

# Toxic Fuels: Tar Sands & Shale Oil

## What are toxic fuels?

- Tar sands consist of oil trapped in a complex mixture of sand, water and clay.
- Extraction of tar sands emits on average three times more carbon dioxide emissions than mining conventional oil.
- Shale oil consists of oil trapped in sedimentary rock.
- Shale oil extraction emits up to eight times more carbon dioxide than conventional oil extraction.
- Vast resources of shale oil and tar sands could redraw the world oil map.

## Threatening climate disaster

Emissions from the production and extraction of these fuels could accelerate climate change to levels not seen on Earth for 55 million years and threaten extinction for a significant proportion of life on our planet. In recent years, there has been a massive increase in activity in the development of unconventional fuels. More than US\$125 billion has been allocated for the development of tar sands in Alberta, Canada by 2015, and in the United States, millions of dollars are going into research to extract oil from shale rock.

## Threatening ecological disaster

These fuels also risk local ecological disaster. Tar sands in Canada have already caused significant environmental damage with large-scale deforestation of pristine boreal forest, a globally important carbon store and wildlife habitat, and toxic waste water ponds – big enough to be seen from space. Tar sand developments also adversely impact upon the well-being of local indigenous communities

*Emissions from oil sands processing*

