

Tar sands coming to town

Exposing Valero's plans to bring tar sands oil to the UK



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NETWORK 

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



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Corporate Watch

Corporate Watch
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*Tar sands have no place
in our energy future if we are to
stop catastrophic climate change.*

Tar sands extraction is one of the biggest threats to our climate. While Canada and the EU go head to head over the Fuel Quality Directive, and Obama battles hundreds of thousands of US pipeline protesters, a little-known company is planning to slip tar sands-derived fuel into Europe, discreetly and quietly. We need to pipe up about this now, before it's too late.

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Part I:

Tar sands and expanding markets

What are the tar sands?

Buried deep under the Albertan boreal forest is 140,000 square kilometres of bituminous sand, known as the ‘tar sands’ – or ‘oil sands’ by the Canadian government and oil industry. The 169.9 billion barrels of proven reserves in Canada are the third largest deposit of oil in the world after Saudi Arabia and Venezuela. Industry currently extracts 1.5 million barrels of tar sands oil per day (bpd)¹, the majority of which is exported to the US.

The tar sands are the world’s largest and dirtiest industrial project. Compared to conventional crude oil, oil from tar sands is much more energy-intensive to remove and process, requiring substantially more refining. Like many ‘unconventional’ types of oil, tar sands are extracted in an incredibly environmentally damaging way. The process emits 3.2 to 4.5 times more greenhouse gas than conventional oil extraction², uses vast amounts of fresh water³ and natural gas, and in many cases leaves behind lakes of toxic pollution. Tar sands developments destroy vast tracts of forest habitat, threatening wildlife with extinction. The resulting pollution has been thought to cause local communities, often First Nations, to suffer rare forms of cancer.⁴



Accelerated development

Despite growing worldwide opposition to tar sands, the industry is expanding – at an accelerating rate. In the next decade, production is expected to double.⁵ Yet if the Albertan tar sands are fully exploited as planned, they will contribute more than 14% of all the carbon emissions that humanity can afford to emit, ever, if we are to have a reasonable chance of stabilising our climate.⁶ According to NASA scientist James Hansen, fully exploiting the tar sands would effectively mean “game over” for the climate.⁷

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This mindless expansion is partly due to a decline in conventional, easily extractable oil resources, combined with rising oil prices, which makes this expensive, energy-intensive fuel profitable to extract. At the heart of the expansion strategy is also the assumption that global demand for oil will continue rising for the foreseeable future.⁸ This dangerous prediction assumes business-as-usual with minimal or non-existent new government legislation on climate change, and little development of alternative energy. The industry also ignores the threat that legal challenges from First Nations could stall or prevent future tar sands expansion and disrupt the profitability of the industry in the long run.

As extraction rates increase, larger amounts of oil will need to be transported out of Alberta, requiring new refineries, pipelines, and, most significantly, new markets to receive the faster-flowing oil. Currently 99% of tar sands oil is exported to the US⁹, but as extraction rates rise – and the US increases domestic oil production and vehicle fuel efficiency– the tar sands industry is seeking new markets for tar sands-derived products in Asia, South America and Europe.





Getting the oil out of Alberta...

Currently, a network of pipelines are already transporting tar sands crude into the US and to Canadian ports for export, but to cope with the expected glut of new oil, vast expanses of new pipelines are planned.

The most relevant¹⁰ of these is Keystone XL, the proposed extension to the existing Keystone I pipeline which would, if completed, transport synthetic crude oil from the Alberta tar sands, across the US, to the Gulf Coast.

The company behind the extension is TransCanada, a North American energy infrastructure company and the sole owner of the existing Keystone Pipeline.

Keystone XL would open up a major new export route for the tar sands and has attracted fierce opposition, with over 1,200 protesters arrested in daily sit-ins outside the White House in August 2011. Protesters included landowners, farmers and Indigenous communities along the proposed route. A rupture of the Keystone XL pipeline near the Ogallala, one of the world's largest aquifers, would contaminate local groundwater resources for millions of US residents.

Keystone XL would open up a major new export route for the tar sands and has attracted fierce opposition

Supporters of the extension, including TransCanada and the US Chamber of Commerce, have focused heavily on job creation and energy security arguments. However, research has shown that in fact much of the oil would be destined for overseas markets.¹¹

In January 2012 the pipeline was delayed by the Obama administration. However, in May 2012, TransCanada submitted a revised route through Nebraska, bypassing the sensitive Sandhills area but still passing over some parts of the Ogallala aquifer. A decision by the US

Department of State is now expected in the first quarter of 2013, after the US presidential elections. Meanwhile, the southern section of the route, from Oklahoma to Texas, was given support by the Obama Administration and construction started in August 2012.

A variety of other proposed pipelines, including reversals of existing pipelines, could also take oil to Canada's east coast.

Enbridge, Canada's largest pipeline operator, is in talks with Valero and other refiners about reversing the flow of a pipeline from Sarnia, Ontario to Montreal, Quebec, which would eventually ship Canadian crude to the U.S. east coast.¹²



...and into Europe?

In expanding the tar sands infrastructure, the Canadian government assumes that new markets will be open to importing tar sands. But the European Union is one potential market that has shown some reluctance to open its doors to the dirty fuel.

To meet its emissions reduction targets, the EU is currently in the throes of negotiating the Fuel Quality Directive (FQD), which would discourage the use of high-emission crude oil, like tar sands, in transport fuels in Europe.

Based on research from Stanford University, the EU Commission wants the FQD to label oil sourced from the tar sands as 23% more carbon-intensive than conventional oil.¹³ While this would not 'ban' tar sands-derived products from entering the EU, it would strongly discourage companies from importing them, requiring them to balance these products with a lower carbon supply elsewhere in the fuel mix – with limited options available.

While Europe currently imports very little tar sands-derived fuel¹⁴, this legislation would both prevent Europe becoming a major new market, and potentially set a precedent for other important existing markets – such as US states – to adopt similarly restrictive legislation. It could also have a ripple effect, discouraging new tar sands extraction projects in other parts of the world, such as Madagascar.

Unsurprisingly, the Canadian government, with the support of European oil companies, has been lobbying hard to prevent the EU differentiating between conventional oil and oil derived from tar sands.



Catastrophic climate change is already bringing more floods, droughts and storms. These disasters often hit poorer communities first and hardest.

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While many European states support the legislation, several states – including the UK – have been sympathetic to the Canadian position, and have refused to back the EU proposal, instead delaying the process and suggesting alternative methodologies that would be less effective at keeping tar sands out of Europe. At the time of writing, the FQD is in limbo, awaiting another vote from member states in 2013.

Worryingly, while the EU is busy fine-tuning its ambitious fuel policy, tar sands could start sneaking unnoticed into Europe in increasingly larger quantities.

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*The new gas-fired power station at Pembroke, and behind it the Valero oil refinery
Photo: Gordon James*



Part II:

Valero and Pembroke

The initiator: Valero

US-based Valero Energy is the world's largest independent petroleum refiner – a company which refines crude oil, but does not drill for it. Valero owns 16 refineries with a combined capacity of three billion barrels per day. Its most recent purchase, in August 2011, was the Pembroke refinery in Wales, marking its first foray beyond the Americas. The £450 million deal also included ownership interests in four major pipelines and 11 fuel terminals, a 14,000 barrel-per-day aviation fuels business, and more than 1,000 Texaco-branded service stations in the UK and Ireland.

The majority of Valero's operations are focused on the business of taking crude oil from various sources, processing it at its refineries to produce gasoline (petrol), diesel, jet fuel, asphalt, petrochemicals, and other products, then selling them either on the market or directly to the consumer through its 6,800 retail outlets.

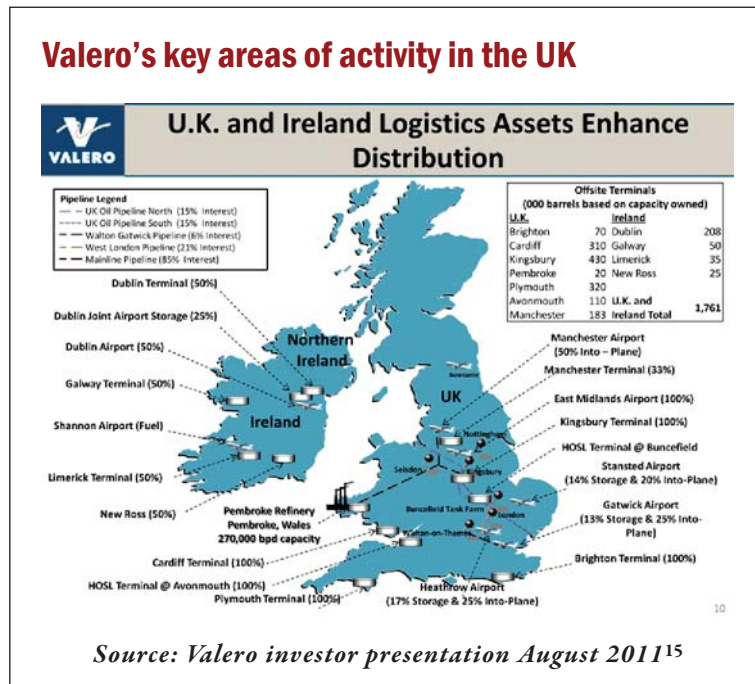
Valero also produces ethanol from 10 plants in the US.¹⁶ It promotes this side of its business as Valero Renewables, although bio-ethanol is neither environmentally nor socially sustainable.¹⁷

In another attempt to improve its green credentials, Valero built a 33 turbine wind farm outside its McKee Refinery. However, in comparing one 50 megawatt wind farm to the 3 million barrels of crude that Valero processes each day, it is obvious where the company's priorities lie.

Valero's fishy background

Valero has an appalling environmental record. In its relatively brief history it has repeatedly received huge fines for violations of air and water pollution legislation¹⁸, funded climate change deniers, and fiercely opposed carbon reduction legislation. One of Valero's most notorious activities was its support of Proposition 23, a 2010 ballot measure which would have suspended the Californian Global Warming Act of 2006.

Valero's key areas of activity in the UK



Valero was by far the largest single donor to the campaign pushing 'Prop 23', contributing more than \$5 million.¹⁹ In the end the proposition was defeated.²⁰

However, attempts to block the Californian Low Carbon Fuel Standard (LCFS) continue. The LCFS is a regulatory measure, similar to the European Union's Fuel Quality Directive, aimed at substantially reducing greenhouse gas emissions from the state's transportation sector by requiring oil refineries and distributors to ensure that the fuel they sell in the Californian market meets carbon intensity (CI) targets. Valero has interests in preventing the Low Carbon Fuel Standard from coming into effect as both its bio-ethanol plants and its refineries would be impacted by CI standards, creating substantial costs. The LCFS is currently locked in a legal battle, with an outstanding lawsuit by the oil industry and ethanol advocates still to be resolved.²¹

Valero ... has repeatedly received huge fines for violations of air and water pollution legislation, funded climate change deniers, and fiercely opposed carbon reduction legislation.

In addition to environmental criticism of the company, Valero has been the centre of a host of other controversies, including safety issues, political influence, labour disputes, wrongful death lawsuits²², excessive CEO pay²³ and war profiteering.²⁴ The company has been involved in at least 28 cases of misconduct, comprising a total of \$283.5m²⁵, and has a history of using its wealth to influence political candidates and policy making. Since 1999 Valero has spent almost \$2.9 million on congressional and political candidate donations, with 83% going to the Republican Party.²⁶



Valero and tar sands

Valero's future business plans rely heavily on Canadian tar sands, with the company boasting that "this large new source of crude oil for the Gulf Coast market will further diversify our feedstock slate and increase our ability to optimize our profitability".²⁷

Valero has committed to taking on at least 100,000 barrels a day (20% of initial capacity) from the proposed Keystone XL pipeline until 2030.²⁸ The company has also recently upgraded its Port Arthur refinery in Texas, increasing its ability to process heavy sour crude – i.e. crude high in sulphur that originates from a variety of places including Canada's tar sands – to 80% of its capacity. Port Arthur is located where the proposed Keystone XL pipeline is planned to terminate, on the Texas Gulf Coast, perfectly positioned for export to Europe and Latin America.

Although the completion of Keystone XL would greatly increase potential tar sands exports to Europe, evidence of small amounts of tar sands-derived oil already entering Europe, primarily in the Netherlands, Gibraltar, Spain and France, was demonstrated in a 2010 report by Greenpeace.²⁹

It revealed how petroleum products containing crude from tar sands have already been entering the EU's petroleum supply chain for some time, mainly from diesel imports from the US Gulf Coast, and particularly from Valero's Port Arthur refinery, which was shown to have regularly processed tar sands crude while exporting diesel to Europe since at least June 2009. The report estimated that about 9.5% of the crude processed at the refinery originated from the Alberta tar sands – and this seems likely to grow.

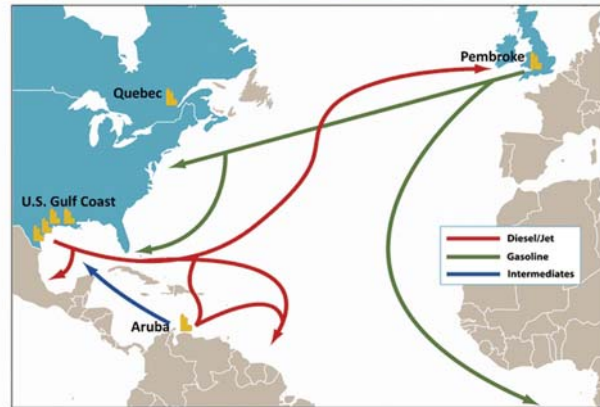
Valero's plans for Pembrokeshire

The 2011 acquisition of the Pembroke Refinery in Wales from Chevron represents a key stage in Valero's plans to export oil from tar sands to Europe. The refinery has a throughput capacity of 270,000 barrels per day and is one of the largest and most complex in Western Europe.³⁰

In a 2011 investor presentation³¹ Valero demonstrated how its acquisition of the Pembroke Refinery would enhance its plans to export diesel from its Gulf Coast facilities to Europe.

Valero's projected shipping routes (2011)

Pembroke Enhances Valero's Margin Optimization Strategy in the Atlantic Basin



Source: Valero investor presentation August 2011 ³²

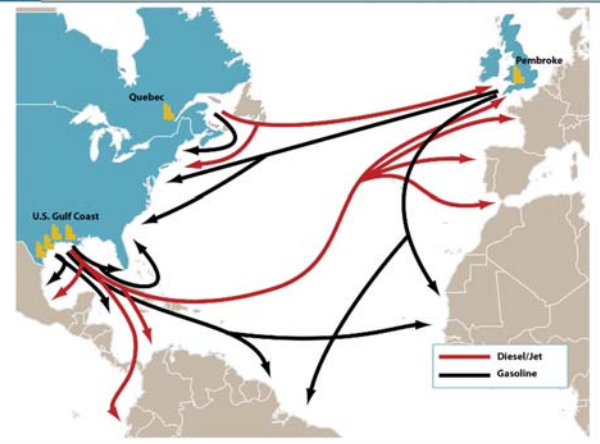
In July 2012, another Valero investor presentation highlights a new strategy to export oil to Europe via eastern Canada, which doesn't rely on Keystone XL.

So as the pipeline network expands, so does the likelihood of tar sands products entering the UK: oil originating in the tar sands will flow via US and Canadian refineries to Pembroke and then on to petrol pumps throughout the UK and Ireland.

Valero's future business plans rely heavily on Canadian tar sands

Valero's projected shipping routes (2012)

Valero in the Atlantic Basin



Source: Valero investor presentation July 2012 ³³

It is worth noting that the Pembroke refinery is not currently equipped to process raw tar sands crude, and current US law also severely restricts the export of unrefined crude.³⁴ This means that tar sands-derived oil arriving in Pembroke would not be in its raw toxic form, having already been refined in the US, or potentially Canada.



Scenes from the Sea Empress 1996 oil spill at Milford Haven, Pembrokeshire

Challenging Valero

The EU Fuel Quality Directive would theoretically harm Valero’s commercial interests, impacting on its plans to import tar-sands derived fuel to the UK via Pembroke. However, as Valero’s investor presentations demonstrate, the company does not seem to be put off.

Moreover, the FQD only targets transport fuel, so this will not affect other tar sands-derived products, like petcoke, a high-carbon solid fuel used in steel refining, power stations and cement production. Petcoke was discovered by Greenpeace to be one of the likely products already arriving in the EU via Valero.³⁵

The lengthy, arduous EU process has led local people to wonder if by acting locally they can influence Welsh legislation to prevent the import of tar sands-derived products. The Welsh government does claim to take sustainable development seriously, proposing to make it its ‘Central Organising Principle’, with all public bodies adopting sustainable development principles when making decisions. Importing oil from the tar sands would mean propping up the world’s dirtiest industry, squarely contradicting the Assembly’s sustainability goals. Yet the actual power of the Welsh government is limited.

A success story

Tar sands is by no means the first dirty fuel to be imported to the Pembrokeshire coast. Containing two oil refineries, two large liquefied natural gas (LNG) terminals and a new 2000 MW gas-fired power station currently under construction, the area is a hub for oil and gas development.

Yet a strong environmental movement in the area has had a series of victories against the oil and gas industry.

Tar sands is by no means the first dirty fuel to be imported to the Pembrokeshire coast.

One noteworthy victory was the successful prevention of ‘Orimulsion’, a dirty fuel made from bitumen in the Orinoco Belt in Venezuela, from coming into Pembrokeshire. In 1991, a proposal was submitted by National Power to burn the fuel at Pembroke power station. Concerns around local air pollution, increased acid rain and possible oil spills resulted in a fierce six-year campaign against the proposal. The campaign faced strong opposition from local authorities and businesses, but a turning point came in February 1996

when a large oil tanker, the Sea Empress, ran aground at the entrance of Milford Haven spilling over 70,000 tonnes of oil. This significantly increased fears of Orimulsion being shipped into the Haven, and a year later the company withdrew its application.

The case of tar sands is different to that of Orimulsion but it shows that a strong community can win an environmental battle against the fossil fuel industry to prevent the import of dirty fuels.



Jill Evans MEP joins Pembrokeshire Friends of the Earth to present a legal complaint about the new gas-fired power station at Pembroke to the European Commission’s representative in Wales.

Photo: Ian Homer



What can we do?

Challenge Valero to share information

We need to force Valero to fully disclose the origin of the oil products it imports to Pembroke and other locations in the UK, as well as its long- and medium-term plans for how this might change based on pipeline expansion in the US.

Find out what regulatory oversight there is over Valero's Pembroke refinery, and who is responsible for it

What permissions would Valero need to dramatically increase imports of products derived from tar sands? Could the Welsh government take a stand against the import of oil originating from the tar sands, based on its goal of 'Sustainable Development'? Would local politicians be willing to speak out against tar sands? If you live near Pembroke, you might want to contact Pembrokeshire Friends of the Earth³⁶, who are working on this issue.

Put Valero in the spotlight

Unlike BP, Shell, and most oil giants, Valero has the luxury of not being a household name. We need to highlight Valero's plans and dodgy history, and let the company know that it is starting to be on the public's radar. One public face of Valero in the UK is its 1000+ Texaco petrol stations.

Work in solidarity

Protesters fighting the Keystone XL pipeline, advocates pushing the EU Fuel Quality Directive, and affected communities on the frontline of tar sands extraction, are all part of the same battle. Join in the struggle wherever you can.

Make a declaration to become "Tar-Free"

Valero is spreading into other parts of the UK too, having purchased terminals in 11 locations including Cardiff, Plymouth, Manchester and Brighton. Is your town on the map on page 6? The UK Tar Sands Network is working with communities around the UK to create a network of 'Tar-Free Towns', that are resisting direct and indirect links to the dirty fuel.

Organise, resist, create, transition, protest and take direct action!

Try getting involved in one of many climate and environmental action groups around the UK, such as Rising Tide, Climate Justice Collective, Campaign Against Climate Change, Climate Rush, Transition Towns, People & Planet, and local Friends of the Earth, Greenpeace or Green Party groups.

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The tar sands industry needs to be shut down, not expanded

Challenging Valero at every step of its planned expansion into Europe will be a new challenge and opportunity in the tar sands battle. Tar sands have no place in our energy future if we are to stop catastrophic climate change. Yet the Canadian government and oil industry's enthusiasm in expanding into new markets, building new pipelines, and approving record numbers of new tar sands leases will lock us into using this dirty fuel for decades to come. By challenging this expansion, we have a great opportunity to slow the rate of production – and eventually keep the majority of the oil in the soil once and for all.



Indigenous activists join UK Tar Sands Network and Rising Tide to protest against BP's sponsorship of the Tate Modern, April 2011

Find out more:

UK Tar Sands Network

www.no-tar-sands.org/valero

Corporate Watch

See the Valero company profile:

www.corporatewatch.org/?lid=4511

Pembrokeshire Friends of the Earth

www.foepembrokeshire.co.uk

Other climate groups:

Campaign Against Climate Change

www.campaigncc.org

Climate Justice Collective

www.climatejusticecollective.org

Climate Rush

www.climaterush.co.uk

Friends of the Earth

www.foe.co.uk

Greenpeace

www.greenpeace.org.uk

Green Party

www.greenparty.org.uk

People & Planet

www.peopleandplanet.org

Rising Tide

www.risingtideuk.org.uk

Transition Towns

www.transitionnetwork.org

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- 3 <http://pubs.pembina.org/reports/oil-sands-and-water-slides.pdf>
- 4 In 2006, unexpectedly high rates of rare cancers were reported in the community of Fort Chipewyan. www.cbc.ca/news/canada/edmonton/story/2006/03/10/ed-fortchip20060310.html In 2008, Alberta Health confirmed a 30% rise in the number of cancers between 1995 and 2006, with exposure to toxins from tar sands developments identified as a possible cause. Alberta Cancer Board (2009), Cancer Incidence in Fort Chipewyan, Alberta. www.albertahealthservices.ca/rls/ne-rls-2009-02-06-fort-chipewyan-study.pdf However, the study lacks appropriate data and is considered a conservative estimate by many residents.
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- 6 <http://dannychivers.blogspot.co.uk/2012/04/just-how-bad-are-canadian-tar-sands.html>
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- 8 BP, for instance, has been shown to be basing its business plan on a scenario that also predicts a six-degree temperature rise (the IEA 'reference scenario'). www.guardian.co.uk/sustainable-business/bp-complaint-deepwater-annual-reporting
- 9 www.worldwatch.org/node/5287 See also www.neb-one.gc.ca/clfsi/rnrgynfmtn/sttstc/crdlndptrlmprdct/stmtdcndncrdlxprtpdstn-eng.html
- 10 A less relevant, but hugely significant, alternative route out of Alberta, is the Enbridge Northern Gateway pipeline, which would take tar sands oil west to British Columbia, and export crude to Asian markets via the new marine terminal in Kitimat on the western Canadian coast. This has met huge opposition from First Nations and other BC communities situated along the proposed route. See e.g. <http://freedomtrain2012.com/> and <http://pipeupagainstenbridge.ca/> and <http://savethefraser.ca/>



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- 12 <http://fuelfix.com/blog/2011/10/06/enbridge-talking-with-valero-on-east-coast-pipeline-reversal/> See also <http://oilsandstruth.org/economic-downturn-shuts-down-trailbreaker-reversal-tar-sands-montreal> and www.mainebiz.biz/apps/pbcs.dll/article?AID=/20120403/NEWS02/120409981/1088
- 13 Upstream greenhouse gas (GHG) emissions from Canadian oil sands as a feedstock for European refineries, Stanford University, Adam Brandt (January, 2011). For a summary of the report, see here: http://switchboard.nrdc.org/blogs/smui/european_commission_report_fin.html The 23% figure refers to the whole “well-to-wheels” lifecycle of the oil– this includes the refining, transportation and burning of the fuel. If considering the extraction process alone, tar sands are 3-5 times more carbon intensive than conventional oil.
- 14 www.greenpeace.org.uk/files/pdfs/tar-sands-in-your-tank.pdf
- 15 http://google.brand.edgar-online.com/EFX_dll/EDGARpro.dll?FetchFilingHtmlSection1?SectionID=8088578-6228-46331&SessionID=2DT9FHPq9TW3e77
- 16 www.valero.com/OurBusiness/Pages/CompanyHistory.aspx
- 17 Biofuels are associated with a host of problems, including deforestation, land grabs, devastation of indigenous communities, soil depletion, and loss of biodiversity. Biofuels have also impacted on global grain prices, contributed to food shortages, famine and food riots, and are a major source of greenhouse gas emissions. See e.g. www.newint.org/features/2011/07/01/biofuelscrops-unsustainable-environmental-damage/
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- 33 <http://phx.corporate-ir.net/External.File?item=UGFyZW50SUQ9MTQ1MTk4fENoaWxkSUQ9LTF8VHlwZT0z&t=1>
- 34 This could change – as the oil lobby in the US pushes for unrefined crude to be allowed to be exported from the US. See: www.reuters.com/article/2012/06/15/usa-api-exports-idUSL1E8HFH7G20120615
- 35 www.greenpeace.org.uk/files/pdfs/tar-sands-in-your-tank.pdf
- 36 www.foepembrookshire.co.uk



Tar sands coming to town

Exposing Valero's plans to bring tar sands oil to the UK



September 2012

UK TAR SANDS NETWORK



The UK Tar Sands Network sees the tar sands as a major driver of climate change and a huge barrier to indigenous rights and climate justice. We work in partnership with indigenous communities to curb the industry's operations.

UK Tar Sands Network

www.no-tar-sands.org/valero

twitter.com/notarsands

facebook.com/notarsands



Pembrokeshire Friends of the Earth
Cyfeillion y Ddaear Sir Benfro

Pembrokeshire Friends of the Earth has taken a prominent role in successful frontline campaigning, lobbying of politicians and extensive media activity on many environmental issues in south-west Wales over the last 25 years.

Pembrokeshire Friends of the Earth

www.foepembrokeshire.co.uk

Corporate Watch

Corporate Watch is an independent, not-for-profit research and publishing group that undertakes research on the social and environmental impact of large corporations, particularly multinationals.

Corporate Watch

www.corporatewatch.org

twitter.com/CorpWatchUK

