

# **A Transition Away from Coal with Something Worse than Coal?**



## ***A Colonial Climate Time Bomb & An Opportunity for a Paradigm Shift in the Climate Movement***

**Esteban Servat**

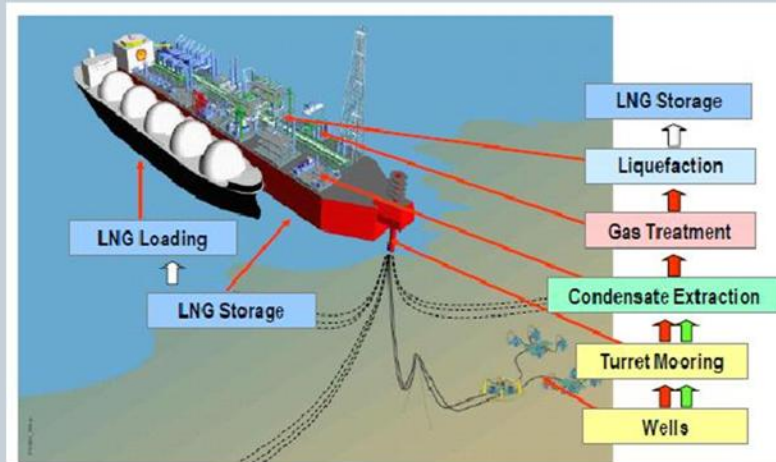
**15/06/2021**

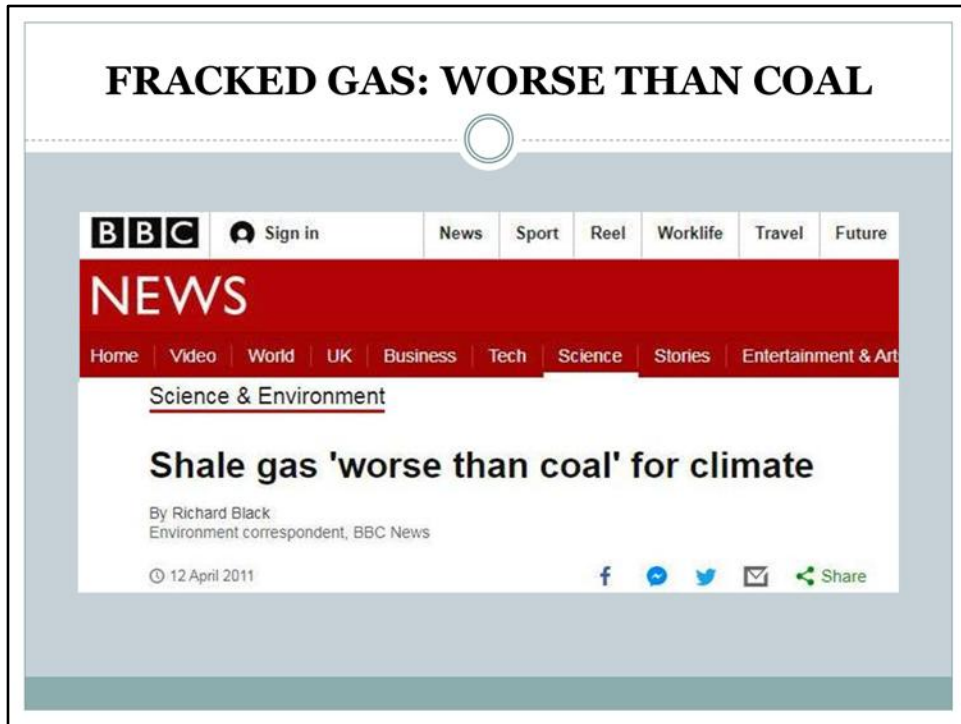
I.



## **A Transition Away from Coal with Something Worse than Coal?**

# LIQUEFIED “NATURAL” GAS (LNG)

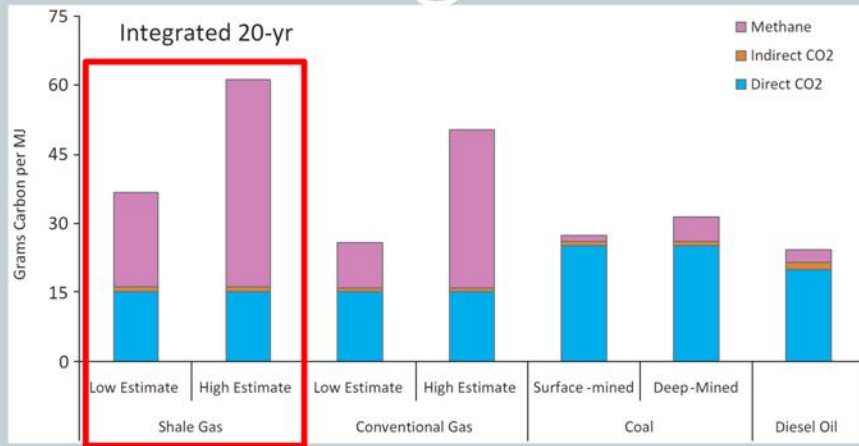




<https://link.springer.com/content/pdf/10.1007/s10584-011-0061-5.pdf>

<https://www.bbc.com/news/science-environment-13053040>

## FRACKED GAS: LARGEST GREENHOUSE EMISSIONS OF ANY FOSSIL FUEL



Howarth RW. A bridge to nowhere: Methane emissions and the greenhouse gas footprint of natural gas. *Energy Science & Engineering*. 2014;2(2):47-60

<https://onlinelibrary.wiley.com/doi/full/10.1002/ese3.35>

## FRACKED GAS: LARGEST GREENHOUSE EMISSIONS OF ANY FOSSIL FUEL

Estimates for sources of increased methane emissions to the atmosphere in recent years (teragrams per year)

All fossil fuels	17.8
– Shale gas	9.4
– Conventional gas	5.5
– Oil	1.6
– Coal	1.3
Biogenic sources	10.6

R. W. Howarth: Shale gas and global methane. *Biogeosciences*, 16, 3033–3046, 2019

<https://bg.copernicus.org/articles/16/3033/2019/bg-16-3033-2019.pdf>



[https://ec.europa.eu/energy/sites/ener/files/eu-us\\_lng\\_trade\\_folder.pdf](https://ec.europa.eu/energy/sites/ener/files/eu-us_lng_trade_folder.pdf)

## US CHANGING THE WORLD'S ENERGY MATRIX WITH FRACKING

### US To Supply More Than Half Of Global Gas By 2035

By [Tsvetana Paraskova](#) - Sep 18, 2019, 5:00 PM CDT



The United States is expected to account for more than half of the global natural gas supply growth through 2035, McKinsey & Company said in a [new report](#).

<https://oilprice.com/Energy/Natural-Gas/US-To-Supply-More-Than-Half-Of-Global-Gas-By-2035.html>

<https://www.nasdaq.com/articles/us-to-supply-more-than-half-of-global-gas-by-2035-2019-09-19>

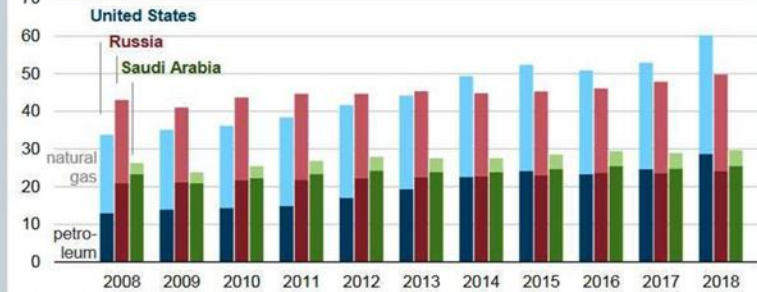


# “THE SHALE REVOLUTION”

AUGUST 20, 2019

## The U.S. leads global petroleum and natural gas production with record growth in 2018

Estimated petroleum and natural gas production in selected countries  
quadrillion British thermal units



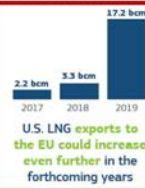
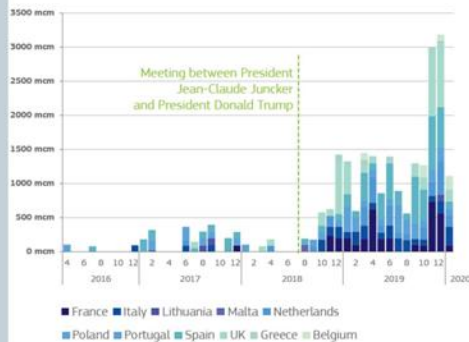
Source: U.S. Energy Information Administration, based on International Energy Statistics

Note: Petroleum includes crude oil, condensate, and natural gas plant liquids

<https://www.eia.gov/todayinenergy/detail.php?id=40973>

# FLOODING EUROPE WITH FRACKED GAS

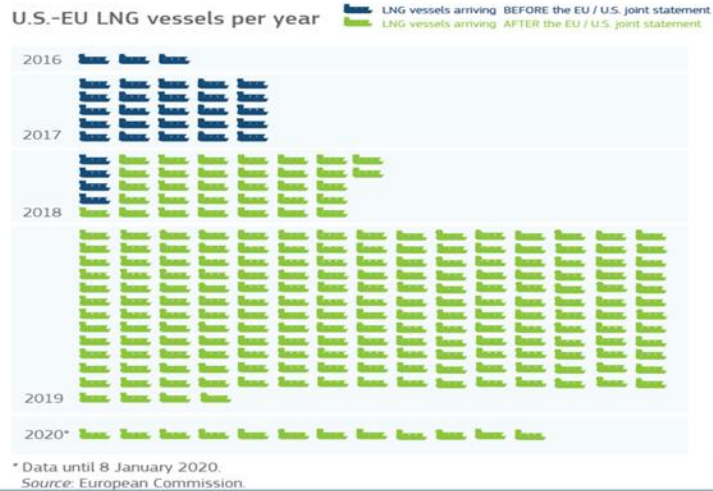
Steep increase of U.S. LNG imports in the EU after the Trump-Juncker agreement in July 2018, mainly in France, Italy, Lithuania, Malta, Netherlands, Poland, Portugal, Spain, UK, Greece and Belgium.



[https://ec.europa.eu/energy/sites/ener/files/eu-us\\_lng\\_trade\\_folder.pdf](https://ec.europa.eu/energy/sites/ener/files/eu-us_lng_trade_folder.pdf)

## FLOODING EUROPE WITH FRACKED GAS

The EU and the U.S. have much to gain from the LNG trade as there is real potential for further increase LNG trade in the coming years. Since the meeting of President Trump with President Juncker, U.S. LNG exports into Europe increased by 760%\*.



[https://ec.europa.eu/energy/sites/ener/files/eu-us\\_lng\\_trade\\_folder.pdf](https://ec.europa.eu/energy/sites/ener/files/eu-us_lng_trade_folder.pdf)

**II.**



## **A Global Ecocide**

## FRACKING & GLOBAL WARMING

*Published on Wednesday, August 14, 2019 by Common Dreams*

### **Fracking Boom in US and Canada Largely to Blame for 'Massive' Rise of Global Methane Levels: Study**

While the rise of methane in the Earth's atmosphere over the past decade has been "globally significant," quick action to end fracking would have a rapid, positive impact on the environment

by Julia Conley, staff writer

**Fracking is responsible for over 50% of all of the World's increased methane emissions from fossil fuels and 1/3 of the total increased emissions from all sources over the past 10 years**

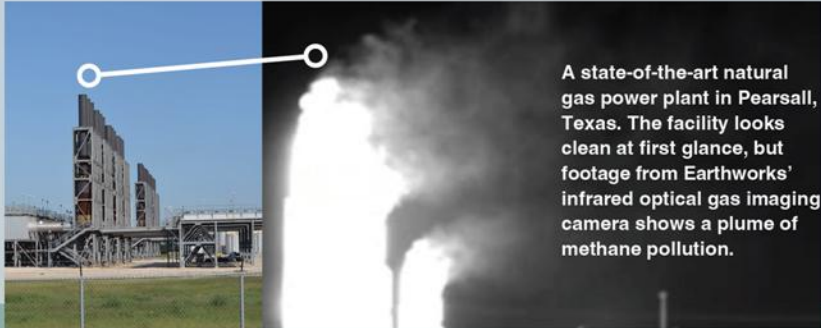
<https://www.commondreams.org/news/2019/08/14/fracking-boom-us-and-canada-largely-blame-massive-rise-global-methane-levels-study>  
<https://www.biogeosciences.net/16/3033/2019/>

# FRACKING & GLOBAL WARMING

## NASA just made a stunning discovery about how fracking fuels global warming

Natural gas is not part of the climate solution, it's part of the problem.

JOE ROMM JAN 9, 2018, 12:52 PM



A state-of-the-art natural gas power plant in Pearsall, Texas. The facility looks clean at first glance, but footage from Earthworks' infrared optical gas imaging camera shows a plume of methane pollution.

<https://earthworks.org/blog/methane-from-oil-and-gas-is-a-climate-crisis/>

<https://archive.thinkprogress.org/nasa-study-fracking-global-warming-0fa0c5b5f5c7/>

# RECORD METHANE EMISSIONS



Kate Aronoff / April 27, 2021

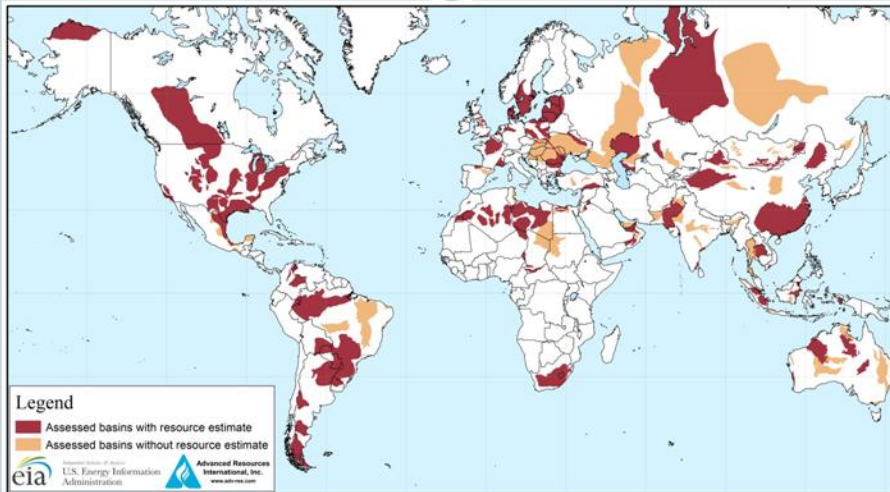
## A New Study Shows Why Fracking Has to Stop

The damage caused by methane emissions is even worse than we thought. Will other states now follow California's lead?



<https://newrepublic.com/article/162185/california-fracking-ban-newsom-methane-study>

## SPEEDING TOWARD THE ABYSS

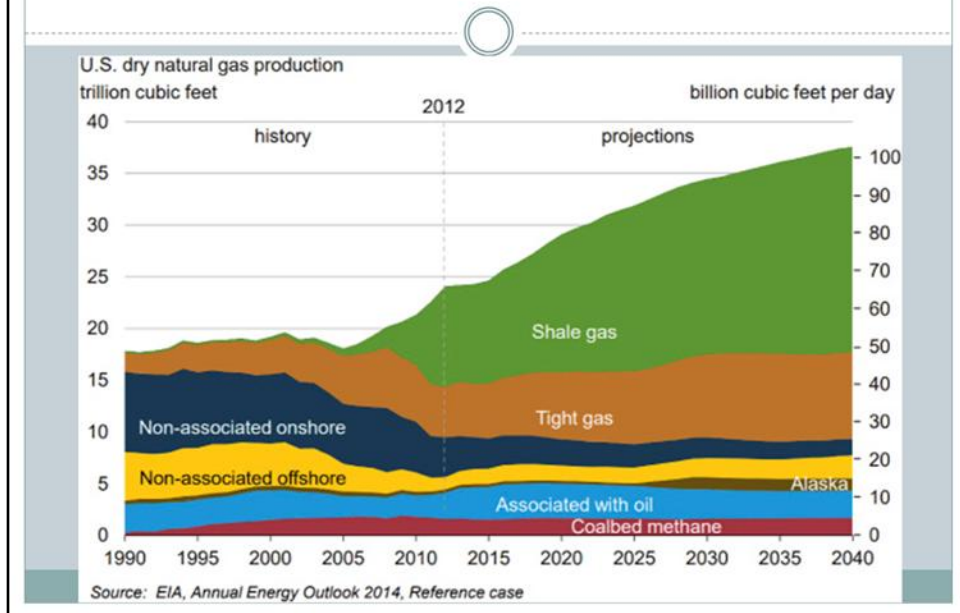


*Global Shale Basins*

<https://advances.sciencemag.org/content/4/8/eaar5982>

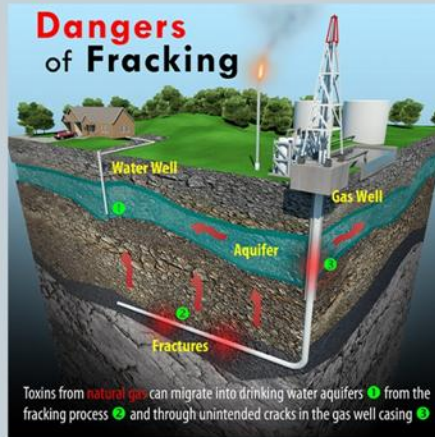


## SPEEDING TOWARD THE ABYSS



<https://www.sciencedirect.com/science/article/abs/pii/S1875510020301736>

# ¿WHAT IS FRACKING?



# WATER CONTAMINATION



[https://www.youtube.com/watch?v=MqVPLbL\\_Y-E&t=728s](https://www.youtube.com/watch?v=MqVPLbL_Y-E&t=728s)

<https://www.youtube.com/watch?v=225fC4OUZ3Y>

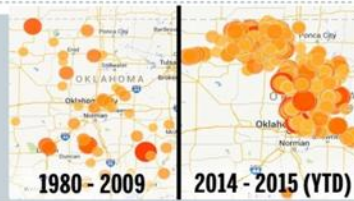
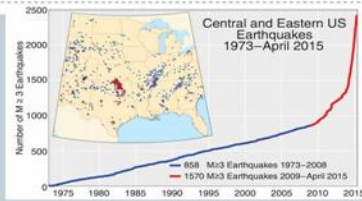
## LETHAL HEALTH CONSEQUENCES

- **Living within 16km of a fracking well is associated with high risk of birth defects**
- **Cancer**
- **Leukemia**
- **Blood disorders**
- **Nervous system conditions**
- **Immunological disorders**
- **Reproductive system conditions**
- **Heart disease, heart attacks, stroke**
- **Asthma & respiratory diseases**

<https://www.nrdc.org/media/2014/141216>

[https://concernedhealthny.org/wp-content/uploads/2019/06/Fracking-Science-Compendium\\_6.pdf](https://concernedhealthny.org/wp-content/uploads/2019/06/Fracking-Science-Compendium_6.pdf)

# INDUCTION OF EARTHQUAKES



**NEWS** 26/10/2018 16:25 BST  
**Cuadrilla Pauses Lancashire Fracking After 17th Earthquake In 9 Days**  
British Geological Survey shows seismic activity has continued.  
George Bowden  
HampPost UK

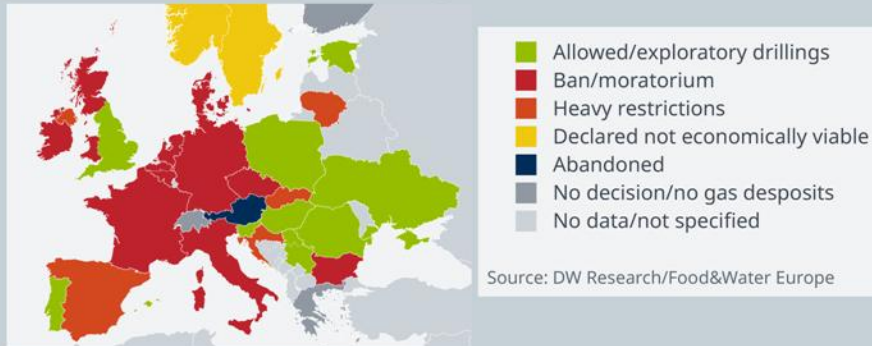


<https://www.forbes.com/sites/jamesconca/2016/09/07/the-connection-between-earthquakes-and-fracking/#38933cc06d68>

<https://www.ecowatch.com/confirmed-oklahoma-earthquakes-caused-by-fracking-1882034344.html>

<https://www.ft.com/content/35591716-fcc5-11e9-a354-36acbbb0d9b6>

## LEGAL STATUS IN EUROPE



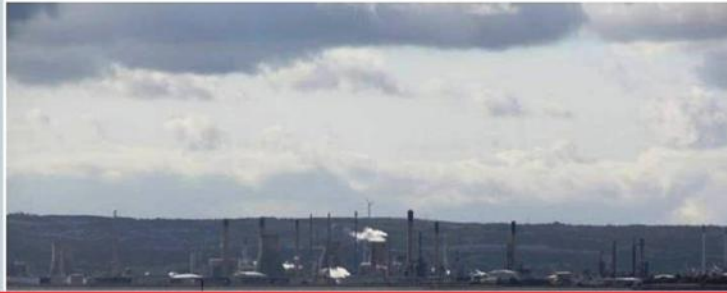
**Recently, the UK has put a moratorium and Spain has committed to full national ban.**

<https://www.dw.com/en/what-ever-happened-with-europes-fracking-boom/a-18589660>

## FRACKING PUSHING A GLOBAL PLASTIC BOOM

### U.S. fracking helps to push a global plastic boom

By Reid R. Frazier · November 16, 2019



The plan to ship this shale gas was hatched in 2011, when INEOS began looking for a new source material to feed its European chemical plants. Its own supplies of ethane from the North Sea were running low.

<https://whyy.org/articles/u-s-fracking-helps-to-push-a-global-plastic-boom/>

# FRACKING FEEDING FERTILIZER BOOM

Search



Bloomberg

Deals

## CF-Yara Talks Show How Shale Gas Is Shaking Up Fertilizer

Jack Kaskey and Christopher Donville

September 24, 2014, 3:45 PM GMT+2

Talks to create the largest nitrogen fertilizer company are the latest example of how the boom in natural gas from fracking is transforming not just the world of U.S. energy but other industries too.

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Listen to Live Radio >

### Nitrogen fertilizer market nearing saturation after shale gas boom

07/27/14 1:26 PM By Daniel Enoch

<https://www.bloomberg.com/news/articles/2014-09-23/cf-yara-talks-show-how-shale-gas-is-shaking-up-fertilizer>

<https://www.agri-pulse.com/articles/4251-nitrogen-fertilizer-market-nearing-saturation-after-shale-gas-boom>



## **SILENCE & COMPLICITY OF ENVIRONMENTAL ESTABLISHMENT**



➤ While warning of a record increase in methane emissions in its reports, the IPCC not only does not mention fracking's major contribution, but it has gone as far as to falsely claim that fracking has helped reduce emissions:

**“A key development since AR4 is the rapid deployment of hydraulic fracturing and horizontal drilling technologies, which has increased and diversified the gas supply and allowed for a more extensive switching of power and heat production from coal to gas (IEA, 2012b); this is an important reason for a reduction of GHG emissions in the United States.”**

[https://www.ipcc.ch/site/assets/uploads/2018/02/ipcc\\_wg3\\_ar5\\_chapter7.pdf](https://www.ipcc.ch/site/assets/uploads/2018/02/ipcc_wg3_ar5_chapter7.pdf)

**III.**



## **A Colonial Climate Time Bomb**

## **A SINGLE BASIN WILL CONSUME 15% OF THE GLOBAL CARBON BUDGET**

 **HEINRICH BÖLL STIFTUNG**  
The Green Political Foundation

Menu

### **Argentina: Fracking projects contradict the government`s agenda**

Contrary to government expectations, the UN Committee on Economic, Social and Cultural Rights recommended the Argentine State to “reconsider” the exploitation of Vaca Muerta due to the impact this would entail on the climate. “Total exploitation of all the shale gas reserves (of Vaca Muerta), with fracking, would deplete a significant percentage of the global carbon budget for reaching the goal of limiting the temperature increase to 1.5 °C,” stated the document published in October. A research study conducted by the organization Oil Change International draws a similar conclusion.

Exploiting all of Argentina's shale reserves at its maximum potential would consume up to 15 percent of the entire global carbon budget necessary for complying with the 1,5°C target of the Paris Agreement.

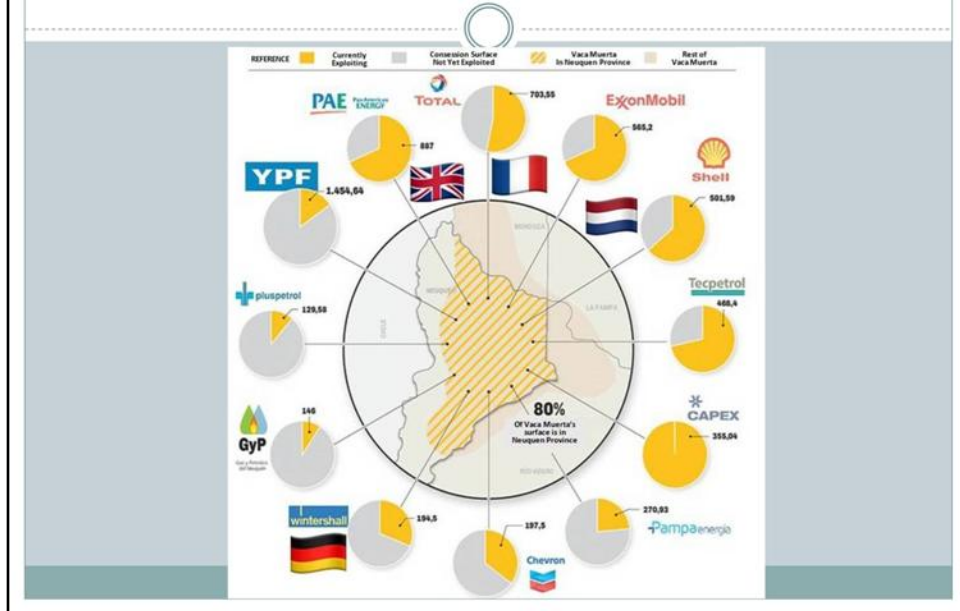
<https://www.boell.de/en/2018/11/29/argentinas-paradox-g20>



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

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

## EU COMPANIES, AMONG LARGEST HOLDERS OF LAND IN VACA MUERTA



<https://www.rionegro.com.ar/quienes-son-los-duenos-de-vaca-muerta-XJ5319473/>

# “THE BIGGEST CLIMATE CRIMINAL THAT YOU NEVER HEARD OF”



<https://wintershalldea.com/en/investor-relations>

## WINTERSHALL MUST FALL BERLIN – 11.12.20



<https://wintershalldea.com/en/investor-relations>

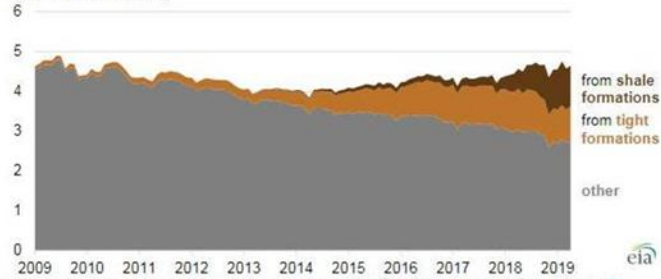
## ARGENTINA BEGINS TO EXPORT FRACKED LNG

JULY 12, 2019

### Growth in Argentina's Vaca Muerta shale and tight gas production leads to LNG exports

Argentina gross natural gas production (2009-2019)

billion cubic feet per day



Source: U.S. Energy Information Administration, based on Secretaría de Gobierno de Energía de Argentina

<https://www.eia.gov/todayinenergy/detail.php?id=40093>



## **IV.**

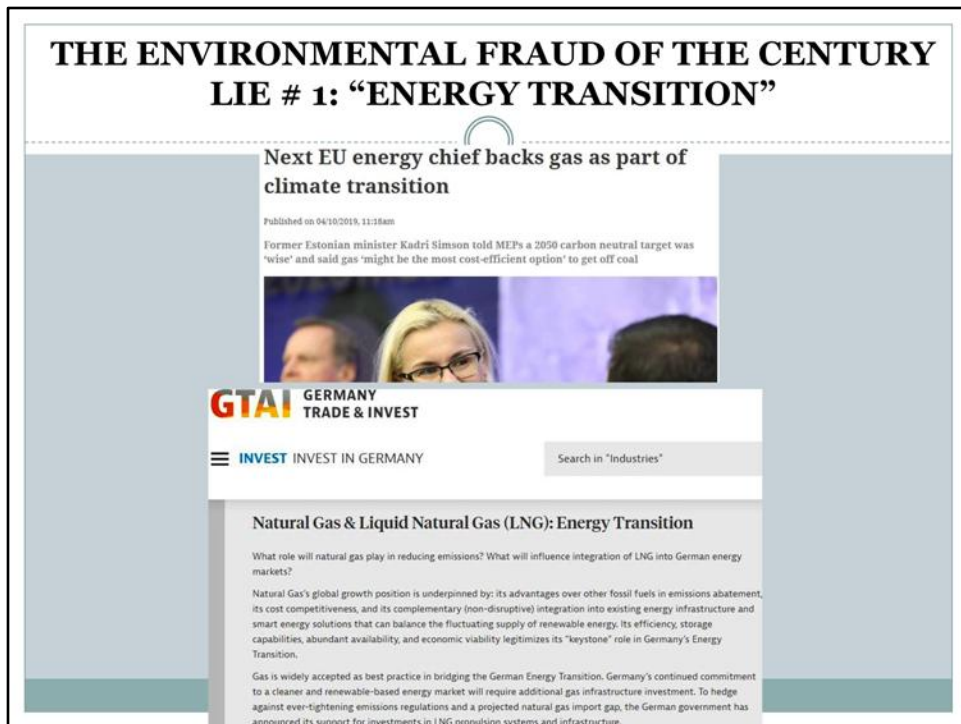


**Geopolitical Side:  
Europe Used as a Pawn in U.S.  
Push for “World Dominance”, at  
Expense of Climate & Planet**



<https://www.whitehouse.gov/briefings-statements/president-donald-j-trump-unleashing-american-energy-dominance/>

<https://marcelluscoalition.org/2019/06/american-energy-dominance-grows-with-lng-deal/>



<https://www.climatechangenews.com/2019/10/04/next-eu-energy-chief-backs-gas-part-climate-transition/>

Germany Trade & Invest (GTAI) is the economic development agency of the Federal Republic of Germany.

<https://www.gtai.de/gtai-en/invest/industries/energy/natural-gas-liquid-natural-gas-lng-energy-transition-105884#>

# GERMANY BOWS TO TRUMP'S PRESSURE



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WORLD | EUROPE

## In Win for Trump, Merkel Changes Course on U.S. Gas Imports

Chancellor calls her decision to open Germany up to U.S. liquefied natural gas a 'strategic' move



<https://www.wsj.com/articles/in-win-for-trump-merkel-changes-course-on-u-s-gas-imports-1540209647>

**THE ENVIRONMENTAL FRAUD OF THE CENTURY**  
**LIE# 2: “INDEPENDENCE FROM RUSSIA”**



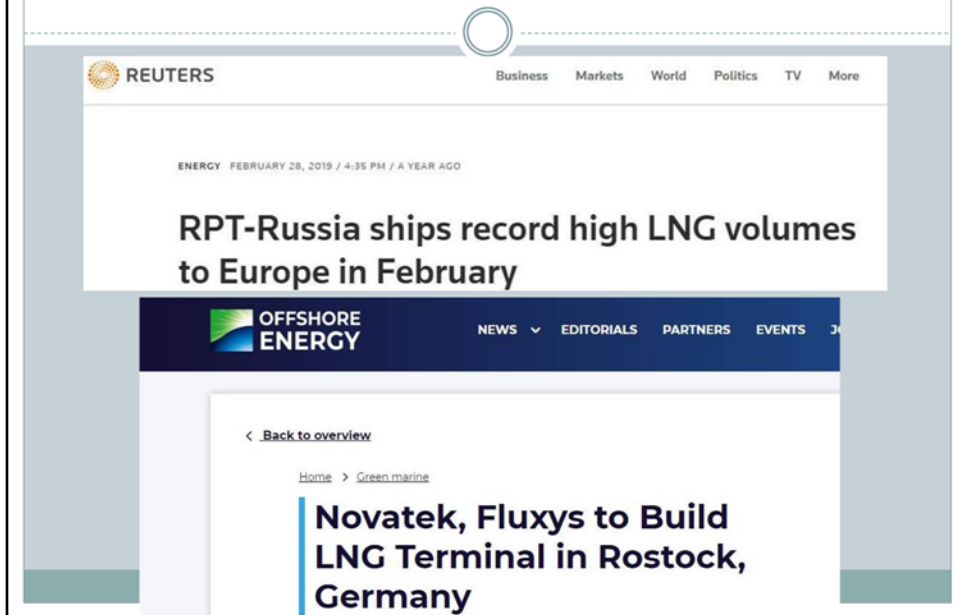
**Novatek backs LNG in low carbon future**

Following FID on Arctic LNG 2, the low-cost Russian producers sees itself well placed to benefit from the energy transition

<https://www.naturalgasworld.com/editorial-russias-two-pronged-strategy-ngw-magazine-73222>

[https://www.petroleum-economist.com/articles/politics-economics/europe-  
eurasia/2019/novatek-backs-lng-in-low-carbon-future](https://www.petroleum-economist.com/articles/politics-economics/europe-eurasia/2019/novatek-backs-lng-in-low-carbon-future)

## THE ENVIRONMENTAL FRAUD OF THE CENTURY LIE# 2: "INDEPENDENCE FROM RUSSIA"



<https://www.reuters.com/article/lng-europe-russia/rpt-russia-ships-record-high-lng-volumes-to-europe-in-february-idUSL5N20N7ZJ>

<https://www.offshore-energy.biz/novatek-fluxys-to-build-lng-terminal-in-rostock-germany/>

## AN INVASION OF “FREEDOM GAS”

### ‘Freedom gas’: US opens LNG floodgates to Europe

By Frédéric Simon | EURACTIV.com

📅 May 2, 2019 (updated: 📅 Aug 28, 2019)



US energy secretary Rick Perry will sign two export orders for liquefied natural gas (LNG) in Brussels today (2 May), in a move officials said will double America's export capacity to Europe to 112 billion cubic meters per year as of 2020.

Seventy-five years after liberating Europe from Nazi Germany occupation, “the United States is again delivering a form of freedom to the European continent,” said Rick Perry, the US energy secretary.

“And rather than in the form of young American soldiers, it's in the form of liquefied natural gas,” he told reporters in Brussels on Wednesday (1 May).

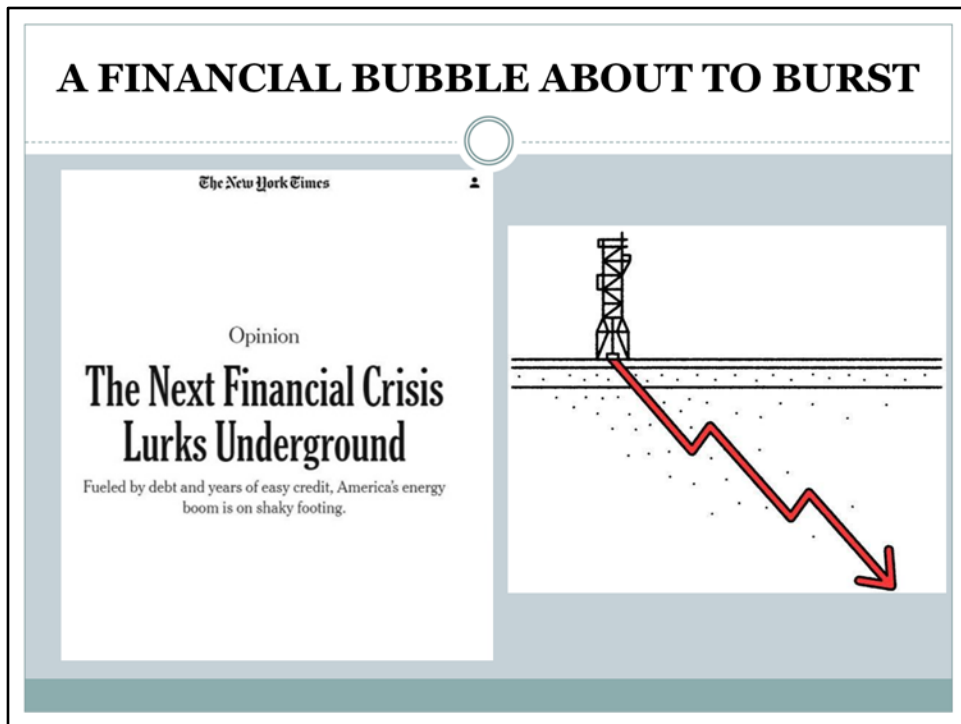
<https://www.euractiv.com/section/energy/news/freedom-gas-us-opens-lng-floodgates-to-europe/>

**V.**



**Financial Side:  
One of the Biggest Bubbles of  
our Times**





<https://www.nytimes.com/2018/09/01/opinion/the-next-financial-crisis-lurks-underground.html>

[http://ieefa.org/wp-content/uploads/2019/07/Risks-to-Fracking-Companies\\_July-2019.pdf?fbclid=IwAR1ScYmQ-](http://ieefa.org/wp-content/uploads/2019/07/Risks-to-Fracking-Companies_July-2019.pdf?fbclid=IwAR1ScYmQ-)

[ILKrZmtpQzQfOg8iySh8eh3rZPpSrNGYLtDhzXHMD86iOHw5nM](http://ieefa.org/wp-content/uploads/2019/07/Risks-to-Fracking-Companies_July-2019.pdf?fbclid=IwAR1ScYmQ-ILKrZmtpQzQfOg8iySh8eh3rZPpSrNGYLtDhzXHMD86iOHw5nM)



<https://www.wsj.com/articles/u-s-shale-driller-whiting-petroleum-to-file-for-bankruptcy-11585746800#:~:text=U.S.%20shale%20driller%20Whiting%20Petroleum,the%20crash%20in%20oil%20prices.>

<https://www.reuters.com/article/us-north-america-oil-bankruptcy/wave-of-north-american-oil-and-gas-bankruptcies-to-continue-at-40-bbl-crude-report-idUSKBN24A2U1>

<https://www.worldoil.com/news/2020/6/29/chesapeake-joins-more-than-200-other-bankrupt-us-shale-producers>

**VI.**



**Coming Together Across  
Movements & Countries to Stop  
this Global Ecocide**

## PROTEST AT GERMAN BUNDESRAT



Daniel Günther, Bundesrat President, receives over 100,000 signatures against building fracked LNG terminals

# WE MUST UNITE

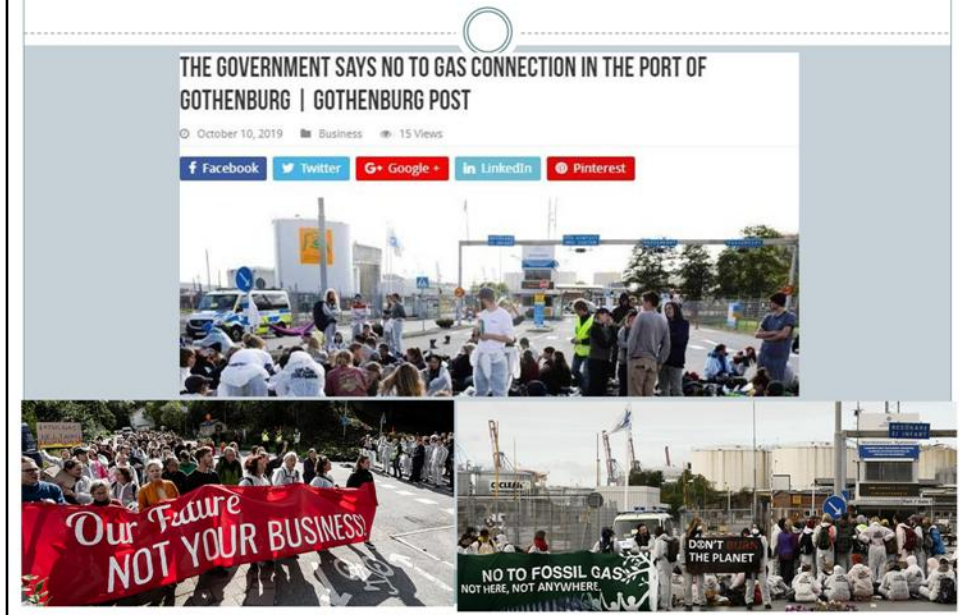


- Ende Gelände
- Extinction Rebellion

- Fridays for Future
- Fossil Free Berlin

- Green New Deal  
for Europe

## FIRST VICTORY: SWEDEN



<https://www.change.org/p/nofracking-keine-neuen-terminals-für-klimakiller-gas-fridaysforfuture-nomorepillepalle-klimakrise-stephanweil-dguenther-cdush-tschenpe/u/24623917>

# IRELAND

## Extinction Rebellion glue scientific papers to Department of Environment building

Independent Video Team  
October 11 2019 16:26 PM



## Pope Francis and Cher speak out against Shannon LNG gas terminal

William H. Williams



Extinction Rebellion activists have been in the news for their protests against the proposed Shannon LNG gas terminal. The activists have been seen in various locations, including the Department of Environment building, where they glued scientific papers to the wall. The activists have also been seen in the streets, where they have been seen holding signs and banners. The activists have been seen in various locations, including the Department of Environment building, where they glued scientific papers to the wall. The activists have also been seen in the streets, where they have been seen holding signs and banners.

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<https://www.independent.ie/videos/irish-news/archive-extinction-rebellion-glue-scientific-papers-to-department-of-environment-building-38585604.html>  
<https://www.limerickleader.ie/news/home/492186/pope-joins-anti-fracking-crusade-as-more-pressure-comes-on-shannon-lng-project.html>  
<https://www.independent.ie/irish-news/pope-backs-shannon-fracking-critics-but-taoiseach-keeps-project-on-table-38650972.html>



## GLOBAL NORTH & SOUTH UNITED IN AN INTERNATIONAL ACTION



ARGENTINA



SPAIN



USA



IRELAND

<https://xrbarcelona.org/es/blog/accion-internacional-anti-fracking-21f/?fbclid=IwAR0QV-oLVr5LOY39l4O8USk-tyKve9FGgk-Cr4zhPyy95pIIIRDvIKfk73G0>



## IRELAND BECOMES FIRST COUNTRY IN THE WORLD WITH A POLICY TO BAN FRACKED GAS IMPORTS

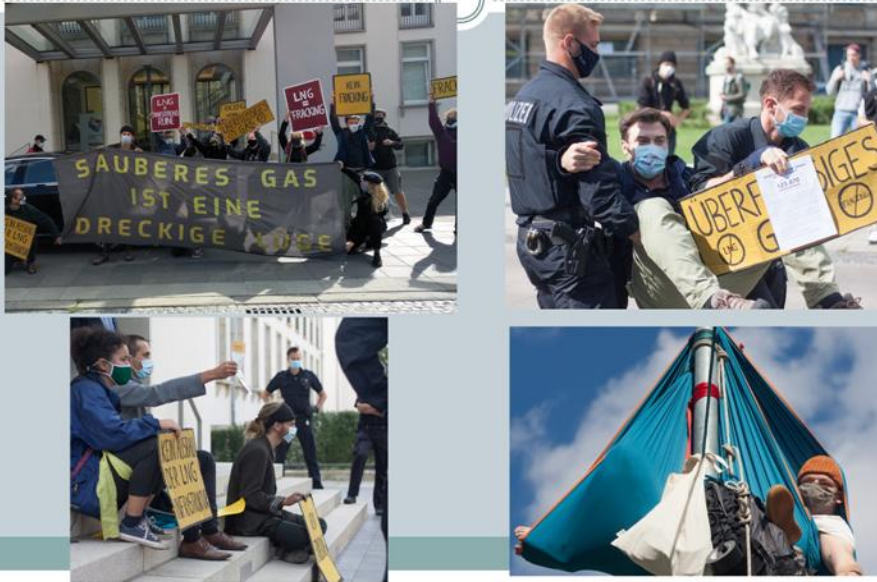
### Irish government moves to block imports of fracked gas

BY RUTH HAYHURST ON JUNE 15, 2020 • ( 13 COMMENTS )



<https://drillordrop.com/2020/06/15/irish-government-moves-to-block-imports-of-fracked-gas/>

## HANNOVER, GERMANY



<https://www.welt.de/regionales/niedersachsen/article215223012/Klima-Demonstranten-kleben-sich-an-Staatskanzlei-fest.html>

## SHALE MUST FALL



# ENDE GELÄNDE

NEWS - 14. MAY 2021

## ++Mass action against fossil gas: Ende Gelände announces action dates of July 29 – August 2++

Press release, 14th of May 2021



Ende Gelände will take a mass action of civil disobedience against the planned LNG terminal in Brunsbüttel from 29 July to 2 August 2021. The planned LNG terminal in Brunsbüttel is also to be supplied with fracking gas. Ende Gelände opposes the further expansion of any fossil infrastructure and calls for an immediate phase-out of coal and gas.

### 5TH ORGANIZING-MEETING

11. - 13. JUNE 2021: EG BÜNDISTREFFEN

### REVIEW ACTION 2020



### FLOW THROUGH OUR BARRIERS

## WHY FRACKED GAS



- Highest greenhouse warming emissions of any fossil fuel
- Colonial capitalism & climate time bomb
- Communicational opportunity as strategy to defeat dominant narrative and build critical mass against conventional gas

## NOW IS THE TIME



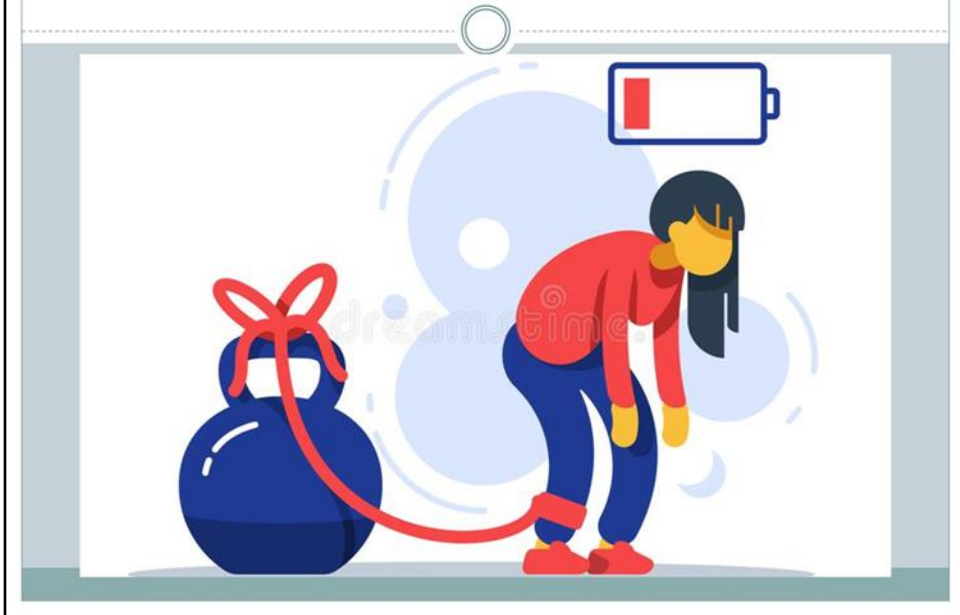
- The future of the struggling fracking industry **largely depends on the complicity of Europe to continue importing fracked gas – and expanding its LNG infrastructure to further increase its imports** as the US heads toward providing more than half of the world's gas supply by 2035 thanks to fracking.
- The massive EU market, which is the second largest consumer of gas in the world, is providing a lifeline to a heavily leveraged financial bubble that is currently undergoing its worst crisis to date, and one which presents an enormous opportunity for environmental movements to come together and deal it a permanent and final blow before it can recover and resume its endless expansion around the world.

**VII.**

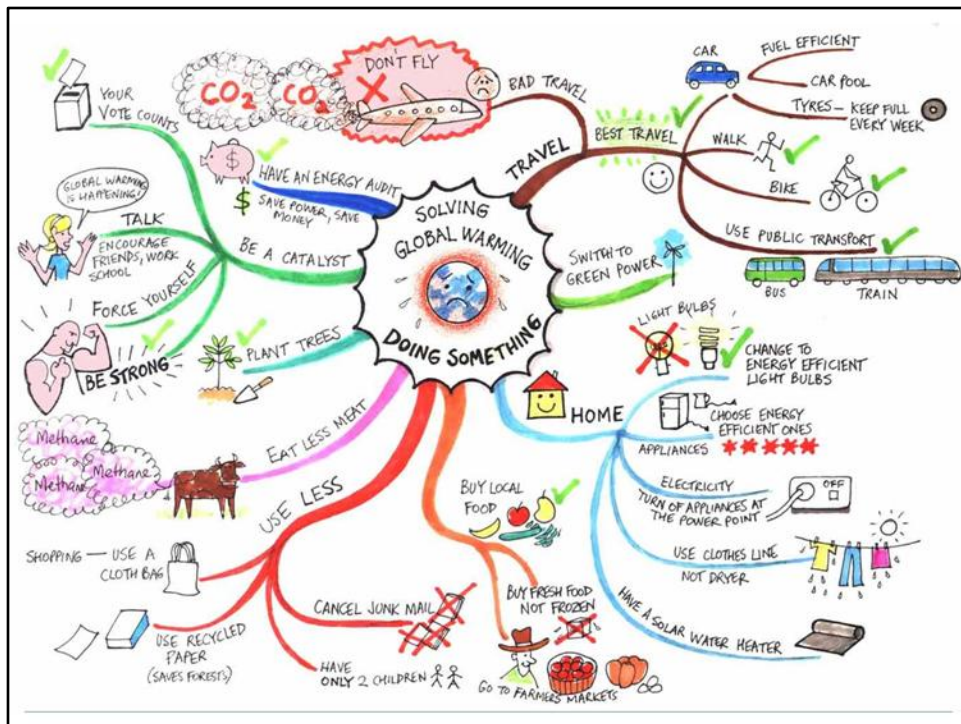


**An Opportunity for a  
Paradigm Shift  
in the Climate Movement**

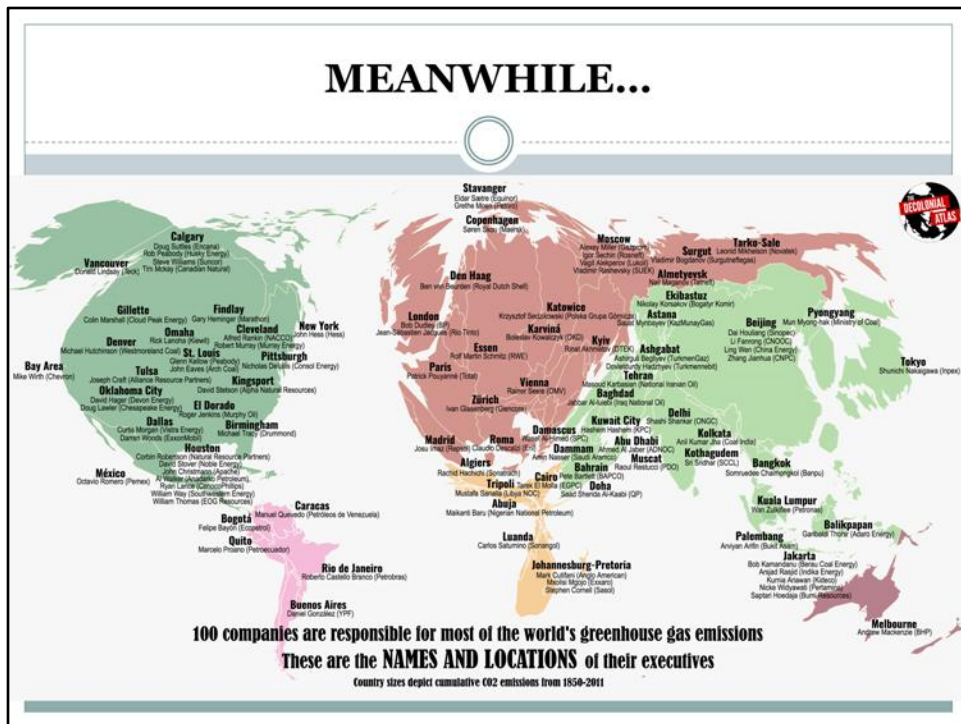
## ACTIVIST BURNOUT





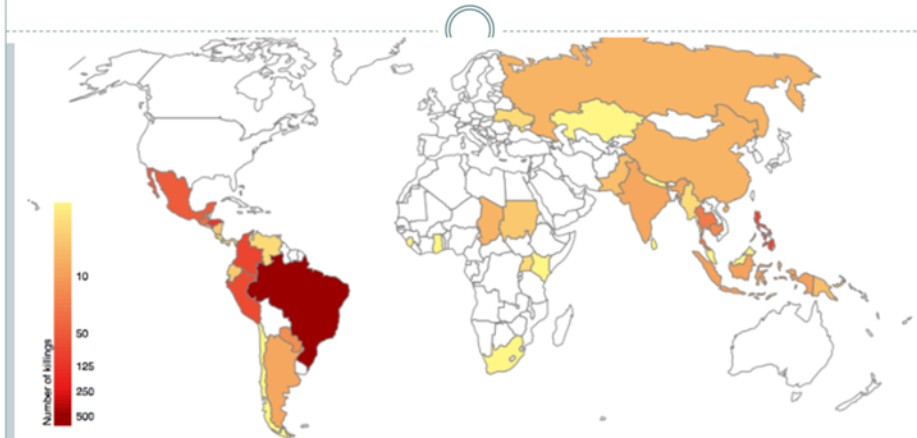


<https://creativeconflictwisdom.wordpress.com/2011/05/18/global-climate-change-mind-map/>



<https://decolonialatlas.wordpress.com/2019/04/27/names-and-locations-of-the-top-100-people-killing-the-planet/>

## THE GLOBAL SOUTH, AT THE FRONTLINE

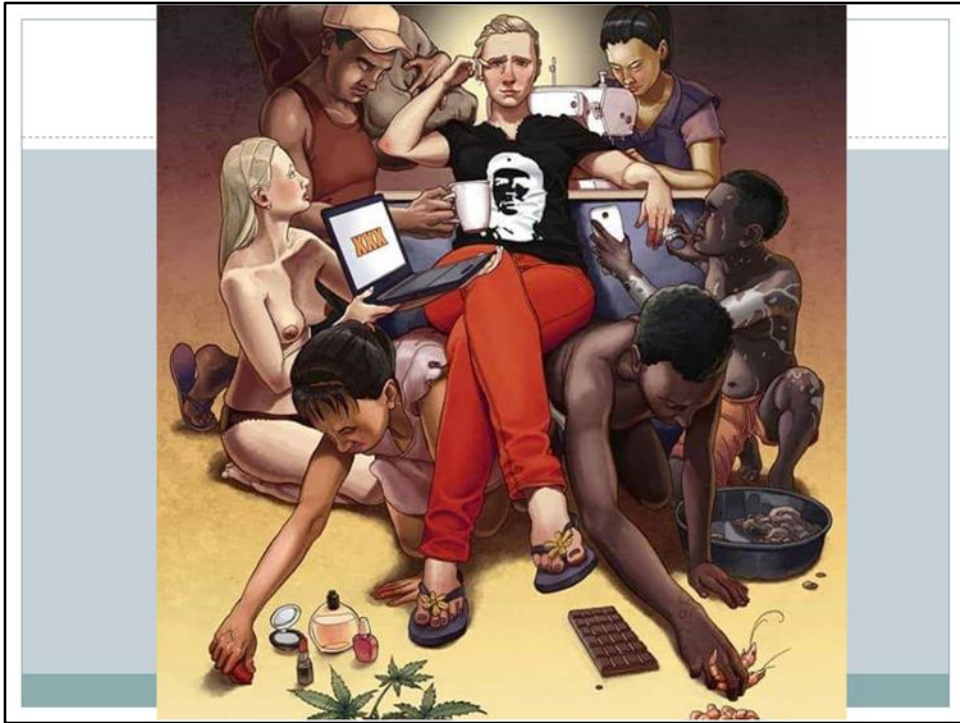


Between 2002 and 2017, 1,558 'environmental defenders' were killed across 50 countries, with 75 per cent (1,171) of those in Latin America, according to the study published in the journal *Nature Sustainability*.

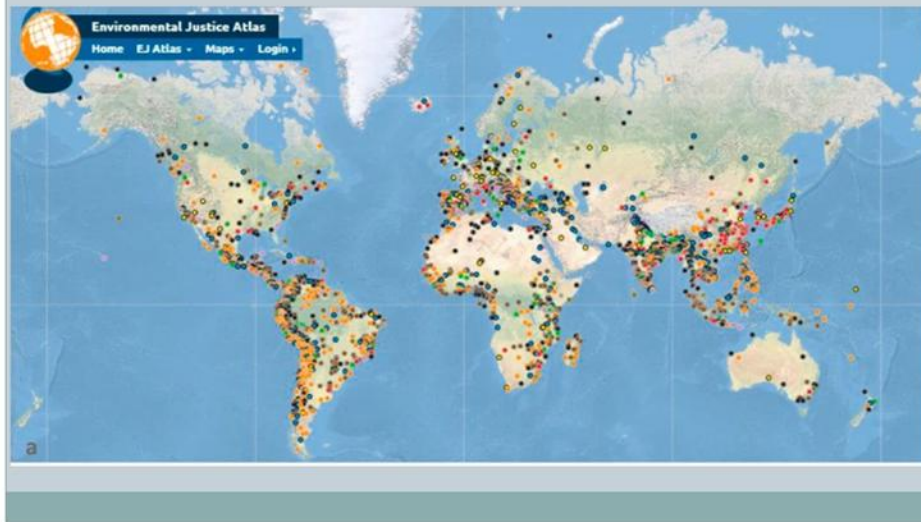
<https://decolonialatlas.wordpress.com/2015/06/08/murdered-environmentalists/>  
<https://www.developmentchannel.org/2019/08/09/worrying-rise-in-deaths-of-environmental-activists/>

## IN A NUTSHELL...





## SWITCHING AWAY FROM THE EUROCENTRIC PARADIGM



<https://transformationstosustainability.org/magazine/environmental-activists-at-high-risk-of-violence-and-assassination-according-to-new-findings-published-by-the-acknowl-ej-network/>  
<https://ejatlas.org/#>



## A COMMUNIST IDEA?



Countries and businesses from the global north have enriched themselves by exploiting



In addition, this "ecological debt" is increased when multinationals do abroad what they



the natural resources of the south, creating an "ecological debt." Who is going to pay this debt?



would never be allowed to do in their own countries. It's outrageous.

<https://www.youtube.com/watch?v=Ziryacd5vlw>

## TIME FOR ACTION!



[https://www.youtube.com/watch?v=nP4mxV0YF\\_0&t=7s](https://www.youtube.com/watch?v=nP4mxV0YF_0&t=7s)



## CONTACT



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