

# Athabasca Oil Sands Project

## **Summary**

The Athabasca Oil Sands Project was called the world’s most destructive oil operation by National Geographic in 2019.<sup>1</sup> The multiple extraction sites use two main extraction methods: in situ recovery and surface mines. While the in situ process is energy and water intensive, for surface mines, large areas of the boreal forest need to be cleared, and they produce toxic tailing ponds.<sup>2</sup> The project is estimated to emit 1.4 GtCO<sub>2</sub> only by burning the extracted fossil fuel.<sup>3</sup>

## **Basic information**<sup>2, 3</sup>

Location: Alberta, Canada ([Map](#))

Annual extraction (2019): 102.2 mboe

Total resources (2019): 3,823.2 mboe

Fuel type: oil (crude bitumen)

Potential emissions: 1.36 GtCO<sub>2</sub>

Extraction methods: in situ recovery (drilled wells), surface mining

## **Companies involved**

	<b>Operator</b> <sup>4</sup>	<b>Owner</b> (those on the EU carbon bomb companies list in <b>bold</b> ) <sup>4, 5</sup>	<b>Investors from the EU carbon bomb companies list</b> <sup>5</sup>
1.	Athabasca Oil Corporation	Canadian Natural Resources Limited	BBVA
2.	Canadian Natural Resources Limited	<b>Chevron Corporation</b>	BNP Paribas

<sup>1</sup> This is the world's most destructive oil operation—and it's growing, 2019  
<https://www.nationalgeographic.com/environment/article/alberta-canadas-tar-sands-is-growing-but-indigenous-people-fight-back>

<sup>2</sup> Alberta Energy Regulator, AER  
<https://www.aer.ca/>

<sup>3</sup> Kühne, Energy Research & Social science, 2021  
<https://www.sciencedirect.com/science/article/abs/pii/S2214629621002656>

<sup>4</sup> Global Oil and Gas Extraction Tracker, Global Energy Monitor, 2022  
<https://globalenergymonitor.org/projects/global-oil-gas-extraction-tracker/>

<sup>5</sup> EU CSDDD - List of Carbon Bomb Companies, Leave it in the Ground Initiative, 2023  
<https://www.leave-it-in-the-ground.org/wp-content/uploads/2023/08/EU-CSDDD-List-of-Carbon-Bomb-Companies42.xlsx>

3.	Canadian Natural Upgrading Limited	CNOOC Oil Sands Canada	BPCE/Natixis
4.	Cenovus Energy Inc.	<b>Exxon Mobil Corporation</b>	Citi Group
5.	CNOOC Petroleum North America ULC	Imperial Oil Resources Limited	Commerzbank
6.	Connacher Oil And Gas Limited	<b>Shell plc</b>	Crédit Agricole
7.	ConocoPhillips Canada Resources Corp.	Sinopec Oil Sands Partnership	Deutsche Bank
8.	Deltastream Energy Corporation	Suncor	DZ Bank
9.	Fort Hills Energy Corporation	Suncor Energy Inc.	HSBC
10.	Greenfire Hangingstone Operating Corporation	Teck Resources	ING Group
11.	Harvest Operations Corp.	<b>TotalEnergies SE</b>	Intesa Sanpaolo
12.	Husky Oil Operations Limited		Santander
13.	Imperial Oil Resources Ventures Limited		Société Générale
14.	Japan Canada Oil Sands Limited		UBS
15.	MEG Energy Corp.		UniCredit
16.	PetroChina Canada Ltd		
17.	Spur Petroleum Ltd		
18.	Suncor Energy Inc.		
19.	Syncrude Canada Limited		

### **Criticism**

- Oilsands could eventually acidify an area the size of Germany, study says, 2018

*This article is about research on predicting the effect of the acid emissions from Alberta's tar sands. It issues a warning, that the emissions could damage an area close to the size of Germany.*

<https://www.thestar.com/news/canada/2018/07/25/oilsands-could-eventually-acidify-an-area-the-size-of-germany-study-says.html>

- Fort McKay First Nation sues Alberta government, says oilsands project threatens sacred site, 2018

*This article is about a lawsuit against an approved tar sands project that poses a risk of polluting a lake that is located only 2 kilometres from the site.*

<https://globalnews.ca/news/4751414/fort-mckay-first-nation-moose-lake-lawsuit/>

- This is the world's most destructive oil operation—and it's growing, 2019

*This article is about the destructive nature of Alberta's tar sands operations. It discusses the extraction methods and the risks they pose to the local communities and nature. It also looks into the situation of the local communities.*

<https://www.nationalgeographic.com/environment/article/alberta-canadas-tar-sands-is-growing-but-indigenous-people-fight-back>

- Measured Canadian oil sands CO2 emissions are higher than estimates made using internationally recommended methods, 2019

*This article that was published in the paper, Nature Communications, is about measuring GHG emissions from Canadian tar sands operations. It found that the CO2 emissions of tar sands facilities are 13-123% larger than the estimated values using publicly available data.*

<https://www.nature.com/articles/s41467-019-09714-9>

- Imperial Oil faces federal order to stop seepage as tailings leak deemed harmful to wildlife, 2023

*This article is about a ruling related to a toxic wastewater seepage from a tailings pond 70 kilometres from Fort McMurray. Although the authorities are required to notify the public about any leaks within 24 hours, in this case, it happened 9 months after the first leak was discovered. Federal inspectors ordered Imperial Oil to take immediate action to stop seepage - 10 months after the first seepage.*

<https://www.cbc.ca/news/canada/edmonton/kearl-imperial-oilsands-leak-1.6778165>

### **Local organizations**

- Keepers of the Water

<https://www.keepersofthewater.ca/>

- Indigenous Climate Action

<https://www.indigenousclimateaction.com/>

- Indigenous Environmental Network

<https://www.ienearth.org/>

## El Sharara

### **Summary**

The El Sharara field is located in the Murzuq Desert in Southwest Libya, and it's one of the largest proven oil reserves in Africa.<sup>6</sup> The first oil was extracted in 1996. The extracted oil is sent to the Zawaya oil export terminal and Zawayia refinery to the Mediterranean Coast. Due to conflict in the country since the 2011 civil war, the oil output of the field was inconsistent.<sup>7</sup> In the last few years, international outlets have been calling for securing and maximising Libya's oil output, and by this, stabilize the oil market and lowering prices.<sup>8, 9, 10</sup> The project is estimated to emit 1.01 GtCO<sub>2</sub> from burning the extracted fossil fuel.<sup>3</sup>

### **Basic information**<sup>3, 6</sup>

Location: Libya, Murzuq Basin

Annual extraction (2019): 75.5 mboe

Total resources (2019): 2,844.2 mboe

Fuel type: oil

Potential emissions: 1.01 GtCO<sub>2</sub>

Extraction methods: onshore wells

### **Companies involved**

	<b>Operator</b> <sup>4</sup>	<b>Owner</b> (those on the EU carbon bomb companies list <b>in bold</b> ) <sup>4, 5</sup>	<b>Investors from the EU carbon bomb companies list</b> <sup>5</sup>
1.	Akakus Oil Operations	National Oil Corporation	BBVA
2.		<b>Repsol SA</b>	BNP Paribas
3.		<b>TotalEnergies SE</b>	BPCE/Natixis

<sup>6</sup> El Sharara Oil Field, NS Energy Business  
<https://www.nsenerybusiness.com/projects/el-sharara-oil-field/>

<sup>7</sup> Conflict in Libya since 2011 civil war has resulted in inconsistent crude oil production, 2022  
<https://www.eia.gov/todayinenergy/detail.php?id=53419>

<sup>8</sup> Can Libyan oil fix petrol-pump price problems? 2022  
<https://www.dw.com/en/libyan-oil-solution-to-the-worlds-petrol-price-problems/a-62756755>

<sup>9</sup> Libya's oil industry is in disarray right when the world needs it more than ever, 2022  
<https://edition.cnn.com/2022/06/20/business/libya-oil-control-mime-intl/index.html>

<sup>10</sup> Libya misses out on oil price boom as political divide continues  
<https://www.aljazeera.com/news/2022/4/26/libya-misses-out-oil-price-boom-political-divide-continues>

4.		<b>OMV AG</b>	CaixaBank
5.		<b>Equinor ASA</b>	Citi Group
6.			Commerzbank
7.			Crédit Agricole
8.			Deutsche Bank
9.			DZ Bank
10.			HSBC
11.			ING Group
12.			Intesa Sanpaolo
13.			Nordea Bank
14.			Santander
15.			Société Générale
16.			UBS
17.			UniCredit

### **Criticism**

- Libya sinks into poverty as the oil money disappears into foreign bank accounts, 2018

*This article explores Libya's corruption situation which causes it to sink into deeper poverty and instability.*

<https://www.independent.co.uk/news/business/analysis-and-features/libya-poverty-corruption-a8451826.html>

- Arab Spring Cartoon: The Libyan Game, 2021

*The article is about the author's opinion on Libya's current political situation in light of the revolution in 2011, 10 years earlier.*

<https://www.aljazeera.com/opinions/2021/2/1/arab-spring-cartoon-the-libyan-game>

- Libya: Working to face corruption and money-laundering challenges, 2021

*This article is about Libya's challenges related to corruption, and money laundering, that affect the development of the country. It also explains the work by international organizations to change these practices.*

[https://www.unodc.org/romena/en/Stories/2021/October/libya\\_working-to-face-corruption-and-money-laundering-challenges.html](https://www.unodc.org/romena/en/Stories/2021/October/libya_working-to-face-corruption-and-money-laundering-challenges.html)

**Local organizations**

*Couldn't find any local organization that opposes extraction from the field. This can well be due to the civil war that has left the whole country unstable since 2011.*

# Kashagan

## Summary

The Kashagan field is Kazakhstan’s first offshore shallow-water oil and gas field.<sup>11</sup> It is located in the NorthCaspian Sea under a protected area.<sup>12</sup> The start of the extraction of the field was delayed for 13 years due to several environmental, legal and investment-related complications.<sup>13</sup> Its exploitation started in 2016 with a total of 40 wells connected to five artificial islands and a 510 km long pipeline network. While the Kazakh government plans to supply at least 50% of its energy use from renewable sources by 2050, there is no plan to restrict oil extraction.<sup>14</sup> The project is estimated to emit 5.09 GtCO<sub>2</sub> from burning the extracted fossil fuels.<sup>3</sup>

## Basic information<sup>3, 11</sup>

Location: Kazakhstan, Caspian Sea  
 Annual extraction (2019): 132.2 mboe  
 Total resources (2019): 14,699.6 mboe  
 Fuel type: oil and gas condensate  
 Potential emissions: 5.09 GtCO<sub>2</sub>  
 Extraction methods: subsea wells

## Companies involved

	<b>Operator<sup>4</sup></b>	<b>Owner (those on the EU carbon bomb companies list in bold)<sup>4, 5</sup></b>	<b>Investors from the EU carbon bomb companies list<sup>5</sup></b>
1.	North Caspian Operating Company N.V	<b>Eni SpA</b>	BBVA
2.		<b>Exxon Mobil Corporation</b>	BNP Paribas
3.		JSC Samruk-Kazyna	BPCE/Natixis

<sup>11</sup> Kashagan Oil Field Development, NS Energy Business  
<https://www.nsenerybusiness.com/projects/kashagan-oil-field-development/>

<sup>12</sup> Biodiversity a-z, UN Environmental programme, Kazakhstan, 2016  
<https://www.biodiversitya-z.org/content/kazakhstan>

<sup>13</sup> Kashagan Oil Field, Kazakhstan, Environmental Justice Atlas, 2014  
<https://ejatlas.org/conflict/kashagan-oil-field>

<sup>14</sup> Away from fossil fuels: Kazakhstan sets ambitious goals for renewable energy, 2022  
[https://www.inform.kz/en/away-from-fossil-fuels-kazakhstan-sets-ambitious-goals-for-renewable-energy\\_a3894507](https://www.inform.kz/en/away-from-fossil-fuels-kazakhstan-sets-ambitious-goals-for-renewable-energy_a3894507)

4.		KMG Kashagan B.V	Citi Group
5.		<b>Shell plc</b>	Crédit Agricole
6.			Deutsche Bank
7.			HSBC
8.			ING Group
9.			Intesa Sanpaolo
10.			Santander
11.			Société Générale
12.			UBS
13.			UniCredit

### **Criticism**

- Kashagan oil field development, Kazakhstan, extractive industries: blessing or curse? 2007

*A report put together by international and local NGOs: Center Globus (Kazakhstan), Friends of the Earth Japan, Crude Accountability (USA), Platform (UK), and Corner House (UK). From its executive summary: "We believe that the public has the right to be informed of all effects of this investment, including contamination, spills, dumping, poisonous substance emissions, toxic wastes, death of seals, sturgeon and birds – all of which have significant impacts on peoples' lives."*

[https://www.foeeurope.org/sites/default/files/publications/foee\\_kashagan\\_oil\\_field\\_development\\_1207.pdf](https://www.foeeurope.org/sites/default/files/publications/foee_kashagan_oil_field_development_1207.pdf)

- NGOs criticise private banks irresponsible investment in Kazakhstan, 2008

*The article is about a letter to financial backers behind the Kashagan oil field by local and international organizations. They demand action to resolve environmental and public health issues before any development continues.*

[https://www.banktrack.org/news/ngos\\_criticise\\_private\\_banks\\_irresponsible\\_investment\\_in\\_kazakhstan](https://www.banktrack.org/news/ngos_criticise_private_banks_irresponsible_investment_in_kazakhstan)

- The Kashagan Field: A Test Case for Kazakhstan's Governance of Its Oil and Gas Sector, Campaner and Yenikeeff, 2008

*This case study explores the effects of the exploitation of the Kashagan oil field. It states that there are serious concerns related to the extraction of the field: it may harm the unique ecosystem of the North Caspian Sea.*

<https://file.ejAtlas.org/docs/1543/Kashaganbis.pdf>

- Kazakhstan loses \$5 bn from oil deal as more delays emerge, 2012



*This article is about an analysis of the actual (2012) progress of the development of the Kashagan oil field. It points out that due to further delays, Kazakhstan was losing money. Even though the government was pushing for a fair share of the revenue for months, it ended up losing due to the powerful oil contracts. "It seems the oil contract is more powerful than any other instrument in Kazakhstan. So what hope is there for the environment and local people?"*

<https://friendsoftheearth.eu/press-release/kazakhstan-loses-5-bn-from-oil-deal-as-more-delays-merge/>

- Public hearings on Kashagan ended in embarrassment (Russian), 2013

*This article is about an open meeting about the environmental impact of the development of the Kashagan field. Local environmentalists accused local officials of deceiving the locals and lobbying for the interests of oil companies.*

<https://rus.azattyq.org/a/kazakhstan-kashagan-caspian-ncoc/24936119.html>

- NCOC and Agip to dispute Kashagan fine, 2014

*This article is about the intent to challenge the fine that was given to the North Caspian Operating Company (NCOC) and Agip KCO by Kazakhstan's ecological authorities for excessive flaring after an incident. It also talks about multiple gas leak incidents that resulted in the halt of the extraction.*

<https://en.tengrinews.kz/environment/ncoc-and-agip-to-dispute-kashagan-fine-26818/>

- Oil Majors Sued by Kazakh Government Over Billions in Revenue, 2023

*The article is about a lawsuit against the operating companies of Kazakhstan's two major oil fields, Kashagan and Karachaganak, by the nation's government. The claim accuses the companies of violating production-sharing agreements, as well as violating tender procedures.*

<https://www.bloomberg.com/news/articles/2023-04-05/oil-majors-sued-by-kazakh-government-over-billions-in-revenue?leadSource=uverify%20wall>

### **Local organizations**

- Center Globus

Email: [globus-caspi@nursat.kz](mailto:globus-caspi@nursat.kz)

- Zhayyk Caspian Aarhus Center

<http://aarhus-atyrau.kz/>

- Kaspika

<http://kaspika.org/>

## Troll

### Summary

Troll is an oil and gas field in the North Sea, about 65 km west of the Norwegian shoreline.<sup>15</sup> Three platforms and multiple subsea wells are active as of 2023. The latest expansion, Troll Phase 3, which started extraction in early 2021, extends the life of Platform A and its processing plant beyond 2050 - as stated on Equinor ASA's website, that is the owner of the operator company.<sup>16</sup> It is also stated that it is likely that new wells will be drilled and new infrastructure installed on the field. There are contradictions between the operator's plan to increase extraction and its climate goals.<sup>17</sup> The carbon bomb is estimated to emit 1.77 GtCO<sub>2</sub> from burning the extracted fossil fuel.<sup>3</sup>

### Basic information<sup>3, 15</sup>

Location: Norway, North Sea

Annual extraction (2019): 245.3 mboe

Total resources (2019): 6,135.7 mboe

Fuel type: oil and gas

Potential emissions: 1.77 GtCO<sub>2</sub>

Extraction methods: subsea wells

### Companies involved

	Operator <sup>4</sup>	Owner (those on the EU carbon bomb companies list in bold) <sup>4, 5</sup>	Investors from the EU carbon bomb companies list <sup>5</sup>
1.	Equinor Energy AS	A/S Norske Shell	BBVA
2.		ConocoPhillips Skandinavia AS	BNP Paribas
3.		ConocoPhillips	BPCE/Natixis
4.		<b>Equinor ASA</b>	Citi Group
5.		Equinor Energy AS	Commerzbank

<sup>15</sup> The Troll field and the Troll A, B and C platforms, Equinor's official website  
<https://www.equinor.com/energy/troll>

<sup>16</sup> Highly profitable Troll phase 3 project on stream, 2021  
<https://www.equinor.com/news/archive/20210830-troll-phase-3>

<sup>17</sup> Greenwashing Files: Equinor, 2021  
<https://www.clientearth.org/projects/the-greenwashing-files/equinor/>

6.		Petoro AS	Crédit Agricole
7.		<b>TotalEnergies SE</b>	Deutsche Bank
8.		TotalEnergies E&P Norge AS	DZ Bank
9.		<b>Shell plc</b>	HSBC
10.			ING Group
11.			Intesa Sanpaolo
12.			Nordea Bank
13.			Santander
14.			Société Générale
15.			UBS
16.			UniCredit

### **Criticism**

- Illegal emissions at Equinor gas plant, 2020

*This article is about illegal emissions from one of Equinor’s gas plants. It highlights that however illegal emissions in the last 10 years were registered by the authorities, they weren’t any punitive consequences.*

<https://www.newsinenglish.no/2020/07/17/illegal-emissions-at-equinor-gas-plant/>

- Counting the cost: Equinor faces one-year shutdown at Norway LNG plant after fire, 2020

*This article is about a dangerous incident that happened in one of Equinor’s LNG plants. It details the incident and the consequences.*

<https://www.upstreamonline.com/safety/counting-the-cost-equinor-faces-one-year-shutdown-at-norway-lng-plant-after-fire/2-1-900069>

- Greenwashing Files: Equinor, 2021

*This report highlights the controversies between Equinor’s climate action plans and its actions. It details the company’s emissions, its business plans in terms of continued exploration and planned production increases, and how it tries to greenwash its activities.*

<https://www.clientearth.org/projects/the-greenwashing-files/equinor/>

- Climate victory at Equinor AGM, 2021

*This article is about a commitment made by Equinor to produce an annual report about its CO2 emissions of its operations worldwide. The request for this came from Greenpeace and WWF, who criticized the company over the discrepancies between its actions and what it communicates. The actions include an overwhelming focus on fossil fuels while investing heavily in advertising to rebrand the company as a ‘green energy’ corporation.*

<https://www.greenpeace.org/norway/nyheter/klimaendringer/climate-victory-at-equinor-agm/>

- Investors push Norwegian government over Equinor climate planning, 2023

*This article is about a dialogue between investors, the Norwegian government, and Equinor. Investors demand to see more ambitions from Equinor in cutting carbon emissions.*

<https://www.reuters.com/business/sustainable-business/investors-push-norwegian-government-over-equinor-climate-planning-2023-03-28/>

### **Local organizations**

- Folkeaksjonen

<https://folkeaksjonen.no/>

- Natur og Ungdom

<https://www.nu.no/>

## Vaca Muerta Shale

### Summary

Argentina's Vaca Muerta Shale, located in the Neuquén Basin of Northern Patagonia, is a vast oil and gas field.<sup>18</sup> It covers about 30,000 square kilometres, roughly the size of Belgium. While extraction of the field has been on for decades, in 2012, the Yacimientos Petrolíferos Fiscales (YPF), the majority state-owned company drastically increased the national production, then opened the field for oil and gas majors, like Chevron, Shell, and TotalEnergies.<sup>19</sup> Since then, the Vaca Muerta Megaproject has been growing and was named the quickest-growing shale play in 2021.<sup>20</sup> It also accounts for among others public health violations, indigenous rights violations, massive greenhouse gas emissions, and degradation of water, soil and air quality. The main extraction method is fracking, which has been banned or strictly regulated in multiple countries due to its destructive practices.<sup>21</sup> The carbon bomb is estimated to emit 5.18 GtCO<sub>2</sub> from burning the extracted fossil fuel.<sup>3</sup>

### Basic information<sup>3, 18</sup>

Location: Argentina, Neuquén Basin ([Map](#))  
 Annual extraction (2019): 102.6 mboe  
 Total resources (2019): 16,380.7 mboe  
 Fuel type: oil and gas  
 Potential emissions: 5.18 GtCO<sub>2</sub>  
 Extraction methods: onshore wells (fracking)

### Companies involved

	Operator <sup>4</sup>	Owner (those on the EU carbon bomb companies list <b>in bold</b> ) <sup>4, 5</sup>	Investors from the EU carbon bomb companies list <sup>5</sup>
1.	Capex SA	BASF SE	BBVA
2.	Chevron Argentina SRL	<b>BP plc</b>	BNP Paribas

<sup>18</sup> Vaca Muerta Shale Oil and Gas Field, hydrocarbons-technology.com  
<https://www.hydrocarbons-technology.com/projects/vaca-muerta-shale-oil-and-gas-field/>

<sup>19</sup> Vaca Muerta Shale Basin, Argentina, BankTrack, 2022  
[https://www.banktrack.org/project/vaca\\_muerta](https://www.banktrack.org/project/vaca_muerta)

<sup>20</sup> Vaca Muerta is the World's Quickest Growing Shale Play, 2021  
<https://energy-analytics-institute.org/2021/09/29/vaca-muerta-is-the-worlds-quickest-growing-shale-play/>

<sup>21</sup> Vaca Muerta Megaproject, A fracking carbon bomb in Patagonia, 2017  
<https://www.boell.de/sites/default/files/megaproject.pdf>

3.	ExxonMobil Exploration Argentina SRL	Bridas Corporation	BPCE/Natixis
4.	GeoPark Argentina Ltd (Sucursal Argentina)	Centaurus Energy	Citi Group
5.	Medanito SA	<b>Chevron Corporation</b>	Commerzbank
6.	Oilstone Energia SA	Dow Chemical	Crédit Agricole
7.	Pampa Energia SA	<b>Equinor ASA</b>	Deutsche Bank
8.	Pan American Energy SL	<b>Exxon Mobil Corporation</b>	DZ Bank
9.	Petroleos Sudamericanos SA	Gas y Petroleo de Neuquen	HSBC
10.	Petroquimica Comodoro Rivadavia SA	GyP Neuquén	ING Group
11.	Pluspetrol SA	Madalena	Intesa Sanpaolo
12.	President Petroleum SA	Mobil Argentina SA	Nordea Bank
13.	San Jorge Petroleum SA	Pampa Energia SA	Santander
14.	Shell Argentina SA	Pan American Energy	Société Générale
15.	Tecpetrol SA	Petrobras	UBS
16.	Total Austral SA	Petronas	UniCredit
17.	Vista Oil & Gas Argentina SAU	<b>Pluspetrol Resources Corporation B.V.</b>	
18.	Wintershall Dea Argentina SA	PlusPetrol S.A.	
19.	YPF SA	Shell Argentina	
20.		<b>Shell plc</b>	
21.		<b>Tecpetrol S.A.</b>	
22.		<b>TotalEnergies SE</b>	
23.		Vista Oil&Gas	
24.		<b>Wintershall Dea AG</b>	

25.		YPF	
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### **Criticism**

- UN Spotlight on Impacts of Argentina's Vaca Muerta Fracking Project on Indigenous Rights and Climate Change, 2017

*This article is about a report on Vaca Muerta's fracking projects. The report was done in collaboration between local and international organizations. It highlights the impact of fossil fuel extraction in Vaca Muerta. While the government plans large-scale exploitation, it should consider its effect on the local community and its significant GHG emission increase that will undermine the objectives of the Paris Agreement.*

<https://www.ciel.org/news/un-spotlight-impacts-argentin-as-vaca-muerta-fracking-project-indigenous-rights-climate-change/>

- Indigenous Mapuche pay high price for Argentina's fracking dream, 2019

*This article is about the rapidly growing fossil fuel industry in Vaca Muerta and its harm to the environment and to the local communities, and indigenous people. It discusses multiple examples and incidents: oil spills, health issues, water, and air pollution. Locals claim that the damages caused by the oil and gas industry are irreversible.*

<https://www.theguardian.com/environment/2019/oct/14/indigenous-mapuche-argentina-fracking-communities>

- Argentina bets on natural gas despite climate commitments, 2021

*This article discusses Argentina's plan to support the growing production of fossil gas in Vaca Muerta with a pipeline network. It states that Argentina's gas extraction increase is not in line with the country's climate commitment, and it analyzes the project's viability considering the energy transition.*

<https://dialogochino.net/en/extractive-industries/argentina-natural-gas-climate-commitments/>

- Frack-Off: Social Media Fights Against Fracking in Argentina, 2021

*This article is about how the anti-fracking movement used social media site, Twitter, to build their resilience.*

<https://www.tandfonline.com/doi/full/10.1080/17524032.2021.2018002>

- Argentina's Illegal Oil and Gas Waste Dumps Show 'Dark Side' of Vaca Muerta Drilling, Says Criminal Complaint, 2021

*The article is about criminal investigations into toxic fracking waste in the Vaca Muerta shale basin. Among others, it mentions the illegal storage of fracking waste that was allegedly built with the help of the municipal and provincial authorities.*

<https://www.desmog.com/2021/03/15/argentina-vaca-muerta-oil-waste-illegal-dumps-investigation/>

- Country Climate and Development Report, Argentina, World Bank Group, 2022

*This report explores Argentina's economic opportunities while considering the challenges related to climate change. It finds that the country would be able to decrease its hydrocarbon extraction and still grow its economy by investing in different industries.*

<https://openknowledge.worldbank.org/server/api/core/bitstreams/a8aee1b8-819c-5f13-98f2-b7c-bc99e6edc/content>

### **Local organizations**

- Confederacion Mapuche del Neuquen  
<https://confederacionmapuche.org/>
- Observatorio Petrolero del Sur  
<https://opsur.org.ar/>
- Observatorio de Derechos Humanos de Pueblos Indígenas (ODHPI)  
<https://twitter.com/odhpi?lang=es>
- Argentina Sin Fracking (ASF)  
<http://argentinasinfracking.org/>
- Proyecto Allen  
[http://www.proyectoallen.com.ar/3/?page\\_id=7](http://www.proyectoallen.com.ar/3/?page_id=7)



## References

- <sup>1</sup> This is the world's most destructive oil operation—and it's growing, 2019  
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