

# KEEP IT UNDER THE SEA

OFFSHORE OIL AND GAS EXTRACTION IN THE ARCTIC IS BAD FOR AMERICA AND BAD FOR OUR CLIMATE.



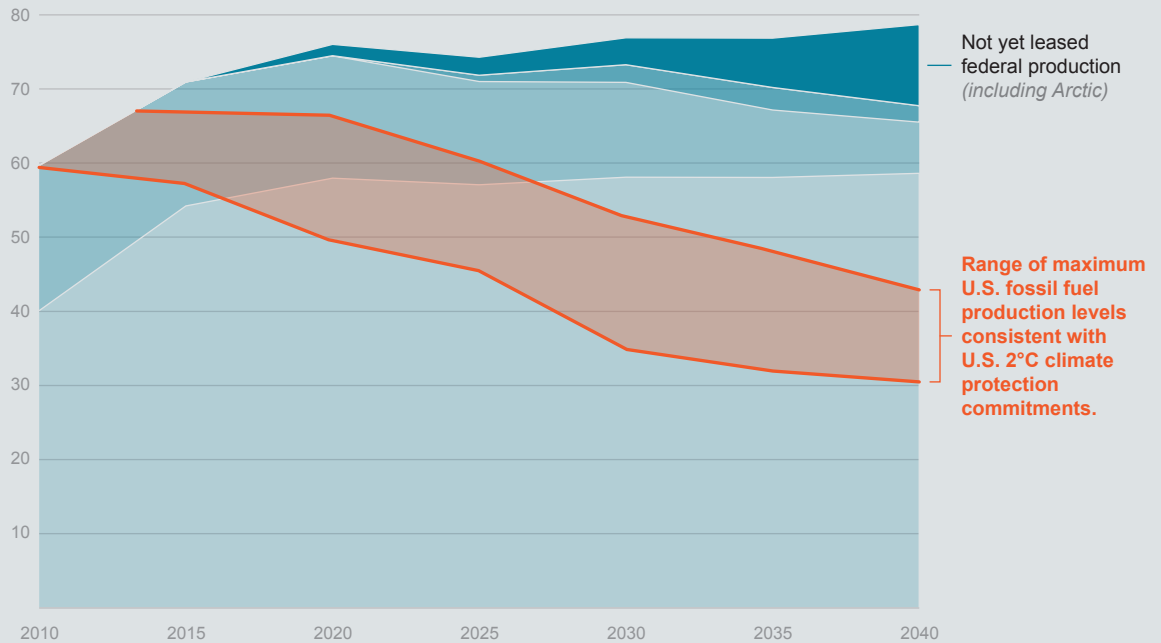
## ALREADY OVER CO<sub>2</sub> BUDGET

New Arctic Ocean oil and gas leases would pave the way for the release of millions of tons of CO<sub>2</sub> into the atmosphere. Leaving those hydrocarbons under the seafloor is imperative if the U.S. hopes to achieve its international climate commitment of limiting temperature rise to 2C. Importantly, leading scientists agree that 1.5C is a more appropriate goal to avoid the worst impacts of climate change.

- Federal production (not yet leased, includes Arctic)
- Federal production (under lease but not yet producing)
- Federal production
- Non-federal production

## PROJECTED U.S. FOSSIL FUEL PRODUCTION

Quadrillion Btu (Qbtu)

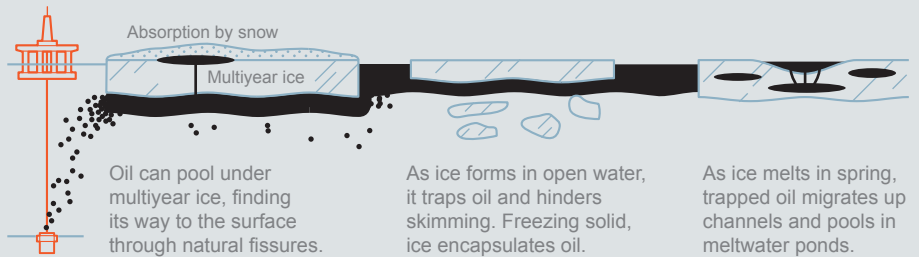


## FAR TOO RISKY

Major oil spills are a near certainty for Arctic drilling. For example, the U.S. government estimates a 75% chance of one or more major oil spills if development moves forward in the Chukchi Sea. Yet there is no proven technology to contain or clean up oil spilled in the Arctic marine environment.

## SHIFTING SEA ICE

Sea ice is a significant impediment to drilling in the arctic. Constantly moving in response to wind and currents, sea ice occurs in complex combinations of form, thickness, and surface coverage.



## NO EMERGENCY RESPONSE INFRASTRUCTURE ON AMERICA'S ARCTIC COAST

### 0 ports

Number of major ports. The closest port is Dutch Harbor, 1,300 miles away by sea.



### 0 bases

Number of U.S. Coast Guard Bases. The nearest base is on Kodiak Island, 1,000 miles away by air or 2,000 miles by sea.

### 1 x

Just one road, the partially paved Dalton Highway.

### 2 x

Two runways long enough to land large response aircraft

## EXTREME CONDITIONS

### 8 months

Normal operations cease during the long arctic winter. Ice can choke the Beaufort and Chukchi Seas from November through June.

### 18 hours

While summer in the Arctic sees zero hours of darkness, October sees 18. It is hard to clean up oil if you cannot see it.

### <25%

Days per year when even trying open water cleanup is possible. Even then it is not very effective.

### -4°C

Minimum temperature in the Arctic in October. Common response methods—dispersants, booms, and burning—lose effectiveness in the cold.

Sources: Stockholm Environment Institute; Bureau of Ocean Energy Management; Nuka Research & Planning; Center for American Progress; Pew Environment Group; World Wildlife Fund