The world is teetering on the brink of climate crisis. But attempts to avert it are being threatened by a massive industry in the Canadian wilderness.

Major oil companies, banks and investors are pouring billions of dollars into the development of the Alberta Tar Sands.

The Tar Sands are the dirtiest and most desperate attempt yet to profit from - and prolong - humanity’s crippling addiction to oil. Tar Sands development is turning once pristine stretches of ancient forest into desolate, post-apocalyptic landscapes and producing toxic pollution that is harming the health and quality of life of the region’s Indigenous First Nations communities.

Until recently, BP was the only major oil company not to be in the Tar Sands. But all this has changed. The company, which used to boast that it was ‘Beyond Petroleum’, has decided it wants a piece of the dirty oil action.

Only a powerful popular campaign can stop it now.

“The Tar Sands is the largest industrial project in the world. It is also the dirtiest. Tar Sands produce three to five times as much CO₂ per barrel as conventional oil. There’s enough under the ground to push us over the edge into runaway climate change. It should be everyone’s concern.”

- Lionel Lepine, Athabasca Chipewyan First Nation
Canada’s Tar Sands

What are Tar Sands?
Tar Sands are basically oil clay. They are sticky deposits of bitumen mixed with sand and clay, which require enormous quantities of energy and water, and several stages of industrial processing, to extract and turn into useable crude oil.

Canada’s Tar Sands are the biggest energy project in the world, currently producing 1.3 million barrels of oil a day.

- Largely located in Alberta, the Tar Sands deposits are distributed over an area of 140,000 km² – an area larger than England.
- Canada has the second largest oil reserves in the world, after Saudi Arabia.
- Canada is the biggest supplier of oil to the US, the world’s largest oil consumer.

Future expansion:
$86 billion has been invested since 2000 in the construction of mines, upgraders, pipelines, refineries and steam plants, with a further $120bn in developments that are underway or planned.

- By 2020 Canadian Tar Sands could produce more greenhouse gases than Austria, Portugal, Ireland or Denmark.
- The plan is for production to increase to 3-5 million barrels per day by 2030.

From dirt into oil
Tar Sands oil is extracted in two ways:

1. Open-pit mining:
   - first the overburden is removed – this is the entire ecosystem including boreal forest and peat marsh (both major carbon sinks). Then giant electric shovels and the biggest trucks in the world dig up the deposits, going down 75m into the ground. It takes four tonnes of earth to produce 1 barrel of oil this way.

2. ‘In situ’ mining:
   - 80 per cent of Alberta’s deposits are too deep for strip mining. They are melted out of the ground by injecting pressurised steam at high temperatures. This resource-intensive method uses roughly twice the water and energy of strip mining.

Resource-intensive
Tar Sands are the most energy-intensive fossil fuel in commercial production.

- The extraction process emits three to five times more CO₂ per barrel than conventional oil.
- Enough natural gas is used in the Tar Sands every day to heat 3.2 million Canadian homes for 24 hours. The development will be using enough gas to heat all 11.5 million Canadian homes by 2012.
- Giant toxic ‘tailings ponds’ of waste produced by some of the projects cover 150 km².

Much of the water used in Tar Sands production ends up in toxic ‘tailings ponds’, so vast they are visible from space. These ponds leak 11 million litres a day of toxic waste into local water supplies. A generation ago, the Athabasca River was clear and drinking from it was common. Now, those that live alongside the river consider it poisonous and off-limits.

Poisoning precious water

“The river used to be blue. Now it’s brown. Nobody can fish or drink from it. The air is bad. This has all happened so fast.”
- Elbie Fabian, 63, an elder in a Native community along the Athabasca River.

Water is needed in huge amounts in Tar Sands production and infrastructure. It takes 3 to 7 barrels of water to produce one barrel of oil (between 230 and 530 million cubic metres a year - more than many large cities use). This water is being diverted from rivers, lakes, farms and cities throughout Canada. The water levels in the Athabasca River have already dropped several metres.

Trampling Indigenous Rights
Indigenous First Nations in Canada have had a sacred relationship with Mother Earth for thousands of years. But now the Tar Sands development has been imposed on their land.

Local communities are seeing high rates of rare forms of cancer, autoimmune and respiratory disease.

Contamination of groundwater has led to arsenic and other heavy metals in moose meat – a dietary staple for First Nations peoples – up to 300 times acceptable levels, and deformed fish have been found in nearby Lake Athabasca.

First Nations have experienced a blatant disregard for their rights in both the management of existing Tar Sands projects, and in the approval of new projects in their territories.

In 2008, chiefs from across Alberta and the neighbouring provinces of Saskatchewan and British Columbia came together to call for a moratorium on all new Tar Sands developments, and threatened to back this up with legal action. While the government continues to approve new projects, several First Nations are fighting them with lawsuits.

BP: a Big Player

In recent years, BP has spent a lot of money trying to convince the world it had moved ‘Beyond Petroleum’. But following the catastrophic Deepwater Horizon oil spill, the only thing left that’s green about this huge corporation is its famous logo. With its entrance into the Tar Sands, it’s safe to say that Beyond Petroleum has gone back to Petroleum...

The Sunrise Project

In 2007, BP took the decision to move into Tar Sands in a big way. In partnership with Husky Energy, a Canadian company, it announced the ‘Sunrise Project’, an extraction project that could produce 200,000 barrels per day.

Sunrise will use so-called SAG-D (Steam Assisted Gravity Drainage), where water is superheated into steam with vast amounts of natural gas, then injected deep into the earth to “melt” the oil from the sand and clay.

When the financial crisis hit and the price of oil crashed in 2008, BP put the project on hold. Then in December 2010 BP announced it intended to go ahead with the project, and invested £1.6 billion in the ‘development phase’. But it will be another four years before the oil flows - so there is still time to stop it.

Other potential BP projects

In February 2010 it emerged that Sunrise wasn’t the only filthy card up BP’s sleeve. The company was in talks to pay about $1.2 billion for a majority stake in Value Creation, a failing Canadian company that has massive Tar Sands reserves. Then, in March, BP sealed a deal with Devon Energy, which would involve the US company coming in and running a Tar Sands extraction project on BP’s behalf. A week later, it emerged that BP had won the bid for Value Creation.

The final investment decision has not been made on these two projects yet. There is still time for BP to back down.

Pipelines and refineries

BP already operates many pipelines and processing facilities vital to the Tar Sands infrastructure. Sunrise will involve piping Tar Sands bitumen to BP’s Toledo refinery, in Ohio, USA. This refinery has been opposed by local communities for excessive flaring, emissions and concerns about health.

In Whiting, Indiana, BP owns the oldest refinery in the US. The company is applying to upgrade it to take on Tar Sands bitumen. BP itself predicts that this expansion would entail a 21 percent increase in fine particle matter, which is known to cause cancer and aggravate asthma. As a result, local communities are strongly against it.

BP fights back – with greenwash

Since the campaign to stop BP going into the Tar Sands started to grow, BP has been treating investors, NGOs and the media to a charm offensive, claiming that the Sunrise Project won’t be like all those other nasty Tar Sands projects – that it will be clean, green, and that local First Nations are perfectly happy about it.

In fact, there’s plenty of evidence to suggest the Sunrise method of mining deeper deposits, known as ‘in situ’, is even more energy and water-intensive than the much uglier surface mines, and its greenhouse gas emissions will be up to three times higher.
Solemn promises to introduce carbon capture and storage (CCS) sometime in the future have been branded a 'dangerous myth' by WWF and The Co-operative, who conclude that this unproven technology is unlikely to significantly reduce emissions from the Tar Sands until at least 2050. And CCS, even if it worked, would do nothing to prevent the toxic by-products that are killing people in Indigenous communities downstream.

BP claims that because Sunrise is not a surface mining operation there will be no tailings ponds and minimal damage to the ecosystem. This is also just plain wrong. The fragmentation of the boreal forest by well pads, pipelines and processing facilities for this type of operation devastates bird and animal habitats.

Alberta's caribou herds, according to the Canadian Parks and Wilderness Society, are 'almost doomed' as a result. Furthermore, there is still a serious risk of water pollution. Sunrise, like many 'in situ' projects, is right on top of Canada's biggest aquifer. BP cannot guarantee it won't be contaminated, given that accidental steam blowouts keep occurring in similar developments. Rick Boucher, vice-president of the local Métis Nation, fears that 'it's just a matter of time before an accident causes injury or death, and pollution of this massive underground freshwater system.'

There is no way to 'green' the Tar Sands – we have to leave them in the ground. A powerful movement campaigning to shut down the Tar Sands has emerged. It is being led by affected First Nations communities and grassroots activists who reject claims that the Tar Sands can be 'green' and demand Climate Justice!

Here in the UK we have a vital role to play in this international struggle. We have to force BP to drop its plans for Sunrise. If we succeed, it would not simply mean that one potential project amongst many had been thwarted. It would send shockwaves through the entire oil industry and investment community, and could even spell the beginning of the end for this particularly filthy source of fuel.

How you can get involved:

A coalition of networks and organisations is mobilising to target BP, including the Indigenous Environmental Network, UK Tar Sands Network, Camp for Climate Action, Rising Tide UK and Platform.

Join us on Facebook:

No Tar Sands
IEN - Canadian Indigenous Tar Sands Campaign

Follow us on Twitter:

@NoTarSands
@ClaytonIEN

Find out how you can get involved at:

www.no-tar-sands.org
www.ienearth.org/tarsands.html

Find out more:

Indigenous Environmental Network:
www.ienearth.org/tarsands.html

UK Tar Sands Network:
www.no-tar-sands.org/

Camp for Climate Action:
www.climatecamp.org.uk/

Rising Tide:
http://risingtide.org.uk/

Art Not Oil:
www.artnotoil.org.uk/

Platform:
www.platformlondon.org/carbonweb/

New Internationalist issue 431:
www.newint.org/

First Nations representatives address a crowd of climate campers outside BP Headquarters in September 2009. Photographer: Alex Lee