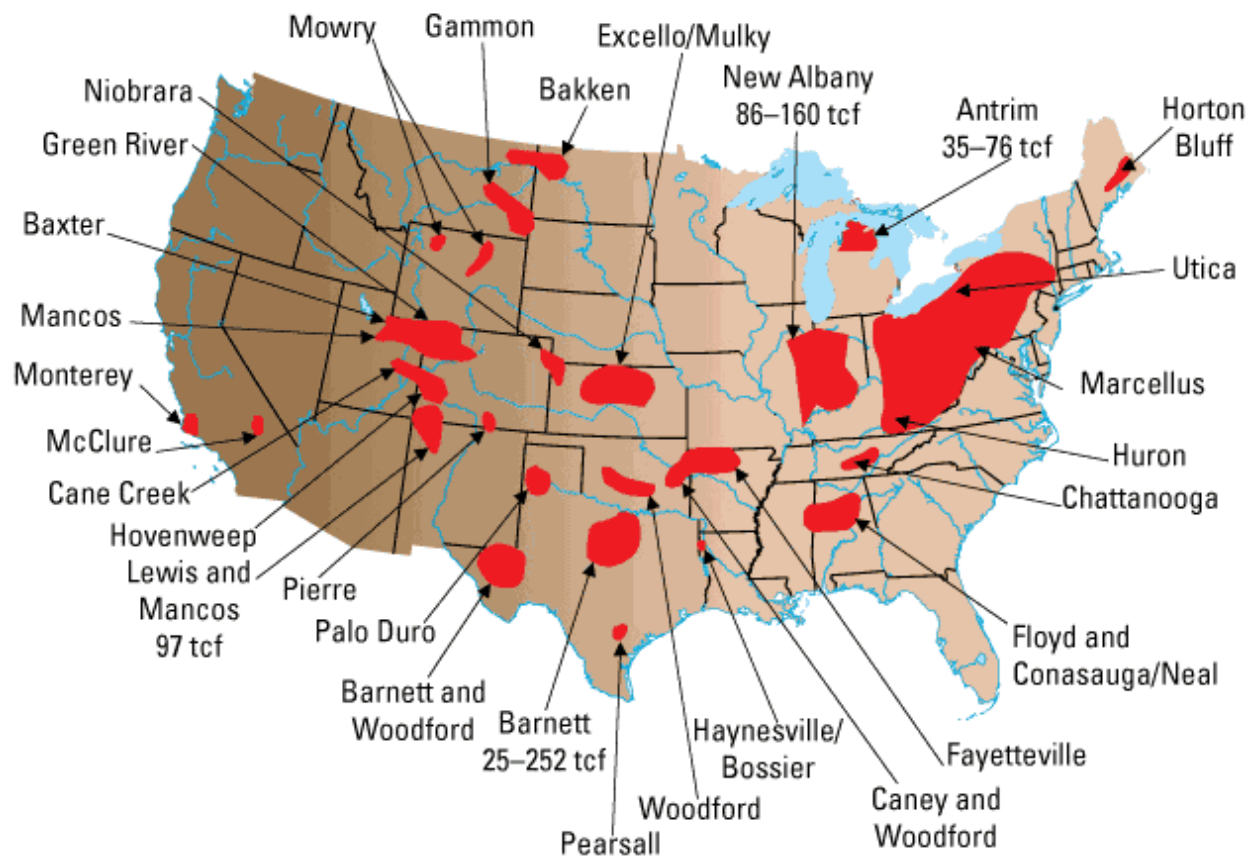


# Pipelines in US, Fracking and the Climate Crisis

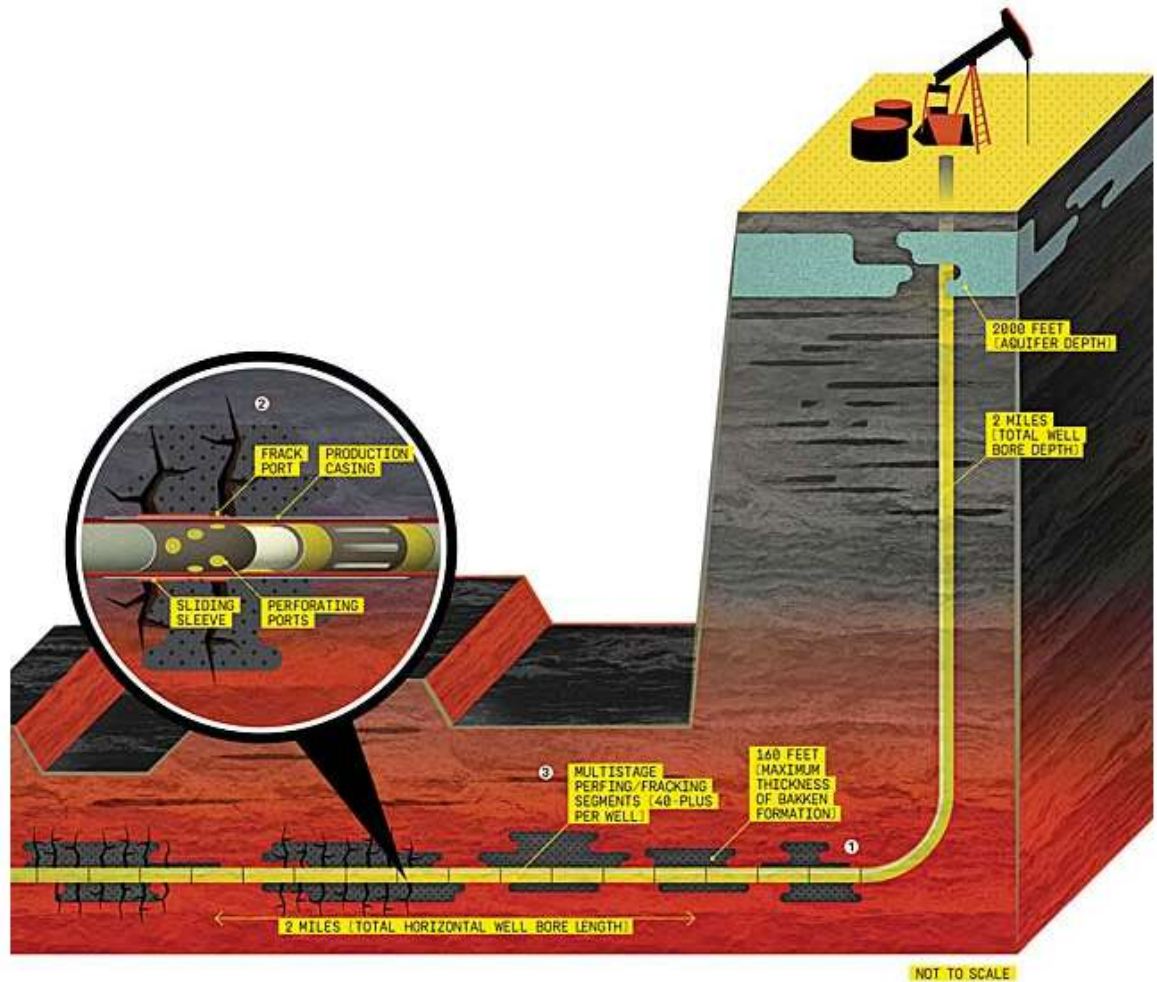
Junior Romero  
NJ Organizer  
Food and Water Watch

# Major US Shale Regions



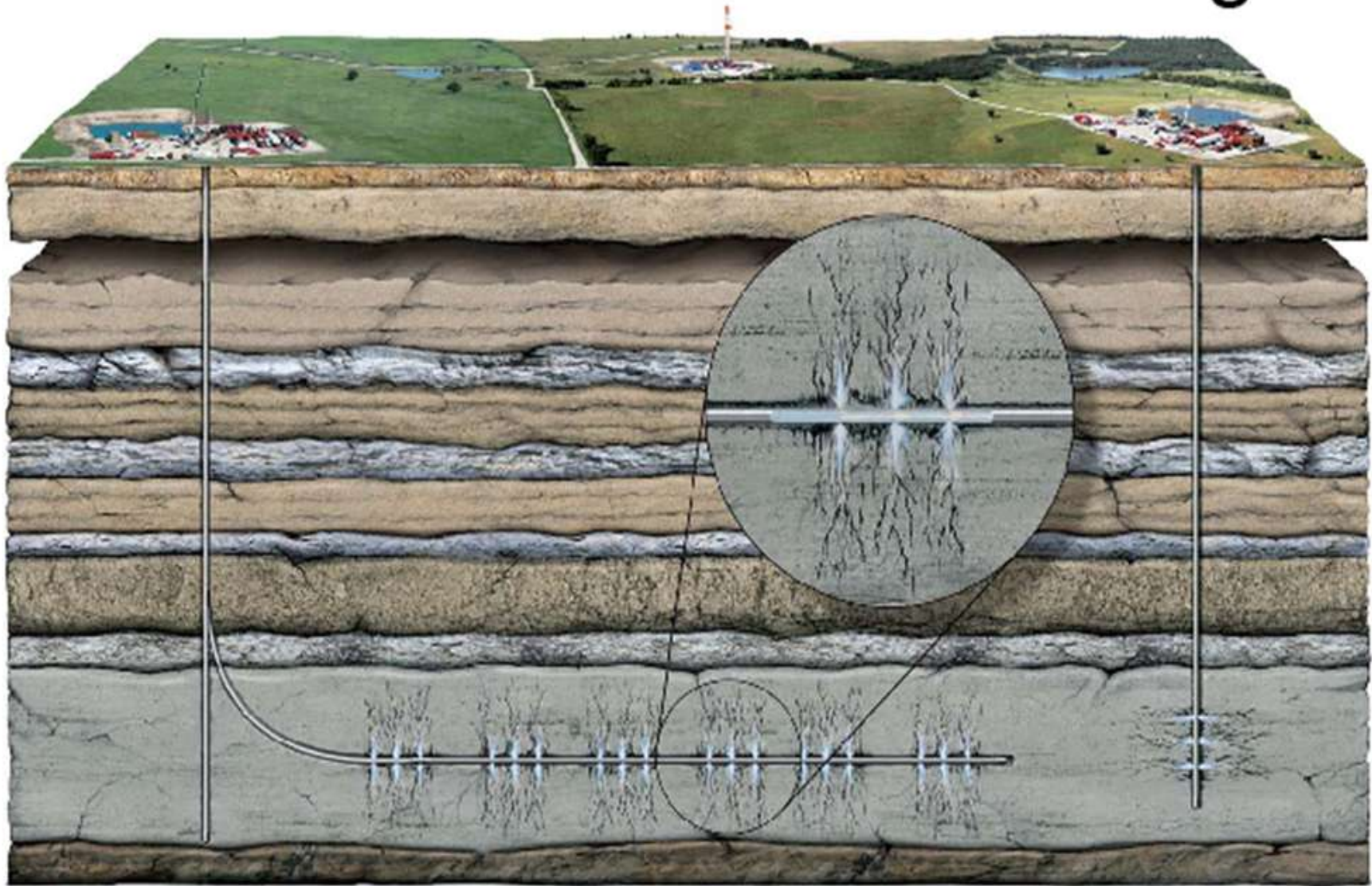
# What is Hydraulic Fracturing?

- Pressurized water, sand, and a cocktail of unknown chemicals are injected into the shale and release the oil
- Allows oil extraction from deep rock formations (2 miles) that do not have the permeability or porosity to flow into the wellbore at an economically profitable rate alone



Popular Mechanics ©

# Vertical vs. Horizontal Drilling



# *Environmental Impacts*

- Significant greenhouse gas emissions
- Consumptive Water Use
- Some of that chemical laced water remains underground
- Rest returns to surface as toxic, radioactive wastewater (Radon)
- Companies not required to disclose the chemicals under exemptions from Safe Drinking Water Act and Clean Water Act

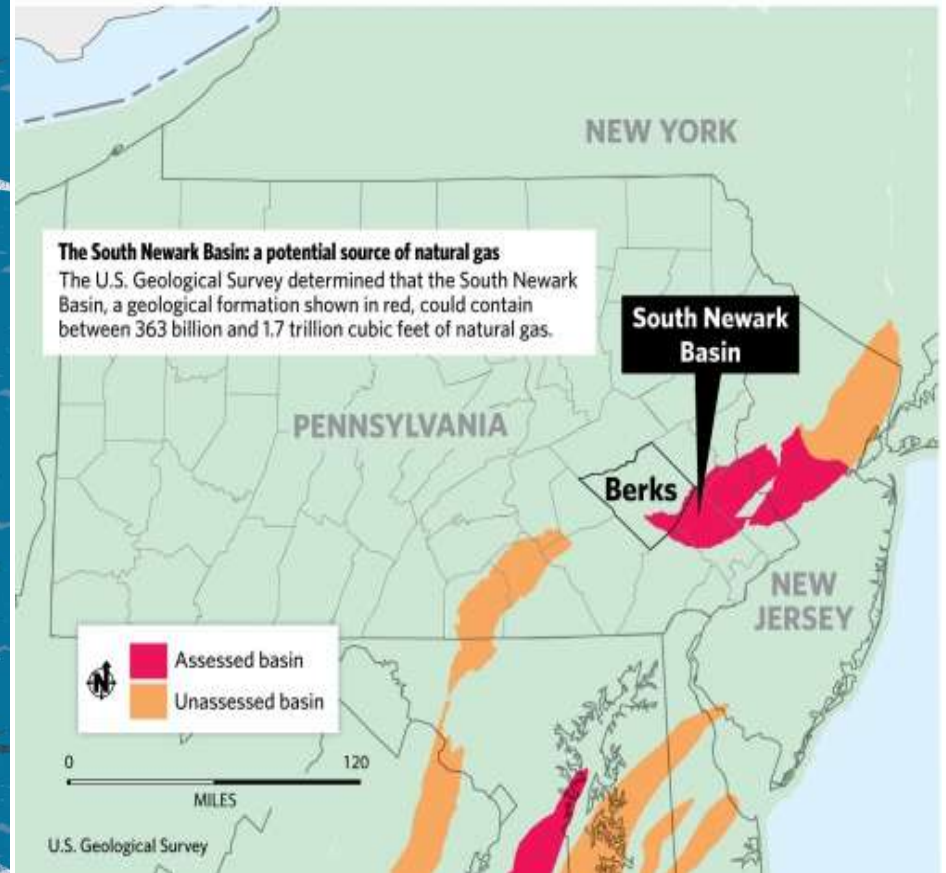
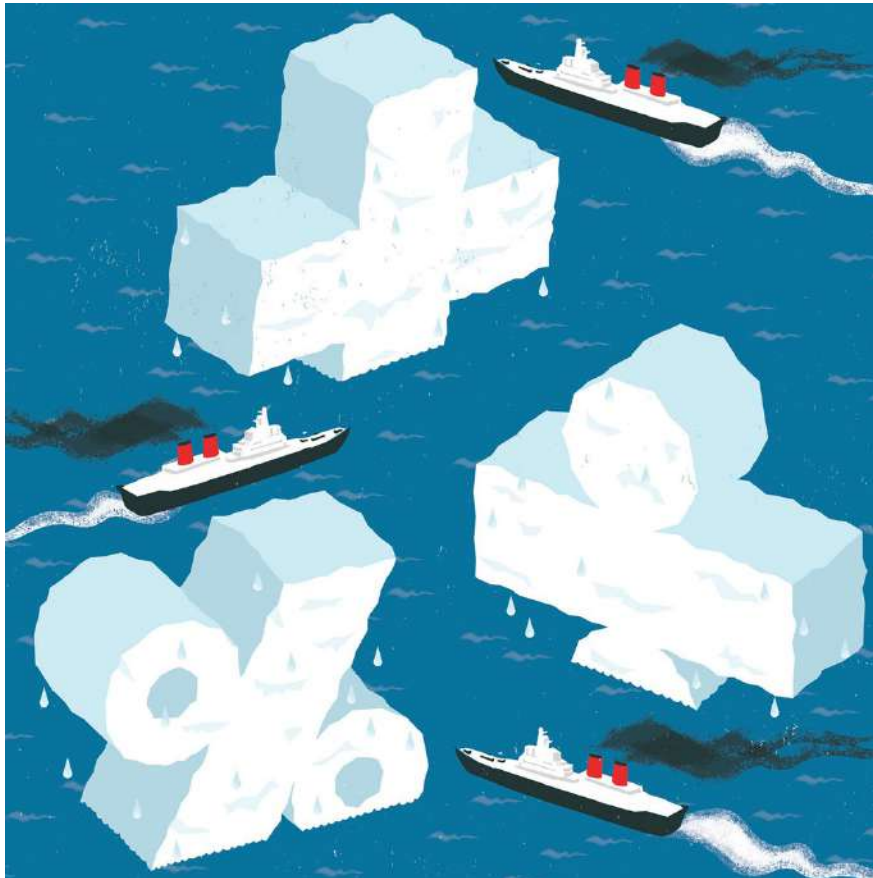


## Fracking and Extreme Energy Development




























What's going in the ground with all the fracking going round?

# The math behind our climate mandate



# US Gas Exports

Type - Area	Graph Clear	Nov-16	Dec-16	Jan-17	Feb-17	Mar-17	Apr-17	View History
<b>Export Volumes</b>								
<b>Total</b>	 <input type="checkbox"/>	227,919	250,836	271,868	255,038	271,843	247,212	<a href="#">1973-2017</a>
<b>Pipeline</b>	 <input type="checkbox"/>	194,922	208,993	220,508	202,979	228,263	196,520	<a href="#">1997-2017</a>
Canada	 <input type="checkbox"/>	74,544	97,178	98,811	87,890	99,489	80,532	<a href="#">1973-2017</a>
Mexico	 <input type="checkbox"/>	120,378	111,815	121,696	115,089	128,774	115,988	<a href="#">1973-2017</a>
<b>LNG</b>	 <input type="checkbox"/>	32,976	41,825	51,342	52,042	43,553	50,669	<a href="#">1997-2017</a>
<b>Exports</b>	 <input type="checkbox"/>	32,976	41,825	51,342	52,042	43,553	50,669	<a href="#">2014-2017</a>
<b>    By Vessel</b>	 <input type="checkbox"/>	32,928	41,784	51,257	51,998	43,489	50,599	<a href="#">2013-2017</a>
Argentina	 <input type="checkbox"/>	0	0	0	0	0	10,135	<a href="#">2015-2017</a>
Barbados	 <input type="checkbox"/>	18	22	22	15	20	15	<a href="#">2015-2017</a>
Brazil	 <input type="checkbox"/>	0	0	0	0	0	0	<a href="#">2015-2017</a>
Chile	 <input type="checkbox"/>	2,940	0	0	2,950	2,951	5,894	<a href="#">2015-2017</a>
China	 <input type="checkbox"/>	7,341	6,747	3,391	10,338	0	0	<a href="#">2011-2017</a>
Dominican Republic	 <input type="checkbox"/>	0	0	0	0	2,934	0	<a href="#">2016-2017</a>
Egypt	 <input type="checkbox"/>	0	3,606	0	0	0	0	<a href="#">2016-2017</a>
India	 <input type="checkbox"/>	3,115	0	3,623	3,399	0	0	<a href="#">2015-2017</a>
Italy	 <input type="checkbox"/>	3,328						<a href="#">2016-2016</a>
Japan	 <input type="checkbox"/>	0	11,137	10,533	3,705	0	7,398	<a href="#">1973-2017</a>
Jordan	 <input type="checkbox"/>	0	0	5,368	2,945	6,655	0	<a href="#">2016-2017</a>
Kuwait	 <input type="checkbox"/>	0	0	0	3,378	3,360	6,784	<a href="#">2016-2017</a>
Malta	 <input type="checkbox"/>	0	0	867	0	0	0	<a href="#">2016-2017</a>
Mexico	 <input type="checkbox"/>	13,300	7,169	14,010	14,407	10,728	13,730	<a href="#">2016-2017</a>
Pakistan	 <input type="checkbox"/>	0	0	0	0	3,166	0	<a href="#">2016-2017</a>
Portugal	 <input type="checkbox"/>	0	0	3,442	1,692	0	0	<a href="#">2015-2017</a>
Russia	 <input type="checkbox"/>	0	0	0	0	0	0	<a href="#">2007-2017</a>
South Korea	 <input type="checkbox"/>	0	10,166	0	0	7,042	3,295	<a href="#">2016-2017</a>



# Williams & LNG Exports

## **Natural gas accidents in Portland, the West don't prompt broad review of Williams Companies**

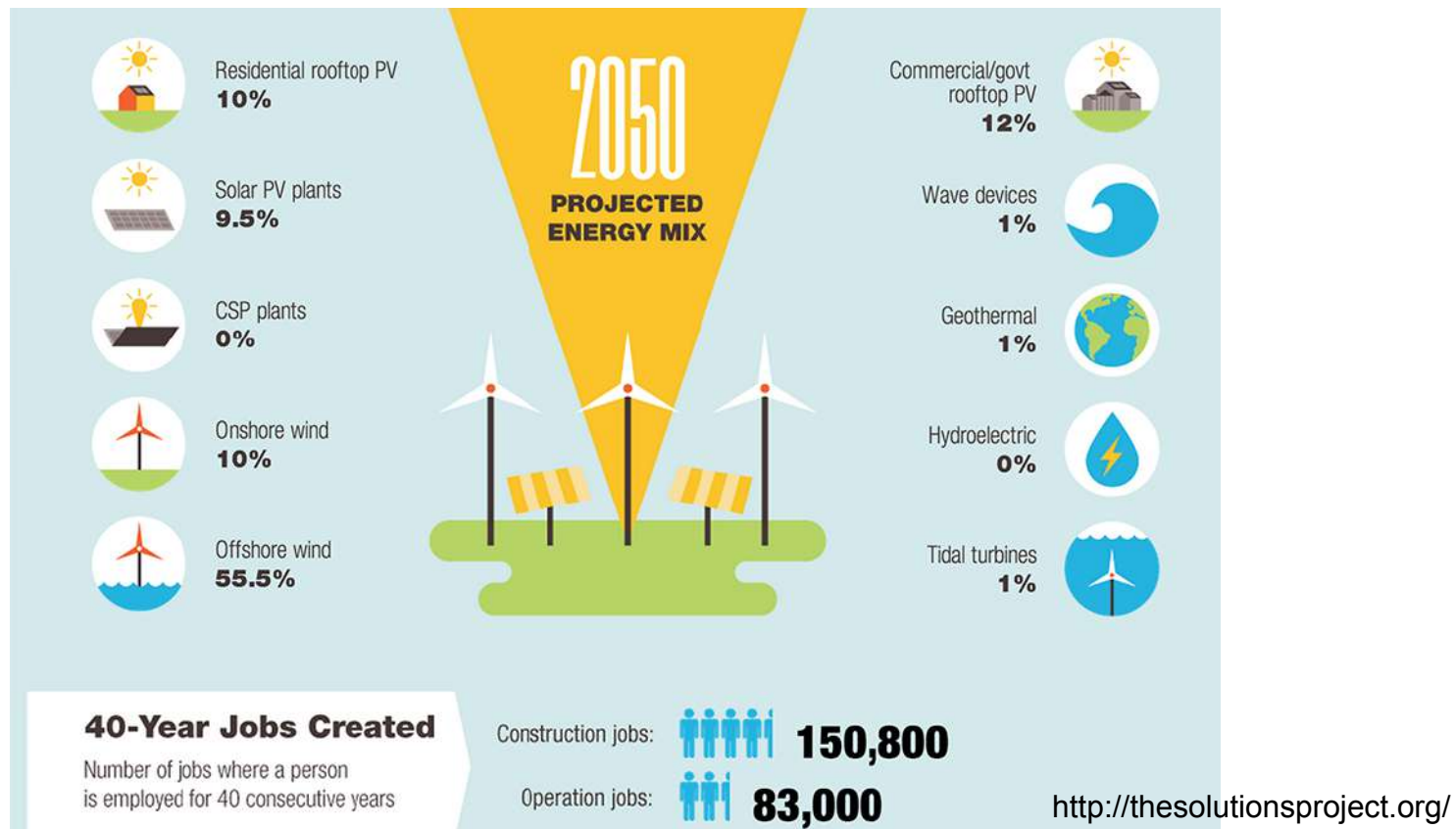
The LNG export terminals proposed on the coast dwarf the size of the Washington facility, and an expert who helped develop LNG hazard models for federal regulators says the risks of locating them near population centers are real.

The blast seriously burned one worker, who remains in a Portland hospital, and injured four others. It forced an evacuation of 400 residents and agricultural workers within a two-mile radius of the facility. River, highway and train traffic was restored Tuesday in the area, though authorities maintained a one mile exclusion zone around the facility until Tuesday afternoon because of the ongoing risk of an explosion.

A team of experts working with the facility's owner, Williams Northwest Pipeline, is still trying to determine what caused the accident and how to fix it.

# Clean Energy Alternatives

- Instead of seeking out dirtier forms of oil and building more risky pipelines, we should be investing in efficiency, modern transportation, and clean, safe energy like wind and solar that can power electric vehicles.



# 100% Renewables by 2035



## *The Horsemen of The Climate Crisis*



# Act now to Stop the Pipeline

- Deny survey permission to the company or rescind that permission if it has already been granted
- Write to and call Senators Booker and Menendez and your Congressional Representative, and your local legislators to urge them to oppose the Transco Pipelines proposal.
- Start a group in your town opposing this project
- Email [jromero@fwwatch.org](mailto:jromero@fwwatch.org) to get involved in your community