in mind that global warming increases the likelihood of extreme weather events, so expect correspondingly more flooding events like around Cockermouth, Carlisle,

Now consider the carbon emissions of the Tar Sands oil industry: It produces **3 to 5 times** the volume of carbon dioxide per barrel as compared with the "conventional oil" production as in e.g. Saudi. This is because it is a **"dirty oil"** - as it is in fact **bitumen** - mixed up so closely with sand, water, clay (and a good dose of toxins) - that it has to be melted out with vast quantities of hot water/steam - heated by burning natural gas at a rate per day (currently) the same as would heat **3 to 4 million** Canadian homes. In fact the energy-related cost to produce a tar sands barrel can even exceed the market price per barrel.

Furthermore these costs exclude any of the high potential habitat restoration costs - so such restoration is just not done! (and very difficult anyhow). And of course - at the moment - the costs of resulting climate change damage elsewhere in the world are not quite part of the oil industry balance sheet.

People in less benign climate parts of the world than ours are *already* suffering badly from climate change, and it is a sad irony that those least responsible for the carbon emissions - often poor communities - are suffering the most. For example: people in drought & flood-prone areas, on coral islands already awash with rising sea-levels, and those with livelihoods dependent on arctic ice. Many tens of thousands of poor people are made homeless every year in Bangladesh due to land erosion resulting from increased glacial melt-water - with the added threat from rising sea-levels (BBC - Simon Reeve).

We here in Cumbria are fortunate we can at least choose whether our savings make their lives worse by where we invest them. Barclays, RBS/NatWest and HSBC have a big Tar Sands investment. So how appealing now is a Black Gold'en ISA?

The full exploitation of Canada's tar sands - over all the area greater than the size of England - would lead to an estimated increase in atmospheric carbon dioxide of between 9 and 15 parts per million, **enough to take us to the brink of runaway climate change**. To science fans - This is when "tipping points" to uncontrollable positive feedback carbon-climate loops are reached (e.g. exponential release of the extremely potent GHG methane from melting permafrost; further acceleration of loss of arctic ice - enhanced by reduction of albedo).

So **you and your children** are *highly likely* to be increasingly affected by climate change due to continued exploitation of the Tar Sands - and not just by how it affects your conscience. What's more - because the UK is investing heavily into the Tar Sands - and using *our* money to do so, we also face potential future *financial* risk if effective carbon costs, emissions regulations or even legal costs are forced on the Tar Sands industry, or climate-change legislation becomes widespread and effective - such as **Arnold Schwarzenegger's** low carbon legislation against the use of "dirty oil" in California, such as that from the Tar Sands (- now being challenged by the oil companies). The tar sands are sensitive to such considerations because they require high oil prices due to the high production costs per barrel, and high oil prices can reduce demand for oil and increase interest in alternatives.

So could "toxic fuel" investments replace "toxic debts" as the next future long-term threat to our bank profits or security?

Fortunately these risks have being heeded by the respected and influential **FairPensions** org, which assisted by major investors has successfully got Tar Sands resolutions tabled for voting at the 2010 AGMs of BP (15th April) and Shell (18th May). If you have a pension (or savings) **you can easily support these resolutions** by clicking on **www.fairpensions.org.uk/tarsands/action**. This will help persuade **pension providers** to vote for these resolutions, and they hold significant share-holder influence on BP and Shell. The overall vote doesn't have to be "won" to make the point.

This is **urgent** - as BP is poised to massively increase its stake in the Tar Sands industry. Shell is already hugely in there - but may be decreasing its rate of expansion.

Not so fortunately - our **government** ignored these investment risks during its "bank bailout" - when the government Treasury (via government-owned UKFI Ltd) gained **84%** ownership of **RBS** using £billions of taxpayers money, and decided *not* to exercise its huge share-holding power with RBS to influence how they invest this money. This was despite that the known investment track record of RBS with the oil industries - which included many billions already into the Tar Sands - was likely to continue unrestrained.

So with this huge "blank cheque" implying **"business as usual"**, RBS promptly invested a further **\$2.5+ billion** (this time "bank bailout money" from us taxpayers) into the Tar Sands industry - in *direct opposition* to apparent government climate change policy.

(This RBS Tar Sands subject is widely documented on the internet [e.g. Guardian] though has been given very little broadcast on TV)

You can keep up pressure on the Government via your MP to incorporate your climate change concerns into *all* government investments - including those into and by RBS. Don't allow them to consider climate change just as a single issue only for the Department of Energy and Climate Change.

For further information about the Tar Sands, including the toxic impacts on the indigenous communities downstream and other pollution horrors click on the links in my website (<u>www.dragonfly1.plus.com</u>). These links can be found on page 2 of the **TAR SANDS information sheet** (Acrobat pdf format).

If you prefer detective work yourself, Google TAR SANDS, or e.g. TAR SANDS RBS - and open the can of worms!

But for action the most urgent website to visit is www.fairpensions.org.uk/tarsands/action

For Climate Change information with a more local focus visit www.slacc.org.uk - the website for the South Lakes Action on Climate Change towards transition.

Dr Henry Adams, Ecological Consultant, Kendal. April 2010 www.dragonfly1.plus.com

A shortened version of the present article is on the SLACCtt website BLOGS web-page.