POLY AFF BLOCKS

<u>R/T Drilling</u>

<u>UQ – R/T Drilling Not in Arctic</u>

Numerous states are already against drilling, so it wouldn't really happen anywhere. The only other place is the Gulf of Mexico, but we already have a treaty with them

Merica 18 Dan Merica, 1-12-2018, "Nearly every governor with ocean coastline opposes Trump's drilling proposal," CNN,

https://www.cnn.com/2018/01/11/politics/governors-ocean-coastline-offshore-drilling-trump/index.ht ml //DF

Nearly every governor with ocean coastline opposes Trump's drilling proposal. The Trump administration's proposal to open vast portions of US coastline to oil drilling was met with ferocious

opposition from a number of the coastal governors it would affect. At least one governor, Florida's Rick Scott, a Republican, asked for and received a waiver from the administration. That move by Interior Secretary Ryan Zinke drew accusations of favoritism, which have been denied. But the fact remains that nearly every governor with ocean coastline opposes drilling off their coast or, in

one case, has concerns. The map paints a startling picture of opposition to the drilling proposal. The lone supporter is Maine's

Republican Gov. Paul LePage. Gulf Coast governors who already have drilling off their shores are open to new exploration. Here's a roundup of where the governors stand:

Dlouhy 18 Jennifer A. Dlouhy, 1-4-2018, "President Trump Seeks to Open Most U.S. Coastal Waters to Oil Drilling," <u>http://time.com/5088449/donald-trump-oil-drilling/</u>//DF

"This radical offshore drilling free-for-all is a clear example of politics over people, ignoring widespread local and state opposition," said Diane Hoskins, a campaign director for the marine conservation group Oceana. "The Trump administration's plan not only ignores the risky nature of

dirty and dangerous drilling, but also the people and coastal businesses who would be most affected." <u>All three governors on the</u> <u>U.S. West Coast oppose expanded offshore drilling, and on the East Coast, more than 140</u> <u>municipalities have lodged their opposition. The governors of North Carolina and Virginia also</u> <u>expressly asked the Trump administration to leave their states out of any new plan, and Florida's</u>

governor announced his opposition Thursday. "The administration's backward-looking approach puts oil and gas profits first — and will place our coastal communities and all they support at risk of the next BP-style disaster," said Natural Resources Defense Council President Rhea Suh, referring to the 2010 oil spill in the Gulf of Mexico. "We'll stand with leaders of vision, business owners and fishing families on every coast to protect our oceans and shores."

States have say in who drills or not

Ori 18 Sam Ori [Energy Policy Institute at the University of Chicago], 1-8-2018, "Why Trump's Offshore Drilling Expansion Won't Be So 'Yuge'," Forbes,

https://www.forbes.com/sites/ucenergy/2018/01/08/why-trumps-offshore-drilling-expansion-wont-beso-yuge/#3f2704523029 //DF Yet, as aggressive as it is on paper, the new plan faces an uphill climb before it results in actual leasing in many of the new areas it covers. First, lease sales off the coasts of Washington, Oregon, California, and the entire Northeast will be bitterly contested by those state governments. As several analyses have pointed out, even though OCS resources belong to the federal government, states have enormous leverage over key aspects of the development process. For starters, states control the waters nearest to their shores, meaning any pipelines intended to bring resources onshore would likely require

state approval. Companies could in theory bypass this by opting to develop resources using floating production storage and offloading (FPSO) vessels, but states also have authority under a myriad of existing laws, like the Coastal Zone Management Act, that will allow them to stall the leasing process from the beginning and file lawsuits throughout the process, forcing oil companies to tie up capital for decades with no clear return. The waters off the northern coast of Alaska are among the most prospective areas proposed for development, together holding more than 23 billion barrels of technically recoverable oil resources and 131 trillion cubic feet (tcf) of natural gas. And the state is obviously favorable to development. The option value of being able to consider these resources again is a clear a positive for industry. But these are also the same waters unsuccessfully explored by Royal Dutch Shell in 2015, after which the company halted Arctic operations for the foreseeable future. While that decision reflected in part the unpredictable nature of federal policy in the Arctic under the previous administration, it also reflected limited drilling success in a costly and complex operating environment. Given current oil prices, it is unlikely that the Arctic will soon present the same allure it did back when Shell originally bid on those tracts in February 2008 and oil prices were approaching \$100 per barrel.

We can drill in Mexico

Conathan 12 Michael Conathan [Director of Ocean Policy at the Center for American Progress], 6-13-2012, "Conservatives Disregard Traditional Allies to Oppose the Law of the Sea," Thinkprogress, https://thinkprogress.org/conservatives-disregard-traditional-allies-to-oppose-the-law-of-the-sea-2a814 f04a717/ //DF

Ask Sen. Risch. Then think about how likely it would be for the United States to approve a payment formula that would send cash to Somalia or the Palestine Liberation Organization. It's just not going to happen. Until we ratify the treaty, no U.S. companies will operate on the extended continental shelf. Aside from <u>a small pocket of territory in the western Gulf of Mexico where we have bilaterally</u>

<u>negotiated a boundary with Mexico</u>, companies cannot be granted the certainty that leases of these regions would not be challenged in international courts. Without becoming party to the treaty and gaining a seat at the negotiating table where decisions are made about how to partition out extended-shelf claims, we will be unable to assure industries that the international community will recognize a U.S. lease. Businesses, even those with extremely deep pockets such as Big Oil and Lockheed Martin, have been very clear: If we don't ratify, they won't operate. Companies want to create those jobs, generate revenue, and increase domestic production. But no certainty means no investment. No treaty means no security, no jobs, no dollars, no resources. It's that simple.

UQ – R/T Companies Will Drill

1. Existing onshore wells are much more profitable. Tomlinson 18 shale oil wells today produce twice as much as their offshore competitors and cost 90 percent less. That's much better than offshore wells, where Elbein 18 reports that only 45% of them are making a profit, and that's with the help of federal subsidies. With so much cheap, onshore oil available, energy company executives remain reluctant to make a final investment decision on a 30-year, multi-billion-dollar deepwater rig.

Tomlinson 18 Chris Tomlinson, 4-16-2018, "Offshore drilling is the unenviable canary in the coal mine," HoustonChronicle,

https://www.houstonchronicle.com/business/columnists/tomlinson/article/Offshore-drilling-is-the-une nviable-canary-in-the-12865144.php //DF The logic seemed impeccable. But times change. Shale oil wells today produce twice as much as their offshore competitors and cost 90 percent less. The U.S. not only rivals Russia and Saudi Arabia as the world's largest producer, but we now export oil, something that was illegal in 2014. Prices are far lower than they were in 2014. Crude prices peaked at \$107, plunged to \$26 in early 2016 and recovered slowly, only recently passing \$65 a barrel. Attendance at OTC has shrunk right alongside oil prices. Companies tout the low cost of their standardized drilling processes rather than trying to dazzle customers with expensive innovations and spare-no-expense custom equipment. Peak efficiency, though, may not be enough to bring back the good times. Oil prices have recovered to the \$60 range only because OPEC, Russia and other national producers agreed to production cuts. These nations are holding back between 1 million and 2 million barrels per day of capacity, equal to how much demand is expected to grow over the next two years. Production is also skyrocketing in the Permian Basin and other onshore plays thanks to better technology and techniques. With almost no new production from offshore wells, the U.S. still manages to pump more than 10 million barrels a day. The only thing restraining more crude from coming online is a lack of pipelines. The Energy Department warns that the world still needs massive offshore wells to avoid a shortfall. But with so much cheap, onshore oil available, energy company executives remain reluctant to make a final investment decision on a 30-year, multi-billion-dollar deepwater rig based on a theory from an organization that is often wrong. Major offshore operators Exxon Mobil and Royal Dutch Shell hold opposing views on future oil demand. Exxon forecasts growth past 2040, while Shell predicts peak demand by 2030. They disagree on mounting competition from electric vehicles, both hybrid and plug-in. Automakers will introduce dozens of new models over the next decade as battery costs plummet. With electric car operating costs as much as 50 percent lower than gasoline vehicles, the only impediment to wider adoption is the battery cost. OPEC and major oil producers also know they cannot allow oil prices to rise too high. Oil above \$100 a barrel, or \$3.50 a gallon for gasoline, would accelerate electric vehicle adoption and quicken the arrival of peak demand. Absent higher prices and predictable demand growth, offshore wells are the riskiest of all, and therefore will lose investor confidence first if oil markets disappoint. The oil industry's canary already looks listless. Operators have announced only a handful of new offshore projects in the past year, almost all of them in established basins with low break-even prices. At the last Department of Interior auction, operators leased only 1 percent of the 77 million acres on offer and spent a measly \$128 million. Out of 105 leases, 102 are adjacent to existing infrastructure, making them bolt-on investments, not new exploration. Under current market conditions, operators can only sanction the most productive offshore wells with the lowest break-even prices. Since few projects meet these qualifications, offshore specialists face stiff competition ahead.

Elbein 18 Saul Elbein, 3-14-2018, "Analysis: U.S. call to drill off all coasts, economic and ecological folly?," Mongabay Environmental News,

https://news.mongabay.com/2018/03/analysis-u-s-call-to-drill-off-all-coasts-economic-and-ecological-fo llv///DF

According to Lorne Stockman of Oil Change International, a think-tank focused on the post-carbon economy, it isn't clear how popular the new offshore leases will be with fossil fuel companies, particularly outside those areas of the Gulf already crowded with rigs and infrastructure. <u>Developing new offshore areas</u>, as Zinke's plan proposes, <u>will require a huge investment by the firms to establish new offshore and onshore infrastructure</u> – new drilling platforms, underwater and underground pipelines, terminals, and refineries would all need to be built. <u>The Gulf</u> already has this infrastructure, and even with that, according to a recent Oil Change International (OCI) study, profits are slim; 76 percent <u>of new</u> Gulf <u>offshore leases</u>, and <u>45 percent nationwide</u>, <u>are only breaking even</u>, <u>and that's with the help of federal subsidies</u>. "If you're in the already crowded parts of the Gulf," Stockman explains, "the break-even price could be \$50 to \$70 a barrel; if you're breaking into completely new areas, it'll be \$70, \$80, upwards." On the Arctic frontier, the costs are even more prohibitive: the last serious attempt to drill offshore in the Arctic was when Royal Dutch Shell tried to drill in the remote Beaufort Sea in 2015, which ended with the company spending \$7 billion on a dry hole. <u>On land, fracking is barely a break-even enterprise</u>: 60 percent of the oil in the Bakken shale, in North Dakota, is subsidy dependent, according to OCI. Stockman questions the economic prudence of any company undertaking offshore development in states where no production is presently occurring: "Drilling an [onshore] shale well takes \$20 million. Flip a switch and drill it tomorrow, or hold till next month when prices are better," he said. However, "An investment offshore is a multibillion <u>multi-year enterprise</u>." Investment in energy dominance, or a political scam? Given these financials, it seems logical to ask why the industry wants a

massive offshore expansion. "Well, that's the question," Stockman laughs. "Is it even something they do want?" The push to open all U.S. waters

to drilling, he explains, has been an industry dream for decades, but as such, it <u>is also a relic of the wildcatting past</u> – a desire that recurs from time-to-time, as it did in the 1970s and early 2000s, when it was believed American oil and gas were in long term decline, with its only way forward the production of ever more remote and expensive fields. <u>The boom in shale gas and oil flipped this paradigm on its head</u>, as has the little publicized, but real, <u>slow downtick in demand for oil</u>, with greater declines forecast if advances in electric and automated vehicles come to fruition. (Vehicles currently account for about 60 percent of oil consumption.) <u>The oil industry</u> and finance press has already begun to speculate that the world may be past, or fast approaching "peak <u>oil demand</u>." And looming over all this economic talk – as markets and insurers are beginning to realize – is the fact that the world's store of technically recoverable oil and gas resources cannot be burned without catastrophically destabilizing the planet's climate. <u>With all that in mind</u>, the industry <u>has shown little inclination to develop new fields – exploration is at a 70 year low.</u> "I'm not saying expanded offshore development isn't potentially gonna happen one day," Stockman says, "but in a typical Trump administration move, they've ruled on the industry's agenda without much insight of whether it's something of particular importance at this moment." So it is, that America awaits the results of the biggest federal oil and gas lease sale ever. But whatever bids are made next Wednesday, and in upcoming lease sales, that doesn't mean we'll see drilling tomorrow. <u>Purchased leases need</u> to be seen for what they are: long term planning. Leases approved in 2017, for example, won't start making money until 2027 at the earliest, and there is no telling what the world energy landscape will look like then.

The Arctic makes even less sense because of how inhospitable the conditions are there. Montgomery 15 explains that even before shale became cheaper, and when oil was at \$100 a barrel, ventures into the region were cautious. So they will remain, should prices find such heights again soon.

Montogmery 15 Scott L. Montgomery, 9-30-2015, "Shell's abandoned well and the myth of the Arctic oil land grab," Conversation,

https://theconversation.com/shells-abandoned-well-and-the-myth-of-the-arctic-oil-land-grab-48305 //DF

Russia has big plans, to be sure, with few concerns about environmentalism, but no ability to carry such plans out just now. It needs the help of Western oil companies, who are banned from working with the state oil firm, Rosneft, in Russian waters until sanctions are lifted. Bluntly put, Rosneft lacks the technological, operational and managerial expertise needed to carry out a big program in the Arctic offshore. That leaves Norway. Its Arctic waters have seen some successful drilling in recent years, such as at Goliat Field, operated by the Italian group Eni. Yet the big lease sales of the past decade haven't yielded anything like a surge in exploration. Few companies are ever eager to spend lavishly in a challenging setting when opportunities exist in less formidable places, especially if lower prices set in. At present, the Norwegian Arctic may be the only place where true hydrocarbon development is taking place, but it is hardly equal to the fracking boom of the US lower 48. In short,

the Arctic is simply too risky, challenging and expensive for a "land rush" or any kind of rush. Even at \$100 per barrel, ventures into the region were cautious. So they will remain, should prices find such

heights again soon. It's perhaps no surprise that cheap oil seems a friend to the people who oppose Arctic drilling. The only problem is that it is also the comrade of higher consumption and demand. That means at some point, higher oil prices, driven by demand, may again make the Arctic more tempting in the future.

2. No company wants a repeat of the BP spill. Laiho 16 explains: In the colder temperatures of the Arctic, it's likely that water and oil would freeze and become part of the ice and permafrost, lingering in the environment for far longer than oil spilled in the tropics.

Laiho 16 Michael John Laiho [PhD researcher at Durham Energy Institute at Durham University], 1-12-2016, "Analysis: Busting the myth of Arctic oil – High North News," HighNorthNews, http://www.highnorthnews.com/analysis-busting-the-myth-of-arctic-oil/ //DF

There will be an Arctic oil and gas boom Due to a growing demand for supplies and speculations about a peak in the production of conventional oil and gas, prospects in the Arctic look more attractive. But when the USGS published its appraisal back in 2008, oil was expensive enough to justify the costs of exploration. Today, historically low oil prices, sanctions against Russia, and the development of shale gas in North America means that expensive Arctic drilling is less attractive. <u>Could the Arctic's reserves be ripe for picking once oil prices rise again</u>? Unlikely. In addition to the cost of drilling at such depths, <u>studies have highlighted the financial and reputational risks of an oil spill. In colder temperatures, it's likely that water and oil would freeze and become part of the ice and permafrost, lingering in the environment for far longer than oil spilled in the tropics. We still don't know exactly what happens to oil spilled in the Arctic – but no one wants to find out. **BP's catastrophe in the Gulf of**</u>

Mexico cost the company a whopping \$18.7 billion. The cost of a potential "oil Chernobyl" would be

<u>enormous</u>. A race for resources Fears of land-grabbing first arose in 2007 after the media dramatised a supposed Russian flag-planting expedition to the north polar seabed. After the USGS survey the following year revealed the region's huge reserves, many put two and two together and worried the Arctic would host a major "race for resources".

Indeed, Mathiesen explains that nervousness flooding through the oil industry has led all but one company, Shell, to abandon the Arctic.

Mathiesen 15 Karl Mathiesen, 8-1-2015, "Can Shell afford Arctic oil?," Guardian,

https://www.theguardian.com/environment/2015/aug/12/can-shell-afford-to-drill-for-oil-in-the-arctic //DF

All this ignores a pretty big polar bear in the room – the risk of a large or catastrophic spill. Which most experts agree would be extremely difficult to clean up in the Arctic conditions. Shell claims it has mitigated the chance of a really massive spill, in the style of BP's Macondo well blow out in the Gulf of Mexico, as much as possible. That disaster cost BP more than \$50bn in clean-up costs and fines. Wheaton said Shell would desperately want to avoid a disastrous spill and its willingness to go back after 2012 was evidence it was satisfied with its reviewed safety procedures. "This is not rocket science; we can do this," Shell's Arctic boss recently told the Financial Times. But on Wednesday, John Browne the former head of BP and a giant figure in the industry described drilling in the Arctic as "risky" and said oil company staff were typically

"techno-optimists". Browne's comments reflect the view of former Total boss Christophe de Margerie, who said in 2012: "Oil on

Greenland would be a disaster. A leak would do too much damage to the image of the company."

<u>Nervousness flooding through the oil industry and cash flow limited by the oil price has lead to a rash of</u> postponements and curtailed programmes, leaving Shell as practically the only company still pouring

money into the far north. Environmentalists like to paint the programme as a gamble – this cultivates the perception of a fiscally and environmentally reckless company that should be stopped. But for Shell, as long as they avoid a catastrophic spill, its a no-lose situation. If they find nothing, a loss of \$7bn could be absorbed just fine by the \$195.4bn corporation. It's the cost of doing business in the ever-tightening race for oil reserves.

This exact thing happened to Shell and contributed to their decision to suspend their project

Boyden 15 2015, "The high costs of Arctic oil drilling," Boyden Associates,

https://www.boyden.com/media/the-high-costs-of-arctic-oil-drilling-170468/index.html //DF The recent retreat of global oil giant Shell from the Chukchi Sea in the Alaskan Antarctic exemplifies a growing reluctance on the part of big oil companies to make the massive investments necessary to pursue challenging projects in inaccessible places. Depressed oil prices as well as **public and political criticism over climate change are putting pressures on Shell, and the oil industry overall**. Shell acquired licenses to drill in the Chukchi Sea in 2008, following a highly publicised seven-year battle. Once begun, the project was far from smooth sailing. A series of mishaps culminated in a drilling rig running aground in 2012. Chief Executive Ben van Beurden took the decision to push forward, on a kind of mission to unlock prospective hydrocarbon reserves estimated at 10 times the total produced so far in the North Sea. Analysts believe Shell was driven by a need to shore up its reserve base as an increasing number of oil and gas deposits are held by national oil companies and American frackers. Last year Shell replaced just 26% of the 1.2 billion barrels of oil equivalent or "boe" it produced. The Arctic seemed to be its best bet for filling that deficit, but now the company is looking to acquire British oil firm BG Group, which would increase its reserves by 25%. For the oil industry overall, Shell's difficulties illustrate how, as The Economist notes, "<u>the economics of drilling in deep and</u> <u>treacherous waters have worsened considerably.</u>" Shell had previously abandoned an attempt to <u>explore in the Chukchi Sea after oil prices fell in the 1990s</u>. This time out, the company invested \$7 billion in a single exploratory well there, only to find it did not have sufficient oil and gas to make exploration worthwhile. With the price of oil falling by more than half in the past year, the financial costs of Arctic drilling have simply proved too high. There are also reputational costs. Shell was lambasted for Arctic drilling by environmental groups and politicians. It was also decried by Shell's own shareholders, many of whom questioned the company's <u>environmental credentials</u> at this year's annual meeting.

c. There's too much political uncertainty for the risk. Obama banned drilling in the Arctic at the end of his term, and even through Trump has now reversed the ban, Tabuchi 18 explains that a new administration could again change offshore policy down the road.

 Tabuchi 18 Hiroko Tabuchi, 1-23-2018, "Trump Would Open Nearly All U.S. Waters to Drilling. But Will They Drill?," NYT,

 https://www.nytimes.com/interactive/2018/01/23/climate/trump-offshore-oil-drilling.html //DF

The Bureau of Ocean Energy Management, which manages offshore leasing, estimates that the areas opened up to drilling under Mr. Trump's plan hold nearly 45 billion barrels of oil, of which 21 billion barrels would be economically recoverable assuming oil prices remain around \$60 a barrel. (To put that in perspective, since 1970, the western and central zones of the Gulf have yielded about 14.5 billion barrels of oil.) While those are large amounts, <u>there are significant oil reserves still to be found in the western and central Gulf</u>, <u>which are already open to drilling</u>. There, some 45 billion barrels of oil reserves are up for grabs, of which 37 billion barrels could be produced economically at current oil prices. Stated another way: Almost <u>two-thirds of the nation's oil reserves that</u> <u>companies can hope to drill for while still turning a profit lie in seas already open to drilling</u>. Meanwhile, there's little recoverable oil and gas in the South Atlantic or the Straits of Florida, or off the Washington and Oregon coast, or off Alaska outside the north shore. <u>The abundance of cheap oil and gas from onshore fracking in the United States has already</u> <u>diminished the incentive for companies to go drill in new offshore zones</u>. Given the risks and costs of building wells in seas that have seen little development to date, not to mention the possibility that <u>a new administration could again change</u> <u>offshore policy down the road</u>, analysts don't expect a rush into newly opened waters soon.

Companies won't ever take this huge gamble. Donohue 12 writes that Offshore operations are capital-intensive, requiring significant financing and insurance. Oil and natural gas companies do not want to undertake these massive expenditures if their lease sites may be subject to legal disputes down the road.

Donohue 12 Thomas J. Donohue [President and Chief Executive Officer U.S. Chamber of Commerce], 6-28-2012 "Hearing on the United Nations Convention on the Law of the Sea," THE COMMITTEE ON FOREIGN RELATIONS OF THE UNITED STATES SENATE,

https://www.foreign.senate.gov/imo/media/doc/Donohue%20Testimony.pdf //DF

Clearly, the hydrocarbon potential of these offshore areas is enormous. Offshore oil volumes already account for about 30 percent of all U.S. production. Successful development will grow the U.S. economy, create jobs, and significantly reduce American reliance on foreign oil. The U.S. Government should enable such development, not hinder it. But that is precisely what the Senate's failure to approve the Law of the Sea Convention has done, because the U.S. cannot secure international recognition of its continental shelf beyond 200 miles without joining the Convention. Offshore operations are capital-intensive, requiring significant financing and insurance. Oil and natural gas companies do not want to undertake these massive expenditures if their lease sites

<u>may be subject to territorial dispute.</u> They operate transnationally, and <u>need to know that the title to the</u> <u>petroleum resources will be respected</u> worldwide and not just <u>in the United States</u>. Availability of clear legal <u>title is crucial to realizing the potential of U.S. offshore areas both now and in the future</u>, as drilling technology continues to advance and make new projects feasible. As ExxonMobil emphasized in its recent letter to this Committee, before it undertakes the immense investments required to explore and develop resources beyond 200 miles, "legal certainty in the property rights being explored and developed is essential."

d. Companies know that there won't be enough demand for oil in the future. Schneider 18 explains it will take up to 20 years for a new well to begin producing oil because companies have to build these massive rigs in the Arctic, get all of the roads, pipelines and infrastructure, conduct exhaustive environmental impact studies, and

Schneider 18 Keith Schneider, 1-5-2018, "Trump has big plans for offshore oil development. But will it ever happen?," latimes, <u>http://www.latimes.com/nation/la-na-offshore-oil-drilling-20180105-story.html</u> //DF

Even in the Gulf, which produces 1.6 million barrels of oil daily, or 16% of U.S. production, the cost of exploration, permitting and operations in deep water is well over \$1 billion per well, according to the American Petroleum Institute. Energy analysts also say <u>it will take at least</u> <u>10 years for a new well to begin producing</u> in the Gulf, and twice that <u>anywhere else on the outer continental</u> <u>shelf. By that time, according to industry forecasts, demand for oil will be well past its peak and</u> <u>dropping due to the advent of electric vehicles, more efficient engines for planes and ships and new</u> <u>materials that are not made with oil or natural gas</u>. In short, many of these experts say, the administration's offshore drilling plan could be out of touch with its time. "<u>The price of crude is the determining factor</u>," said Ron Stein, founder of PTS Staffing Solutions, an Irvine-based company that provides professional staff to energy companies. Producing oil offshore is a money-burner, he said. "<u>If</u> <u>the price of oil isn't right, they won't do it.</u>" Others are of a similar view. "<u>There is no economic justification for</u> <u>going to the outer continental shelf, and there probably never will be,</u>" <u>said Lorne Stockman, a senior</u> <u>research analyst with Oil Change International</u>, a clean energy research and advocacy group in Washington, D.C. The administration's agenda seems clear: With a series of executive orders issued early last year by the president, and regulatory changes ordered by Zinke, Trump has set out to reverse Obama-era restrictions on fossil fuel development. Offshore production has been a particular area of focus, not only because Obama had strictly limited access to the Atlantic and the Arctic, but also because government energy analysts have projected that tens of billions of barrels of untapped oil and trillions of cubic feet of natural gas lay beneath the oceans.

<u>Link – R/T Arctic</u>

1. Companies can already legally drill anywhere up to 200 miles off the coast. UNCLOS gives access to drill further than that, but companies would never take that up because it only contains 3.8% of undiscovered oil

Wong 13 Ernest Wong [Associate at Booz Allen Hamilton], 2013, "Geopolitics of Arctic Oil and Gas: The Dwindling Relevance of Territorial Claims," George Mason University, New Voices in Public Policy, <u>https://journals.gmu.edu/newvoices/article/view/132</u> //DF

The results of the analysis are provided in Table 1 and Table 2. Table 3 and Table 4 resort Table 1 by largest holding of resources. Figure 3 and Figure 4 map the distribution of resources by territory. Note that <u>the U.S. cannot submit any ECS claims as it is not a</u> <u>member to the UNCLOS</u>. However, <u>if it wanted to do so in the future</u>, **potential claimable areas** for <u>resources would be the remaining unclaimed portion of the Amerasia basin</u>,14 <u>which contains 3.8% of</u> <u>the undiscovered Arctic oil</u> (see Table 2). While this constitutes the majority of Arctic oil and gas in unclaimed international territory,

it only amounts to the equivalent of 6 months of U.S. oil consumption in 2010.15 Conclusion The primary purpose of this analysis was to determine who owned what resources and how much ECS claims mattered. A secondary purpose was to assist U.S. policymakers with their Arctic policy. From the findings of the analysis, there are three important conclusions that alter the geopolitics of Arctic energy resources: First, while Russian ECS claims to vast portions of the Arctic are controversial and viewed by some countries as overreaching, from the perspective of oil and gas resources, ECS claims should not be a major point of contention as they do not contain significant amounts of either resource. Instead, the findings shift the geopolitical importance of Arctic oil and gas away from ECS claims and toward existing territories, as the existing

territories of U.S. and Russia contain two-thirds of all undiscovered Arctic oil and gas. Second, the U.S. has little reason to ratify

the UNCLOS for the purpose of securing Arctic energy resources, as there are few resources within the

U.S.'s potential ECS claim. Attempting to ratify the UNCLOS would consume significant time and political resources that could be spent addressing other important Arctic issues, such as ownership of the Northwest Passage and Northern Sea Route, funding of polar icebreakers, and assessing and building appropriate levels of Arctic disaster response capability.

Donohue 12 Thomas J. Donohue [President and Chief Executive Officer U.S. Chamber of Commerce], 6-28-2012 "Hearing on the United Nations Convention on the Law of the Sea," THE COMMITTEE ON FOREIGN RELATIONS OF THE UNITED STATES SENATE,

https://www.foreign.senate.gov/imo/media/doc/Donohue%20Testimony.pdf //DF

Accession to the Law of the Sea Convention would provide oil and natural gas companies with legal certainty as they explore and develop the vast energy deposits off the coasts of the United States. As I have mentioned, the U.S. benefits from a broad continental margin, especially off of Alaska's coast, where the U.S. continental shelf likely extends more than 600 miles into the Arctic Ocean. The U.S. Geological Survey estimates that the Arctic contains one quarter of the world's undiscovered oil and natural gas, including nearly 100 billion barrels of oil and trillions of cubic feet of gas. The U.S. ECS seaward of Alaska encompasses a large portion of this Arctic Circle area. And, while much is yet

unknown regarding Alaska's offshore, a Department of Interior report estimates that just the area within 200 miles of shore

holds 27 billion barrels of oil and 132 trillion cubic feet of natural gas. The U.S. offshore in the Gulf of Mexico has a similarly impressive total endowment which, including quantities already pumped to surface, is estimated to contain 45 billion barrels of oil and 232 trillion cubic feet of natural gas. Clearly, the hydrocarbon potential of these offshore areas is enormous. Offshore oil volumes already account for about 30 percent of all U.S. production. Successful development will grow the U.S. economy, create jobs, and significantly reduce American reliance on foreign oil. The U.S. Government should enable such development, not hinder it. But that is precisely what the Senate's

failure to approve the Law of the Sea Convention has done, because the U.S. cannot secure international recognition of its

continental shelf beyond 200 miles without joining the Convention. Offshore operations are capital-intensive, requiring significant financing and insurance. Oil and natural gas companies do not want to undertake these massive expenditures if their lease sites may be subject to territorial dispute. They operate transnationally, and need to know that the title to the petroleum resources will be respected worldwide and not just in the United States. Availability of clear legal title is crucial to realizing the potential of U.S. offshore areas both now and in the future, as drilling technology continues to advance and make new projects feasible. As ExxonMobil emphasized in its recent letter to this Committee, before it undertakes the immense investments required to explore and develop resources beyond 200 miles, "legal certainty in the property rights being explored and developed is essential."

	By Territory		By ECS Claim	
Country	Oil Percentage	Gas Percentage	Oil Percentage	Gas Percentage
Canada	11.2%	4.2%		
Denmark	14.6%	6.9%	0%	0%
Iceland	0.3%	0.1%	0%	0%
Norway	4.7%	5.3%	0.6%	1.3%
Russia	29.2%	66.1%	2.2%	2.8%
United States	32.6%	12.8%		

Table 1: Undiscovered Arctic Oil & Gas within Existing Territories and ECS claims

Note: Finland and Sweden do not have any Arctic oil & gas within their territories and were omitted from the table.

R/T All Offshore Drilling

1. Makes zero economic sense now

Schneider 18 Keith Schneider, 1-5-2018, "Trump has big plans for offshore oil development. But will it ever happen?," latimes, <u>http://www.latimes.com/nation/la-na-offshore-oil-drilling-20180105-story.html</u> //DF

The administration's agenda seems clear: With a series of executive orders issued early last year by the president, and regulatory changes ordered by Zinke, Trump has set out to reverse Obama-era restrictions on fossil fuel development. Offshore production has been a particular area of focus, not only because Obama had strictly limited access to the Atlantic and the Arctic, but also because government energy analysts have projected that tens of billions of barrels of untapped oil and trillions of cubic feet of natural gas lay beneath the oceans. But getting at those reserves tests the limits of exploration and production technology, and it is expensive. In the early 1980s, a consortium of oil companies explored in Alaska's Beaufort Sea, an area that the administration plans to open, but abandoned the effort when wells came up dry and costs soared over \$2 billion. In 2015, Royal Dutch Shell, after spending \$7 billion, abandoned its program of exploring for oil in the nearby Chukchi Sea after its drilling rig was battered by ice and storms and protests against drilling erupted on the West Coast. The cost and difficulty of oil and gas exploration on the U.S. outer continental shelf is so high that some respected oil industry analysts have discouraged major companies from even trying. A recent study by Rystad Energy, a Norwegian consultancy that tracks the economics of development, found that trends in oil demand and weak pricing made developing new fields in the Atlantic and the Arctic impractical for decades. "There just isn't a lot that makes sense now or in the foreseeable future for offshore development," said Peter Erickson, a senior scientist in Seattle with the Stockholm Environment Institute. "If prices stay around \$50 a barrel, \$60 a barrel, where they've been for some time, you're not going to see any interest in drilling in these high-cost offshore areas."

2. Non unique: drilling may still be illegal

a. under federal law, even if it becomes permissible under international law.

Gramer 17 Robbie Gramer, 3-24-2017, "Oil Companies Cool on Arctic Drilling. Trump Wants It Anyway.," Foreign Policy,

https://foreignpolicy.com/2017/03/24/oil-companies-cool-on-arctic-drilling-trump-wants-it-anyway-ene rgy-alaska-environment/ //DF

"Shale is more accessible and is going to come ahead of the Arctic," said Bud Coote of the Atlantic Council, formerly a CIA energy analyst. When oil companies like Shell did venture to the waters off Alaska several years ago, oil went for more than \$100 a barrel. That made all the extra costs involved in drilling at the edge of the earth a bit more bearable. "I think it has to be back up in that range" for companies to head north again, he told Foreign Policy. Yet crude has hovered around \$50 a barrel since late 2014. Big oil gave up on some \$2.5 billion in drilling rights in the U.S. Arctic in 2016; expensive plays as oil prices dropped just weren't worth the cost anymore. "High-cost frontiers," like the Arctic "will be shunned," energy intelligence firm Wood Mackenzie said in December last year. **Former President Barack Obama** didn't help. He threw a wrench into Trump's energy plans when he **signed a series of midnight regulations on his way out the door designed to lock up the Arctic from drilling**, with little consultation from Alaskan lawmakers. But despite the clear signals from the market, Trump is stubbornly pursuing Arctic energy plays. Trump and Zinke met with Sens. Lisa Murkowski (R.-Alaska) and Dan Sullivan (R.-Alaska) earlier this month to lay down plans for opening Alaska's coast to offshore drilling. (The Chukchi and Beaufort Seas off the Alaska coast are the only bits of the offshore U.S. Arctic that have been open at all for drilling.) That has energized Alaska lawmakers, whose state draws much of its revenue from drilling and land leases for oil exploration.

This makes companies very wary of a long term investment

Tabuchi 18 Hiroko Tabuchi, 1-23-2018, "Trump Would Open Nearly All U.S. Waters to Drilling. But Will They Drill?," NYT, https://www.nytimes.com/interactive/2018/01/23/climate/trump-offshore-oil-drilling.html //DF The Bureau of Ocean Energy Management, which manages offshore leasing, estimates that the areas opened up to drilling under Mr. Trump's plan hold nearly 45 billion barrels of oil, of which 21 billion barrels would be economically recoverable assuming oil prices remain around \$60 a barrel. (To put that in perspective, since 1970, the western and central zones of the Gulf have yielded about 14.5 billion barrels of oil.) While those are large amounts, there are significant oil reserves still to be found in the western and central Gulf, which are already open to drilling. There, some 45 billion barrels of oil reserves are up for grabs, of which 37 billion barrels could be produced economically at current oil prices. Stated another way: Almost two-thirds of the nation's oil reserves that companies can hope to drill for while still turning a profit lie in seas already open to drilling. Meanwhile, there's little recoverable oil and gas in the South Atlantic or the Straits of Florida, or off the Washington and Oregon coast, or off Alaska outside the north shore. The abundance of cheap oil and gas from onshore fracking in the United States has already diminished the incentive for companies to go drill in new offshore zones. Given the risks and costs of building wells in seas that have seen little development to date, not to mention the possibility that <u>a new administration could again change</u> offshore policy down the road, analysts don't expect a rush into newly opened waters soon.

b. Numerous states are already against drilling, so it wouldn't really happen anywhere. The only other place is the Gulf of Mexico, but we already have a treaty with them

Dlouhy 18 Jennifer A. Dlouhy, 1-4-2018, "President Trump Seeks to Open Most U.S. Coastal Waters to Oil Drilling," <u>http://time.com/5088449/donald-trump-oil-drilling/</u>//DF "This radical offshore drilling free-for-all is a clear example of politics over people, ignoring widespread local and state opposition," said Diane

Hoskins, a campaign director for the marine conservation group Oceana. "The Trump administration's plan not only ignores the risky nature of dirty and dangerous drilling, but also the people and coastal businesses who would be most affected." <u>All three governors on the</u>

U.S. West Coast oppose expanded offshore drilling, and on the East Coast, more than 140 municipalities have lodged their opposition. The governors of North Carolina and Virginia also expressly asked the Trump administration to leave their states out of any new plan, and Florida's

governor announced his opposition Thursday. "The administration's backward-looking approach puts oil and gas profits first — and will place our coastal communities and all they support at risk of the next BP-style disaster," said Natural Resources Defense Council President Rhea Suh, referring to the 2010 oil spill in the Gulf of Mexico. "We'll stand with leaders of vision, business owners and fishing families on every coast to protect our oceans and shores."

Merica 18 Dan Merica, 1-12-2018, "Nearly every governor with ocean coastline opposes Trump's drilling proposal," CNN,

https://www.cnn.com/2018/01/11/politics/governors-ocean-coastline-offshore-drilling-trump/index.ht ml //DF

<u>Nearly every governor with ocean coastline opposes Trump's drilling proposal. The Trump</u> <u>administration's proposal to open vast portions of US coastline to oil drilling was met with ferocious</u> <u>opposition from a number of the coastal governors it would affect</u>. At least one governor, Florida's Rick Scott, a

Republican, asked for and received a waiver from the administration. That move by Interior Secretary Ryan Zinke drew accusations of favoritism, which have been denied. But the fact remains that nearly every governor with ocean coastline opposes drilling off their coast or, in

one case, has concerns. The map paints a startling picture of opposition to the drilling proposal. The lone supporter is Maine's

Republican Gov. Paul LePage. Gulf Coast governors who already have drilling off their shores are open to new exploration. Here's a roundup of where the governors stand:

3. Non unique: IF (and this is a big if) companies become interested in Arctic oil, that will be long down the road

Gardner 15 Timothy Gardner, 5-12-2015, "Here's Why Obama Is Approving Arctic Drilling Again," Scientific American

https://www.scientificamerican.com/article/here-s-why-obama-is-approving-arctic-drilling-again/ //DF While oil prices have fallen by more than half since last summer, <u>offshore Arctic drilling may not produce substantial new</u> <u>reserves for decades - when onshore shale deposits may start to wane</u>. The fracking revolution in North Dakota and Texas has led to the highest U.S. oil output since the early 1970s, but nobody knows how long shale will continue to produce at high rates. "<u>The trick of Arctic energy development is that the time horizons are extraordinary long, some 10 to</u> **30** years from when companies start these complex deals to even seeing when those resources would

get to market," said Heather Conley, an analyst at the Center for Strategic and International Studies. Shell will conduct tests to see how much oil and gas are in the Chukchi and Beaufort Seas. The Arctic is estimated to contain about 20 percent of the world's undiscovered oil and gas, 34 million barrels of oil in U.S. waters alone. Only Russia has bigger deposits. The National Petroleum Council, a group led by oil companies that advises the Energy Department, said in an assessment of Arctic potential last week that the region will boost U.S. energy security.

By that time, there won't be any point to it anymore

Schneider 18 Keith Schneider, 1-5-2018, "Trump has big plans for offshore oil development. But will it ever happen?," latimes, <u>http://www.latimes.com/nation/la-na-offshore-oil-drilling-20180105-story.html</u>//DF

Even in the Gulf, which produces 1.6 million barrels of oil daily, or 16% of U.S. production, the cost of exploration, permitting and operations in deep water is well over \$1 billion per well, according to the American Petroleum Institute. Energy analysts also say <u>it will take at least</u> <u>10 years for a new well to begin producing</u> in the Gulf, and twice that <u>anywhere else on the outer continental</u> <u>shelf. By that time, according to industry forecasts, demand for oil will be well past its peak and</u> <u>dropping due to the advent of electric vehicles, more efficient engines for planes and ships and new</u> <u>materials that are not made with oil or natural gas</u>. In short, many of these experts say, the administration's offshore drilling plan could be out of touch with its time. "<u>The price of crude is the determining factor</u>," said Ron Stein, founder of PTS Staffing Solutions, an Irvine-based company that provides professional staff to energy companies. Producing oil offshore is a money-burner, he said. "<u>If the price of oil isn't right, they won't do it.</u>" Others are of a similar view. "<u>There is no economic justification for going to the outer continental shelf, and there probably never will be," said Lorne Stockman, a senior research analyst with Oil Change International</u>, a clean energy research and advocacy group in Washington, D.C. The administration's agenda seems clear: With a series of executive orders issued early last year by the president, and regulatory changes ordered

by Zinke, Trump has set out to reverse Obama-era restrictions on fossil fuel development. Offshore production has been a particular area of focus, not only because Obama had strictly limited access to the Atlantic and the Arctic, but also because government energy analysts have projected that tens of billions of barrels of untapped oil and trillions of cubic feet of natural gas lay beneath the oceans.

<u>R/T California Drilling</u>

1. Just absolutely no chance of more drilling with prices that are so low

Schneider 18 Keith Schneider, 1-5-2018, "Trump has big plans for offshore oil development. But will it ever happen?," latimes, <u>http://www.latimes.com/nation/la-na-offshore-oil-drilling-20180105-story.html</u>//DF

"<u>There just isn't a lot that makes sense now or in the foreseeable future for offshore development</u>," said Peter Erickson, a senior scientist in Seattle with the Stockholm Environment Institute. "If prices stay around \$50 a barrel, \$60 a barrel, where they've been for some time, you're not going to see any interest in drilling in these high-cost offshore areas." <u>In California, where</u> offshore rigs produce 16,000 barrels of oil daily, the same economic conditions exist. Analysts say the California coast will not see another offshore production platform until oil prices rise to at least \$120 a barrel, a price unlikely to appear in an era of oil abundance and historically moderate prices. Officially, the oil industry is still bullish. The American Petroleum Institute says developing new offshore tracts in the Atlantic, Pacific and Arctic, as well as the Gulf of Mexico, could generate \$70 billion a year to the economy, 840,000 new jobs and the equivalent of 3.5 million barrels of oil a day.

2. Oh, and it was also just banned - so there's that, too

Papenfuss 18 Mary Papenfuss, 9-10-2018, "Not Here: California Gov. Signs Laws To Thwart Trump's Offshore Drilling Scheme," HuffPost,

https://www.huffingtonpost.com/entry/california-gov-brown-signs-laws-trump-offshore-drilling_us_5b9 609d2e4b0cf7b00414779 //DF

<u>California Gov. Jerry Brown (D) has signed legislation aimed at blocking</u> the Trump administration's plan to <u>open</u> <u>offshore waters to new oil and gas drilling</u>. "California's message to the Trump administration is simple: Not here, not now," said Brown as he signed the legislation Saturday. "We will not let the federal government pillage public lands and destroy our treasured coast." <u>No new federal leases have been granted for oil and gas drilling off California's coast since 1984. The</u> new state laws, Senate Bill 834 and Assembly Bill 1775, aim to block offshore drilling by prohibiting any

<u>new leases for construction</u> — such as docks or bays — needed to load oil and gas pumped from ocean platforms onto California's shores. The state controls the coastline as well as ocean waters within three miles of shore. The legislation would also block systems to transport gas or oil, such as pipelines. Though the federal government could still allow drilling in federal waters, California could effectively block the oil and gas from getting to its coast for transportation to buyers. The legislation also requires public notice and a more demanding process for any extensions or renewals of existing construction leases linked to offshore gas and oil. In 2015, the state had its worst oil spill in 25 years when a ruptured oil pipeline spilled over 140,000 gallons of crude into the ocean near Refugio State Beach in Santa Barbara County. Texas-based Plains All-American Pipeline on Friday was convicted in Santa Barbara of nine criminal charges related to the spill, including a felony for failing to properly maintain the pipeline

R/T Accelerates Russian Drilling

Just absolutely no relation – Russia's doing it because their other reserves are drying up

Gramer 17 Robbie Gramer, 3-24-2017, "Oil Companies Cool on Arctic Drilling. Trump Wants It Anyway.," Foreign Policy,

https://foreignpolicy.com/2017/03/24/oil-companies-cool-on-arctic-drilling-trump-wants-it-anyway-ene rgy-alaska-environment/ //DF

Economics and legal battles aside, national security experts (and Alaskan lawmakers and lobbyists) are framing Arctic drilling as a national security issue — with an eye on Russia. Energy can be a (profitable) wedge to drive greater U.S. presence into a largely empty region, they say. The United States may have plenty of easy oil to tap before it is forced to weather the tough Arctic offshore. But **Russia faces a big decline in crude production from old oil fields as soon as the next decade — unless it can line up some**

big plays in its own frozen north. That's why Russia is ramping up its Arctic energy exploration and

boosting its military infrastructure there. For the United States, many experts say keeping the energy pilot light lit is a good way for the United States to maintain its footprint and assert its sovereignty in the Arctic. Even if Arctic energy ventures don't pan out, energy companies are still poised to have a grand old time during the Trump administration. (Well, maybe not coal companies.) Hot on the heels of the election, the Republican-controlled Congress rolled back anti-corruption regulations for the oil and mining industries. And on Friday, the State Department green-lighted the controversial Keystone XL oil pipeline, reversing Obama's orders to scrap the project meant to pipe Canadian crude to U.S. Gulf coast refineries.

Sanctions have actually slowed, not quickened, the pace of drilling

Slav 18 Irina Slav, 4-23-2018, "Russia Bets Big On Arctic Oil," OilPrice,

https://oilprice.com/Energy/Energy-General/Russia-Bets-Big-On-Arctic-Oil.html //DF Gazprom Neft, Russia's fourth largest oil producer, has big plans for its Arctic oil operations, and it seems that neither sanctions nor production cuts can force it to quit its presence there. In fact, the oil division of Gazprom will try to turn itself into what its head of strategy and innovations called "a benchmark," but not in terms of production. Gazprom Neft wants to become a benchmark in areas such as safety and efficiency, and most notably technology. <u>Arctic drilling was one of</u> the top targets of U.S. sanctions that banned U.S. oil companies—and their European peers—from

sharing technological know-how with Russian producers. This may have slowed down the progress of Gazprom Neft and others in the Arctic, but it did not put an end to it. Not that it could: Russia's energy industry has been working on Arctic exploration for much longer than the four years since the

<u>annexation of Crimea</u>, which became the grounds for the sanctions. Gazprom Neft launched its first Arctic field, Prirazlomnoye, at the end of 2013, and first oil, and the new blend, ARCO, from Arctic Oil, reached markets the following year. Since then, more than 10 million barrels have been shipped from the field. Recoverable reserves at Prirazlomnoye are estimated at 540 million barrels of crude, and the peak of production is set to be reached in 2020, at 110,000 barrels per day.

R/T Norway

Norway's oil drilling is much better than the US

Holter 17 Mikael Holter, 5-3-2017, "Where the Arctic Oil Industry Is Booming," Bloomberg, <u>https://www.bloomberg.com/news/features/2017-05-03/where-the-arctic-oil-industry-is-booming</u> //DF <u>The Barents enjoys a number of advantages over the U.S. Arctic</u>, where President Donald Trump is pushing to expand drilling. Thanks to the Gulf Stream, <u>it's largely ice-free</u>, <u>unlike</u> other areas such as <u>Alaska</u> and Greenland, <u>which have been</u> <u>deserted by oil companies</u> like Royal Dutch Shell Plc since 2014. <u>The relatively shallow waters off Norway mean</u> <u>drilling is less costly</u>, while the potential prize is huge: the Enabler's fourth well will be Korpfjell, probably the largest prospect to be tested offshore Norway since the 1990s. "It's the biggest remaining structure that we know of on the Norwegian shelf," Tim Dodson, head of exploration a state-controlled Statoil, said aboard the rig last week. "It's important for us, and for northern Norway — and the entire country, actually." Norway is betting the under-explored Barents could boost its oil industry, after crude production fell by half since 2000. There could be more than 17 billion barrels of oil and gas yet to find here, or almost 65 percent of Norway's undiscovered resources, according to estimates from the Norwegian Petroleum Directorate.

IL – R/T Increases Emissions

Drilling in one place reduces drilling elsewhere because of price changes, so there's no net increase in emissions

Levi 15 Michael A. Levi, 5-13-2015, "The Environmental and Climate Stakes in Arctic Oil Drilling," Council on Foreign Relations, https://www.cfr.org/blog/environmental-and-climate-stakes-arctic-oil-drilling //DF Navigating these tradeoffs is difficult. But throwing climate change into the mix as a central consideration lacks empirical foundation. (Perhaps that's why that Times article doesn't follow through on its headline's promise.) Yes, at a global level, more oil production means more oil consumption, and hence greater carbon dioxide emissions and worse climate change. But more oil production in one place generally means less oil production elsewhere – that's how markets and prices work – which substantially blunts the effect. Bill McKibben drills home the conventional wisdom in a Times op-ed, blaming Obama for "climate denial" by claiming that "you can't deal with climate on the demand side alone", backing that up by citing a study that was unable to identify any "climate-friendly scenario in which any oil or gas could be drilled in the Arctic". True! Also true: that claim was based on looking at a whopping two scenarios. (From the original: "none [of the oil or gas] is produced in any [Arctic] region in either of the 2C scenarios before 2050".) And, most important, the study never asked what would happen to emissions if the Arctic oil were put off limits. Had it done so, it would have found more oil production elsewhere, and minimal net emissions impact. What the study really found – and what is entirely reasonable – is that if the world gets serious about

<u>minimal net emissions impact</u>. What the study really found – and what is entirely reasonable – is that if the world gets serious about reducing emissions, oil prices will fall, and companies won't want to develop most Arctic oil anyhow. That points to demand-side policy, denigrated by many who are painting the Alaska decision as climate apostasy, as critical.

https://digital.lib.washington.edu/researchworks/bitstream/handle/1773/40225/Dvorak_washington_0 2500_17565.pdf?sequence=1

In line with Kotchen and Burger (2005) and BOEM (2015a), I do not consider greenhouse gas damages as a cost of oil development because the supply is very small compared to the global market for oil. Annual production from the Chukchi Sea is estimated to be 45 Mbbls, which is less than 1% of annual world oil consumption (approximately 35 Bbbls, U.S. EIA 2017c), so the cumulative impact of the development of these specific resources on global oil demand is negligible. Thus, one can expect that if demand were not met with Chukchi Sea oil resources, they would be met somewhere else. This effectively means that the supply and its associated greenhouse gas emissions would be fully displaced, and that no net positive greenhouse gas emissions would arise from the scenario, an assumption that is also made in economic analyses by Kotchen and Burger (2007) and BOEM (2015b).

R/T Price Changes

Hahn and Passell 10 Robert Hahn [University of Manchester, United Kingdom; Smith School University of Oxford, United Kingdom] and Peter Passell [Milken Institute, United States], 5-2010, "The economics of allowing more U.S. oil drilling," Journal of Energy Economics

https://www.sciencedirect.com/science/article/pii/S0140988309002461 //DF

This paper examines the likely impact of developing U.S. energy resources on oil prices. In addition, we examine the benefits and costs of allowing drilling in the Arctic National Wildlife Refuge and the areas of the Outer Continental Shelf that were until recently closed to drilling. We find that **allowing oil drilling in** ANWR and **the off-limits OCS would be likely to have a very modest impact on oil prices**—**on the order of 1%**. However, a benefit–cost analysis of developing ANWR and off-limits OCS suggests that the benefits are likely to exceed the costs. The dramatic fluctuations in crude oil prices over the past two years have sparked renewed interest in U.S. oil exploration and development.1 Some politicians and commentators argue that increased exploration could have a marked impact on prices. Others say the price impact would be small. In this paper, we begin by addressing the price issue using a simple, transparent model of prices in the world oil market. We conclude that crude oil price decreases that could result from allowing more U.S. oil development in areas now off-limits are likely to be on the order of 1%. <u>Such decreases would not likely have a significant impact on prices</u> **that consumers pay at the gasoline pump now or in the future.**

Mccarthy 08 Michael Mccarthy, 7-25-2008, "Riches in the Arctic: the new oil race," Independent,

https://www.independent.co.uk/environment/nature/riches-in-the-arctic-the-new-oil-race-876816.html //DF

The future of the Arctic will be less white wilderness, more black gold, a new report on oil reserves in the High North has signalled this week. The first-comprehensive assessment of oil and gas resources north of the Arctic Circle, carried out by American geologists, reveals that underneath the ice, <u>the region may contain</u> as much as a fifth of the world's undiscovered yet recoverable oil and natural gas reserves. This includes <u>90 billion barrels of oil, enough to supply the world for three years at current consumption</u>

rates, or to supply America for 12, and 1,670 trillion cubic feet (tcf) of gas, which is equal to about a third of the world's known gas reserves. The significance of the report is that it puts firm figures for the first time on the hydrocarbon riches which the five countries surrounding the Arctic – the US, Russia, Canada, Norway and Denmark (through its dependency, Greenland) – have been eyeing up for several years.

Impact – R/T Methane

1. The study looked at methane release from an area of the Arctic in Siberia, which has absolutely nothing to do with Arctic drilling

Mooney 13 Chris Mooney, 8-8-2013, "How Much Should You Worry About an Arctic Methane Bomb?," Mother Jones,

https://www.motherjones.com/environment/2013/08/arctic-methane-hydrate-catastrophe///DF

It was a stunning figure: <u>\$60 trillion</u>. Such <u>could be the cost</u>, according to a recent commentary in the journal Nature, <u>of "the</u> <u>release of methane from thawing permafrost beneath the East Siberian Sea, off northern Russia</u>...a figure comparable to the size of the world economy in 2012." More specifically, the paper described a scenario in which <u>rapid Arctic warming</u> <u>and sea ice retreat lead to a pulse of undersea methane being released into the atmosphere</u>. How much methane? The paper modeled a release of 50 gigatons of this hard-hitting greenhouse gas (a gigaton is equal to a billion metric tons) between 2015 and 2025. This, in turn, would trigger still more warming and gargantuan damage and adaptation costs</u>. The \$60 trillion figure went everywhere, and no wonder. It's jaw dropping. To provide some perspective, 50 gigatons is 10 times as much methane as currently exists in the atmosphere. Atmospheric methane levels have more than doubled since the industrial revolution, but this would amount to a much sharper increase in a dramatically shorter time frame.

2. That number's probably not even accurate, since most scientists have also rejected the study's findings

Oskin 13 Becky Oskin, 7-29-2013, "Claims of Arctic methane disaster stir up controversy," NBC News, https://www.nbcnews.com/sciencemain/claims-arctic-methane-disaster-stir-controversy-6C10786434 //DF

The issue being debated is this: Could the Arctic seafloor really expel 50 billion tons of methane in the next few decades? In a commentary published in the journal Nature on Wednesday, researchers predicted that the rapid shrinking of Arctic sea ice would warm the Arctic Ocean, thawing permafrost beneath the East Siberian Sea and releasing methane gas trapped in the sediments. The big methane belch would come with a \$60 trillion price tag, due to intensified global warming from the added methane in the atmosphere, the authors said. But climate scientists and experts on methane hydrates, the compound that contains the methane, guickly shot down the methane-release scenario. "The paper says that their scenario is 'likely.' I strongly disagree," said Gavin Schmidt, a climate scientist at the NASA Goddard Institute for Space Studies in New York. An unlikely scenario One line of evidence Schmidt cites comes from ice core records, which include two warm Arctic periods that occurred 8,000 and 125,000 years ago, he said. There is strong evidence that summer sea ice was reduced during these periods, and so the methane-release mechanism (reduced sea ice causes sea floor warming and hydrate melting) could have happened then, too. But there's no methane pulse in ice cores from either warm period, schmidt said. "It might be a small thing that we can't detect, but if it was large enough to have a big climate impact, we would see it," Schmidt told LiveScience. David Archer, a climate scientist at the University of Chicago, said no one has yet proposed a mechanism to quickly release large quantities of methane gas from seafloor sediments into the atmosphere. "It has to be released within a few years to have much impact on climate, but the mechanisms for release operate on time scales of centuries and longer," Archer said in an email interview. Methane has a lifetime of about 10 years in the atmosphere before it starts breaking down into other compounds. [What are Greenhouse Gases?]

3. Even if the study's results were true, the authors found that it was going to happen based on current trends, even if we don't drill

Chestney 12 Nina Chestney, 2012, "Arctic Methane Release Could Cost Economy \$60 Trillion," Scientific American <u>https://www.scientificamerican.com/article/arctic-methane-release-could-cost-60t/</u>//DF <u>A release of methane in the Arctic could speed the melting of sea ice and climate change with a cost to the global economy of up to \$60 trillion</u> over coming decades, according to a paper published in the journal Nature. (Scientific American is part of Nature Publishing Group.) Researchers at the University of Cambridge and Erasmus University in the Netherlands used economic modeling to calculate the consequences of a release of a 50-gigatonne reservoir of methane from thawing permafrost under the East Siberian Sea. They examined a scenario in which there is a release of methane over a decade as global temperatures rise at their current pace. They also looked at lower and clower releases yet all preduced "steps" economic costs.

temperatures rise at their current pace. They also looked at lower and slower releases, yet all produced "steep" economic costs stemming from physical changes to the Arctic. "The global impact of a warming Arctic is an economic time-bomb," said Gail Whiteman, an author of the report and professor of sustainability, management and climate change at the Rotterdam School of Management, part of Erasmus University.

Impact – R/T 5 Degree Warming Study

1. The study finds that we're already headed towards this

McKinnon 15 Hannah McKinnon, 8-2015, "Untouchable: the Climate Case Against Arctic Drilling," Greenpeace, http://priceofoil.org/content/uploads/2015/08/OCI-Untouchable Arctic FINAL.pdf //DF In a section of the document entitled "National Energy Needs" the BOEM refers to the Obama Administration's "national strategy to meet U.S. energy needs," which is articulated in a May 2014 document called, "The All-of-the Above Energy Strategy as a Path to Sustainable Economic Growth."6 In this document the Administration cites the Energy Information Administration's (EIA) Reference Case forecast for U.S. oil supply and demand and discusses the need to pursue additional domestic oil production in order to enhance U.S. energy security. It also lists further leasing in the OCS as one of a selection of "initiatives" the Administration is undertaking. The EIA Reference Case is a climate disaster and should not be used to formulate energy policy. It is a forecast that shows where U.S. and global energy supply and demand will go if policies to safeguard the climate are not urgently implemented. The EIA Reference Case results in the precise opposite of the stated policy goal of the Administration when it comes to climate change. Basing the nation's energy policy on the EIA Reference Case is akin to planning to achieve climate disaster. The International Energy Agency (IEA) also produces energy forecasts and its forecasts include a Current Policies Scenario (CPS), which is broadly aligned with the EIA Reference Case.7 In addition it publishes a 450 Scenario (450s), which models what the world's energy and emissions trajectories would look like if carbon in the atmosphere were to be limited to 450 parts per million (PPM), a recognized threshold that climate scientists believe will give a 50 percent chance of containing average global temperature rise to within the 'safe' benchmark limit of 2 degrees C. The IEA states that the Current Policies Scenario is likely to lead to a catastrophic 5.3 degrees of warming, a level that will fundamentally undermine life on the planet as we know it.8



Makes sense that we're already past a tipping point in the Arctic

Watson 17 Paul Watson, 3-29-2017, "A Melting Arctic Could Spark a New Cold War," Time,

http://time.com/4773238/russia-cold-war-united-states-artic-donald-trump-barack-obama-vladimir-put

in///DF

When Tillerson was Exxon's CEO, he signed a \$500 billion deal with Rosneft, Russia's state-owned oil company, to find and tap Arctic reserves. That stalled under economic sanctions following Russia's annexation of Crimea. Exxon has asked the Treasury Department for an exemption in the Black Sea, a request that was rejected. If broader sanctions eventually do melt away with the Arctic ice, more cracks will undermine the 175-nation Paris Agreement to wean the world off fossil fuels. Scientists warn the Far North may be near, or already past, a climate tipping point. Caught in a calamitous feedback loop, the planet's natural air conditioner may be breaking down. Sea ice receded to a new record low at both poles this winter. At least three times, temperatures soared as high as 50 degrees Fahrenheit above normal. Ominous signs suggest the Greenland ice sheet may be headed for complete meltdown. That would raise sea levels by 24 feet, according to a recent study. The U.S. military warns that rising seas already threaten coastal bases and "will present serious risks to military readiness, operations and strategy," an expert panel reported last fall. Oil refineries along the Gulf Coast are increasingly vulnerable to storm surges. Around the world, millions of people living near oceans and river deltas may become refugees as homes and farms, factories and offices, end up under water.

Berwyn 17 Bob Berwyn, 3-31-2017, "Greenland's coastal ice melt hit a tipping point 20 years ago, study says," InsideClimate News,

https://insideclimatenews.org//news/31032017/-climate-change-science-greenland-global-warming-ice -melt //DF

Ice caps and glaciers along the coast of Greenland passed a tipping point in 1997, when a layer of snow that once absorbed summer meltwater became fully saturated. Since then, the coastal ice fields-separate from the main Greenland Ice Sheet—have been melting three times faster than they had been, according to a new study published Friday in the journal Nature Communications. "The melting ice caps are an alarm signal for the ice sheet. It

means long-term ice mass loss is inevitable. It will increase and accelerate if nothing changes," said lead author Brice Noël, a scientist at the University of Utrecht Institute for Marine and Atmospheric Research. "It's very unlikely the ice caps will recover. It's a climate tipping point—the time at which a change or an effect cannot be

stopped." Climate scientists are wary of tipping points, when a series of small changes make a much larger change inevitable. The fear is a total meltdown of the Greenland Ice Sheet, which would raise global sea level by 24 feet, Noël said. Overall, the rate of ice sheet melting is accelerating, according to peer-reviewed studies cited in the most recent Arctic report from NOAA. "On a warming planet, there will be less snow and more rain. That will limit the formation of healthy snow that could absorb the runoff in summer. Additional melt will just run off toward the ocean, rising sea level," he said. "What we saw there in normal conditions, before 1997, is that the snow was able to absorb most of the melt and then refreeze. So the melting was not contributing to sea level rise before 1997, even though warming was already ongoing."

2. This study assumes that there are long-term, sustained increases in the oil price, which it also says is unlikely

McKinnon 15 Hannah McKinnon, 8-2015, "Untouchable: the Climate Case Against Arctic Drilling," Greenpeace, http://priceofoil.org/content/uploads/2015/08/OCI-Untouchable Arctic FINAL.pdf //DF Extraction in the U.S. Arctic Ocean is at the top end of estimated global oil production cost curves - in other words, it is potentially among the most expensive sources of oil on the planet.10 The collapse of global oil prices in the past year has served as a clear reminder that oil market dynamics are highly volatile. Yet even in an industry best-case scenario, Arctic oil production would not begin for another decade, meaning the profitability of Arctic oil depends on sustained high oil prices decades into the future.11 According to recent research from the International Energy Agency and the New Climate Economy, oil prices will be 35 to 50 percent lower in a climate safe scenario.14 As the world moves to tackle climate change, oil demand will necessarily decline (we are already seeing a decline in global demand growth), and subsequently prices will be lower.15 As Figure 4 shows, the IEA forecasts global oil prices under three scenarios. The Rystad Energy UCube database shows that U.S. Arctic OCS oil production is currently uncommercial under current oil price forecasts. While precise breakeven pricing can only be estimated for fields in which oil is yet to be discovered, Rystad models a breakeven price of between \$150 and \$250 per barrel for various fields in the U.S. Arctic OCS. The very bottom of this range is where the IEA predicts oil prices will be in a 5 degreeplus scenario. It could not be clearer that Arctic oil is only viable in a scenario in which the climate is irrevocably destroyed For this reason, Shell's multi-billion dollar investment in Arctic exploration – oil that will not come online for a decade and only in a sustained high oil price scenario – is a bet that governments will fail to live up to their commitments to tackle climate change.16 A world where there is demand for Arctic oil will be a world that has soared past safe climate limits and is en-route to global temperatures that are multiple times higher than what is considered 'safe'. This bet on failure has been confirmed by recent research published in the journal Nature.17 This approach to modeling identified global reserves that would remain unburned if an "economically rational" approach to addressing climate change were taken. Among its conclusions was that no Arctic oil would be exploited given the high-cost and long-term time frame.

Impact – R/T 2 Degree Nail in the Coffin

1. No, lots of other stuff

McGlade 15 Christophe McGlade [University College London (UCL), Institute for Sustainable Resources], 1-7-2015, "The geographical distribution of fossil fuels unused when limiting global warming to 2°C," Nature, https://www.nature.com/articles/nature14016 //DF

Policy makers have generally agreed that the average global temperature rise caused by greenhouse gas emissions should not exceed 2 °C above the average global temperature of pre-industrial times1. It has been estimated that to have at least a 50 per cent chance of keeping

warming below 2 °C throughout the twenty-first century, the cumulative carbon emissions between 2011 and 2050 need to be limited to around 1,100 gigatonnes of carbon dioxide (Gt CO2)2,3. However, the greenhouse gas emissions contained in present estimates of global fossil fuel reserves are around three times higher than this2,4, and so the unabated use of all current fossil fuel reserves is incompatible with a warming limit of 2 °C. Here we use a single integrated assessment model that contains estimates of the quantities, locations and nature of the world's oil, gas and coal reserves and resources, and which is shown to be consistent with a wide variety of modelling approaches with different

assumptions5, to explore the implications of this emissions limit for fossil fuel production in different regions. Our results suggest

that, globally, a third of oil reserves, half of gas reserves and over 80 per cent of current coal reserves should remain unused from 2010 to 2050 in order to meet the target of 2 °C. We show that development of resources in the Arctic and any increase in unconventional oil production are incommensurate with efforts to limit average global warming to 2 °C. Our results show that policy makers' instincts to exploit rapidly and completely their territorial fossil fuels are, in aggregate, inconsistent with their commitments to this temperature limit. Implementation of this policy commitment would also render unnecessary continued substantial expenditure on fossil fuel exploration, because any new discoveries could not lead to increased aggregate production.

Impact – R/T Indigenous Peoples

No. Indigenous communities are united in their support for drilling because they can conduct it in safe measures, and because it benefits the economy

Rexford 17 Matthew Rexford, 10-1-2017, "Alaskans say 'yes' to ANWR drilling," Juneau Empire, <u>http://juneauempire.com/opinion/2017-10-01/alaskans-say-yes-anwr-drilling</u> //DF

As ANWR debates occur, the views of the Iñupiat who call the area home are often times left out. The wishes of the people who live in and around the Refuges' Coastal Plain are frequently drowned out by people who live hundreds and even thousands of miles away. Many of whom have never bothered to set foot anywhere near the Arctic. Well, today is a new day. **Voice of the Arctic Iñupiat, an**

organization with 21 members from across the Arctic Slope region — including members from Kaktovik located inside ANWR — <u>have voted unanimously to pass a resolution supporting oil and gas development</u> in the 1002 area. <u>This is an unprecedented show of unity from the community leaders</u> of the North Slope, those who live in and around the coastal plain of the Refuge, and should send a very clear message to America — we support the development of a portion of the Coastal Plain of ANWR. My fellow lñupiat and I firmly believe in a social license to operate, and perhaps no other potential project in the history of America has called for such a blessing from local indigenous peoples more than this one. <u>When oil was first discovered</u> on our land in 1969, the lñupiat were worried of industry activities and fought hard for

self-determination in order to protect our subsistence resources. So, we fully understand the trepidation from outsiders; the fear that the presence of industry on the coastal plains of ANWR could disrupt wildlife and affect America's manufactured perspective of our land and culture. However, we also have the benefit of decades of experience working with the oil and gas industry to implement stringent regulations to protect our lands, and the industry has consistently lived up to our standards. Prudhoe Bay, the largest oil field on the continent located 60 miles to the west of the coastal plain of ANWR, has demonstrated for four decades that resource development and ecological preservation can and do coexist in the Arctic. The 1002 area of ANWR resides in our backyard and is entirely within our homeland, which gives the lñupiat a unique perspective in the debate to allow drilling there. The oil and gas industry supports our communities by providing jobs, business opportunities and infrastructure investments; and has built our schools, hospitals and provided other basic services most Americans may take for granted. Our region recognizes its importance to our local and state economy, and we believe that development can be done responsibly in a portion of the 1002 area. We are not alone.

One of the biggest oil companies is actually run by natives

Bennet 17 Mia Bennett [assistant professor at Hong Kong University's Department of Geography and School of Modern Languages & Cultures], 7-11-2017, "As Shell gets out of Arctic oil, Alaska Native corporation gets in," CRYOPOLITICS,

https://www.cryopolitics.com/2017/07/11/alaska-native-corporation-seeks-to-drill-in-arctic-ocean///DF

Yet little attention has been paid to what happened to Shell's leases after the oil company quit Alaska. Just days before the moratorium was announced, <u>21 leases in a part of the Beaufort Sea Lease Area called Camden Bay were purchased in 2016</u> by a subsidiary of Arctic Slope Regional Corporation (ASRC), the wealthiest Native corporation in Alaska. At about precisely the same time that ASRC was criticizing Obama's ban on further developments in the Outer Continental Shelf, the protests at Standing Rock against the Dakota Access Pipeline were exploding. If you thought that all indigenous peoples were

uniformly opposed to oil drilling, think again. According to a list provided by the Bureau of Ocean Energy Management, most of the leases purchased by ASRC Exploration are set to expire at the end of this year. Two are valid until summer 2019. In order to prevent the expiration of nearly all of the leases, as Alex DeMarban at Alaska Dispatch News writes, ASRC Exploration requested unitization of the offshore leases from the U.S. Bureau of Safety and Environmental Enforcement (BSEE). Unsurprisingly, under an administration that's more pro-oil than the previous one, BSEE approved the unitization of 20 of the 21 units. The benefits of unitization are that whatever happens in one lease now applies to all other 20 leases, since they're now considered part of the same area. Petroleum News explains, "Unitization binds together a group of leases, which often have multiple owners, to encourage orderly and thorough exploration and production with minimal waste of dollars or resources." For ASRC, this means if they find oil in one lease area, the rest of their leases stay active and exploration can continue. The next challenge for ASRC will be to successfully obtain an extension of the leases from BSEE. Shell wasn't able to do this earlier, but that was under the Obama administration. Under Trump, things could be different. Ty Hardt, Senior Director of Communications at ASRC, wrote over email, Arctic Slope Regional Corporation: A force for development Since its formation in 1971 under the Alaska Native Claims Settlement Act, ASRC has transformed into a major economic force in Alaska and beyond. In 2010, Forbes ranked it the 190th largest private company in the U.S., just behind Burger King, with revenues of \$2.33 billion. The corporation represents the interests of some 13,000 Iñupiat shareholders, most of whom reside in seven villages scattered across Alaska's North Slope. Every guarter, Iñupiat receive dividends from ASRC, whose value often reflects whether oil has been up or down. ASRC's active involvement in Arctic industrial development puts a spin on the usual narrative that's woven of Arctic indigenous peoples being both victims of outside exploitation and staunch protectors of the environment. The regional corporation's bread and butter has been oil field services for a long time, but it's also been involved in mineral exploration for decades. In 1991, for instance, the Alaska legislature awarded \$2 million to the company for coal exploration and feasibility studies in northern Alaska. Even back then, potential export markets were Asia and Europe via a "northern

Arctic Ocean sea route," as a 1992 report from the Alaska Department of Natural Resources referred to it. Since the late 2000s, ASRC's interest in oil exploration has grown.

Arctic drilling provides economic support for indigenous communities, which actually helps them maintain their way of life

Bennet 17 Mia Bennett [assistant professor at Hong Kong University's Department of Geography and School of Modern Languages & Cultures], 7-11-2017, "As Shell gets out of Arctic oil, Alaska Native corporation gets in," CRYOPOLITICS,

https://www.cryopolitics.com/2017/07/11/alaska-native-corporation-seeks-to-drill-in-arctic-ocean///DF

Anti-whaling and seal-clubbing protestors aside, one could argue that ASRC is simply a for-profit corporation that doesn't really have the best interests of all its shareholders in mind. After all, Native corporations have had their fair share of scandals, from fraud and self-dealing within the Cape Fox Corporation to the dissolution of the 13th Regional Corporation after some pretty heinous corporate mismanagement. So maybe ASRC, in exploring for Arctic oil, is really just looking out for its wallet rather than its shareholders. This is certainly a possibility, but Arctic oil is no easy game to play. Instead, ASRC could just stick to its tried and true practice of winning 8(a) contracts. But that doesn't necessarily help to build an economic base for the future, which is what ASRC is trying to do in spurring Arctic oil extraction — even if the economics of it seem crazy at the moment. And beyond mere dollars and cents, the story here is also about protecting not only indigenous rights to traditional cultural practices, but protecting indigenous rights to develop. In some cases,

the two are even intertwined. <u>Economic development can generate the funds necessary to support traditional</u> <u>cultural practices that</u>, for better or worse, <u>might not be viable on their own anymore in an economy that has</u> <u>both subsistence and market practices</u>. Making a sealskin boat for whaling, for instance, doesn't come cheap. Sure, the sealskins and caribou intestine thread come from the land, but the wood has to be purchased, and later the motor and fuel, and so on and so forth.

Impact – R/T Oil Spills

This will happen in the Arctic (this card is awesome)

Bennet 18 Mia Bennet [assistant professor at Hong Kong University's Department of Geography and School of Modern Languages & Cultures], 2-14-2018, "The automation of Arctic oil: good for companies, hard for communities," CRYOPOLITICS,

https://www.cryopolitics.com/2018/02/14/automation-may-make-arctic-oil-likely/ //DF

The drop in energy prices and pressure to cut costs has also incentivized companies to adopt new, money-saving technologies like automation. Craig Clark, vice president of finance at Houston-based National Oilwell Varco, expressed in an interview with Forbes, "In a peculiar way this downturn has increased the interests of rig contractors and service companies as they look for ways to trim costs." Realizing that oil will not reach heights of \$80-100 a barrel anytime in the near future, the industry's goal is now to make oil profitable at \$50-60 a barrel. With Arctic oil generally seen as profitable at a price of \$90 a barrel, if technologies can advance such that production costs lower significantly even if the price of oil doesn't go back up, then Arctic oil may be profitable at lower costs, too. Matt Rogers, a consultant at McKinsey, stated to the Financial Times, "I don't think we've built into our supply-side models just how much more oil this will provide...The world in 10 years will feel very different...It's going to feel like we're in Star Wars compared to where we are now." Automating oil production in the Arctic If Star Wars is the future of oil and gas, then Planet Hoth, with its gigantic robots walking mechanically walking across the snow, lies on the horizon for the Arctic oil frontier. But even AT-ATs had room for at least 40 stormtroopers inside. Years from now, drill rigs might not have any people at all. Mitch Pryor, co-founder of the Drilling and Rig Automation Group at UT Austin, remarked to Offshore Technology, "The companies are now saying the data we are getting from our sensors is something we can trust and use to make decisions possibly without a driller in the loop." Automation, which is reducing the need for human labor across numerous industries, is thus starting to make headway in the oil and gas industry. Just as Amazon rolled out its cashier-less grocery store in Seattle a few weeks ago, rigs may soon require only a fifth of their current crew sizes. The Financial Times article notes that Belani, the tech VP at Schlumberger, believes that shale drilling rigs that have 26 people today might only have five people in five years' time. The invention of automated drilling even has its roots in the Arctic. In 2006, NASA tested a Mars prototype drill on Devon Island in Nunavut, Canada, marking supposedly the first time that automation completely controlled a drill rig. While NASA's Mars drill would look for water and life on the Red Planet, the same technologies will allow industry to scour harsh environments without risk to human life. There are other overlaps between NASA's inventions and Arctic oil and gas, too. U.S. company Energid Technologies developed software for NASA to control lunar rovers that oil companies are now using to program robots to lay out a confined rig floor on the seabed. The Arctic is fast becoming an automation frontier in the oil and gas industry. In 2011, the Society of Petroleum Engineers published a newsletter that argued, "Statoil needs a rig capable of drilling in the Arctic, and other environments that would put workers out of harm's way." Last summer - six years later - Statoil was employing "the most advanced automated drilling control (ADC) system ever installed on a rig, and the first ADC system on a floating rig" on its Songa Enabler offshore drilling rig in the Koigen Central wildcat well in the Barents Sea. While the well, which proved dry, was plugged and abandoned, the attempt at least marked an advance for Statoil in using ADC technology to explore for Arctic oil. The rise of new technologies like autonomous vehicles can make monitoring of onshore and offshore pipelines easier, too. This could make Arctic drilling safer for both the environment, thanks to added monitoring, and for humans, who may no

Ionger have to brave bad conditions to carry out checks. Automated robots could soon be probing for leaks despite stormy seas that might keep humans onshore, for instance, while automated drill pipe handling reduces human risks by obviating the need to have people manning the drill floor. More dramatically, over time, the introduction of automated technologies may mean the rise of fully automated drilling operations, according to a report from DNV GL, a risk management company based in Norway.

Human errors are the #1 cause of oil spills

Rinkesh, "Oil Spill: How Does it Happen and Various Causes of Oil Spill," Conserve Energy Future,

https://www.conserve-energy-future.com/various-causes-of-oil-spill.php //DF

Whenever oils spills happens, the consequences are grave including serious harm to marine mammals and birds and can also harm sea otters, shellfish, and fish. The harms are because the oils interfere with the insulating ability of mammals with furs. The animals may also get trapped in the oil, especially birds and sea otters, exposing them to cruel conditions notwithstanding the possibility of swallowing the oil which can be poisonous. As such, during oil spills, hundreds to thousands of marine mammals, birds, turtles and fish usually end up dying. Various Causes of Oil Spill Carelessness or people making mistakes Carelessness or mistakes or errors made by people is one of the primary causes of oil spills.

According to the Office of Response and Restoration with regards to oil spills, <u>the majority of the oil spill cases are associated</u> with human error, carelessness and mistakes that could be avoided. Such cases are normally noted where there are petroleum refineries, barrages, tankers, storage facilities and pipelines. For instance, <u>all acts of human mistakes and</u> carelessness were linked to the Exxon Valdez Oil Spill in March 1989. On a separate case, <u>the BP's head of safety</u> party blamed human error for the oil spill in 2010. Further, reports indicated that five key human errors led to the Gulf oil rig blowout, causing one of the biggest oil spills in history.

Impact – R/T \$172 Billion Social Cost

The study assumes a \$100 barrel price of oil

Donaghy 16 Tim Donaghy, 6-2016, "The Climate Change Costs of Offshore Oil Drilling," Greenpeace,

https://www.greenpeace.org/usa/wp-content/uploads/2016/06/Climate-Costs-Offshore-Oil-June2016-F INAL.pdf //DF

This analysis considers the climate impacts of offshore oil production under the Mid-Price scenario for oil produced from the Chukchi Sea, the Beaufort Sea, Cook Inlet and the Gulf of Mexico. This analysis does not consider the climate impacts of natural gas production nor does it consider oil produced from the Atlantic planning region, which was removed from the Proposed Program in March 2016.12 The Mid-Price scenario corresponds to price levels of of \$100 per barrel of oil and \$5.34 per million cubic feet of gas.13 Under these assumptions, total oil production from the Proposed Program is 7,781 million barrels (Mbbl). 2. Net CO2 Emissions from Offshore Oil Production The analysis considers the net impacts on global CO2 emissions in the case that the 2017-2022 Proposed Program is cancelled and none of BOEM's anticipated production takes place. In particular, it compares global CO2 emissions under the Proposed Program to a "No Sale" option where the scheduled lease sales do not take place and energy markets respond to the changes in global oil and gas supply. Despite BOEM's claims, the avoided oil production under the "No Sale" option will be partially, but not completely, replaced by fuels from other sources, and this will lead to a net drop in global emissions. To convert from oil production estimates to net carbon dioxide emissions, we follow the methodology outlined in Erickson & Lazarus (2016). That study found that global consumption of oil responds to changes in oil supply, such that a one unit decrease in oil production will lead to a decrease of oil consumption of 0.44 units. The study also found that a decrease in oil production will lead to an increase of 0.22 units of oil substitutes, such as biofuels, natural gas or electricity. This substitute fuel mix is assumed to have 85% the carbon intensity of oil. These shifts in fuel supply lead to an overall decrease in fuel consumption of 22% (-0.44 + 0.22) for each barrel of oil that is not produced.14Applying this methodology to BOEM's production estimates for each planning region, the findings are: Therefore full production and consumption of the oil found in BOEM's production estimates would result in a net increase in global CO2 emissions of around 850 million metric tons of CO2 over the full timespan of the leases, in comparison to the "No Sale" option. This would represent average annual emissions of 17 Mt CO2 over 50 years, which is equivalent to the yearly emissions from 3.6 million cars.15 These findings are sensitive to how the oil market changes in response to oil production and to assumptions about the availability and carbon intensity of oil substitutes. These assumptions are modeled by Erickson & Lazarus using a few key parameters.16 This analysis adopts the central values for the parameters used in that report, although we also consider two

scenarios where those parameters are varied in order to test other future energy market possibilities. For example, if we were to adopt the assumptions from that study's "lower carbon world" scenario, net emissions reduction from the "No Sale" option would total 1757 Mt CO2, whereas adopting the assumptions from the "higher carbon world" scenario would lead to emissions reductions of only 117 Mt CO2.

Economy Advantage

Massive job gains and revenue benefits from Arctic drilling

Houck 13 James W. Houck, 2013, "The Opportunity Costs of Ignoring the Law of Sea Convention in the Arctic," Hoover Institution: Arctic Security Initiative,

https://elibrary.law.psu.edu/cgi/viewcontent.cgi?article=1240&context=fac_works //DF

The potential implications of this extended continental shelf regime are profound. With one of the largest coastlines in the world, the United States is expected to have over 291,000 square miles of extended continental shelf.89 The U.S. continental margin off the coast of Alaska alone may extend to a minimum of 600 miles from the Alaskan baseline.90 Alaska's extended continental shelf lies over the Arctic Alaska province, one of the many oil- and gas-rich basins in the Arctic.91 <u>It is estimated that there may be almost 73 billion barrels of oil and oil-equivalent natural gas located in the Arctic Alaska province</u>, the second highest estimated production capability of all Arctic provinces.92 The continental shelf within the 200-mile EEZ under the Beaufort and Chukchi Seas alone may have over 23 billion barrels of oil and 104 trillion cubic feet of natural gas.93 Not only would development of <u>these resources</u> promote energy independence, a U.S. national security objective,94 it <u>Would also create almost 55,000 jobs per year nationwide and generate over</u> <u>\$193 billion in federal, state, and local revenue over a fifty-year period</u>.95 Due to delays in Arctic oil and gas exploration in the Chukchi and Beaufort Seas, both within the U.S. 200-mile EEZ, the earliest estimated date of extraction is sometime after 2019.96

Houck 13 James W. Houck, 2013, "The Opportunity Costs of Ignoring the Law of Sea Convention in the Arctic," Hoover Institution: Arctic Security Initiative,

https://elibrary.law.psu.edu/cgi/viewcontent.cgi?article=1240&context=fac_works//DF

Given the level of exploration, development, and production activities in the Beaufort and Chukchi OCS areas, this study shows that the federal government and other states outside of Alaska are expected to receive significant financial benefits from OCS lease payments, taxes, and other fees associated with the increase in economic activity resulting from exploration, development, and production of OCS oil and gas resources. Moreover, <u>oil and gas sector jobs, manufacturing jobs, jobs in the trade and services sector, and other support sector jobs would</u> also <u>be generated in the rest of the nation to support the OCS activities in</u>

<u>Alaska</u>. The rest of this report describes the analysis and results of the national-level economic benefits of OCS development in the two Alaska OCS areas. The discussion is organized according to the tasks outlined in the scope of work requested by Shell Exploration & Production, as follows: 1) Direct and indirect Alaska and local government revenues, 2) Federal lease revenues, 3) Federal corporate income tax revenues, 4) Federal personal income tax, 5) Additional indirect revenues to federal and other state governments, 6) Sensitivity Analysis, and 7) Total jobs generated in Alaska and the rest of the nation.

REMs Advantage

R/T Japan

Kuo 18 Frederick Kuo, 4-1-2018, "Is Japan's rare earth discovery fool's gold?," Lowy Institute, <u>https://www.lowyinstitute.org/the-interpreter/japan-s-rare-earth-discovery-fool-s-gold</u> //DF This recent discovery could therefore be a consequential event that provides resource security for Japan and other nations dependent on China's rare earth exports. Harvesting challenges Despite the news-grabbing headlines, it may be too soon to celebrate this discovery as Japan's rare earth El Dorado. The minerals are buried 6000 metres deep in the ocean. While the Japanese researchers who discovered the deposits claim they have also created an efficient method to extract these minerals, questions remain as to how this method could be scaled. Currently, there are no profitable methods of producing rare earth minerals embedded more than 5 kilometres below the seabed. Based on current methods, producing only 1000 tons of metals would require mining more than one million tons of mud.

Kuo 18 Frederick Kuo, 4-1-2018, "Is Japan's rare earth discovery fool's gold?," The Interpreter, Lowy Institute, <u>https://www.lowyinstitute.org/the-interpreter/japan-s-rare-earth-discovery-fool-s-gold</u> //DF In addition, questions remain as to whether a timeline which allows Japan to wean itself off its dependence on Chinese rare earth materials within the foreseeable future is feasible. <u>Currently, it takes an average of ten years to advance a rare earth</u> <u>discovery on land to a producing mine.</u> The fact that the newly discovered rare earth deposit is <u>embedded in deep seabed, combined with unproven methods of profitable extraction of such minerals,</u> <u>means</u> Japan's <u>rare earth ambitions will not come to fruition soon.</u> The status quo remains While Japan's recent discovery of rare earth minerals is noteworthy for its unprecedented size, it is premature to suggest this is a watershed moment that will unravel China's dominance of the global supply. It is one thing to be in possession of an unrivalled deposit of unmined ore, and quite another to create a profitable chain of production that allows its vast potential to be unlocked. Therefore, considering the limitations of existing methods of production, as well as the lengthy timeline of bringing rare earth projects to fruition, China's rare earth monopoly will unlikely be challenged in the near future. While Japan certainly possesses a veritable El Dorado beneath its territorial waters, the benefits of such an inheritance is out of reach for now.

Extras

Goldberg 17 Shelley Goldberg, 5-12-2017, "Trump's Plan for Arctic Drilling Won't Hit a Gusher," Bloomberg,

https://www.bloombergquint.com/markets/2017/05/12/trump-s-plan-for-arctic-drilling-won-t-hit-a-gus her#gs.sEQ=97g //DF

Zinke pointed out that revenue from offshore leasing had dropped by \$15 billion during the Obama administration, partially due to the decline in oil prices. With 94 percent of the nation's outer continental shelf now off limits for development, Trump claims that the industry is eager to see more of the Arctic open to leasing. Maybe so, but oil prices would have to increase sharply to spur any significant production there. - The level of interest from U.S. exploration and production companies in drilling in the Arctic is unclear. Over the years, they have struggled to establish a presence in this polar region, considered unfriendly to drilling. But it's not just about regulatory delays. The area features punishing weather conditions, remote locations on land and sea and stunted infrastructure, all of which translate to high operating costs, of particular concern now as crude oil struggles to rise from 6-month lows. For these reasons, Royal Dutch Shell in 2015 abandoned its \$7 billion attempt to extract riches beneath the seabed off Alaska's Arctic coast. That same year, Imperial Oil, on behalf of partners ExxonMobil Canada Ltd. and BP Plc, announced an indefinite delay in plans to drill in the Arctic's Beaufort Sea. Other companies have been abandoning old leases without seeking new ones. There is no question that Arctic sea ice continues to melt, through oil price rallies and price crashes, from oil shortages to gluts. And as the ice melts, the conditions improve for building remote oil platforms in the frigid waters and for land-based drilling operations that take advantage of newly thawed shipping routes. The timing, nevertheless, couldn't be worse, as the world faces an oil glut. Yet rig counts in the U.S. are increasing, as are oil exports, which were banned for 40 years, with minor exceptions, until 2016. As of May 5, the U.S. total rig count was 877, a year-on-year increase of more than 111 percent, according to the rig count by Baker Hughes. Meanwhile, the Organization of Petroleum Exporting Countries, which meets on May 25, may be forced to extend its ineffective output cut.

Hampstead 18 John Paul Hampstead [Staff Writer], 1-5-2018, "Trump wants to free up almost all coastal areas for offshore drilling," FreightWaves,

https://www.freightwaves.com/news/2018/1/5/trump-wants-to-free-up-almost-all-coastal-areas-for-of fshore-drilling //DF

The first planning areas that will be open for new leases are in remote areas of the Arctic Ocean, north of the Alaskan Peninsula. The Beaufort and Chukchi Seas, which saw lease sales in 2008, are the first areas that will be re-opened for business in 2019. According to a 2017 study by the Bureau of Ocean Energy Management, the Beaufort Sea planning area is estimated to hold 1.2B barrels of recoverable oil and .892T cubic ft of technically recoverable natural gas; the Chukchi Sea is believed to hold oil and gas reserves as high as 30B barrels. Drilling in the Arctic Ocean is very expensive—the exceptionally harsh climate, with air temperatures plunging to -40 degrees Fahrenheit and the difficulty of maintaining pipeline infrastructure that uses (now melting) permafrost as its foundation pushes the break-even point on Arctic oil to more than \$78 a barrel. Today's Brent crude price is \$68.02. Shell Oil has already let all of its Arctic leases but one lapse because developing those

<u>reserves is simply not profitable</u>. So, don't expect a sudden oil exploration bonanza in the Arctic planning areas. "It is going to be a really long story," said William Turner, an analyst at Wood Mackenzie in Houston. "It is not going to be gangbusters." It's still an open question as to how valuable Arctic leases will be to the federal government and how much revenue the Interior Department will be able to raise from areas that are not currently commercially viable.

B. Prices will also never rise significantly because of OPEC. Their target price is only \$70-80 a barrel

Tucker 18 Lancelot Tucker, 9-13-2018, "How Does OPEC Control the Price of Oil?," NewsBlaze News, https://newsblaze.com/business/how-does-opec-control-the-price-of-oil 91072///DF

The Organization of the Petroleum Exporting Countries, also called OPEC, is an intergovernmental organization created in the 1960s to coordinate oil production, prices, and policy among its members. Today, <u>OPEC comprises 14 member countries whose</u> <u>primary goal is to ensure the stability of the global oil market</u>, ostensibly balancing the needs of both producers and consumers. Most people in the oil trading business know that OPEC's decision making can influence the price that is sold for oil on the market today. Their impacts on worldwide affairs not only affect the profit making of companies involved in the oil industry, but transportation, agriculture and manufacturing sectors as well. For companies trading in the commodity, they can take advantage of oil price swings by using online commodity trading brokers, which allow them to openly buy and sell positions; depending on weather their market outlook is bearish or bullish of course. UFX's trading platform is a large platform operating in the entire online trading industry. Its advanced trading tools and charts provide savvy traders with real-time access to the most important commodities, thus, allowing them to trade during the best conditions. How does OPEC Control Oil Prices? <u>One of the most powerful tools that OPEC has on the oil market is production cuts.</u>

By slashing output through production quotas for member countries can trigger direct impacts on

worldwide levels of oil production and oil prices. The first formal production agreement by OPEC members was back in 1982, when its 13 members decided to cut their daily production by about 700,000 barrels to achieve a maximum total output of 17.5 million barrels per day. Last November, OPEC members and non-members alike decided to reduce oil production to deal with strong "imbalance and volatility" in the global market. The organization decided that from January 1st 2017, output would be reduced by about 1.2 million barrels per day to set a maximum of 32.5 million barrels per day. The initial agreement was to last 6 months, but it was later extended for another 6 months. Now investors are awaiting more information about a possible second extension of the agreement, or a gentle "tapering" of production.

Amadeo 18 Kimberly Amadeo, 1-24-2018, "What Makes Oil Prices So High?," Balance,

https://www.thebalance.com/what-makes-oil-prices-so-high-3305654

Oil prices are rising because OPEC agreed to extend production cuts through 2018. On November 30, 2016, the organization first agreed to cut production by 1.2 million barrels per day (mbpd) starting January 2017. In response, traders bid \$65 a barrel, a 30-month high. OPEC has been battling U.S. shale oil producers for market share. Shale producers pushed U.S. oil production to 9.4 million mbpd in 2015. That knocked OPEC market share to 41.8 percent in 2014 from 44.5 percent in 2012. This increased supply caused oil prices to fall. That created a boom and bust in the U.S. shale oil industry. OPEC doesn't want prices too high, or for alternative fuel sources to start to look good again. OPEC's target price for

oil is \$70-\$80 a barrel. But U.S. shale producers need \$40-\$50 a barrel to pay the high-yield bonds they used for financing. Until 2016, OPEC accepted the lower price to maintain market share. Normally, oil and gas prices can be forecast by a predictable seasonal swing. They rise in the spring and fall in autumn. That's because futures traders anticipate increased demand for the summer vacation driving season. Even though heating oil use rises in the winter, it's not enough to offset the post-vacation drop in gasoline demand. Another factor that determines oil prices is a dollar decline. Most oil contracts around the world are traded in dollars. As a result, oil-exporting countries usually peg their currency to the dollar. When the dollar declines, so do their oil revenues, but their costs go up. Therefore, OPEC must raise the price of oil to maintain its profit margins and keep costs of imported goods constant.

The price of oil isn't going to go up substantially

Tomlinson 18 Chris Tomlinson, 1-8-2018, "Trump's drilling plan ignores the past and future,"

HoustonChronicle,

https://www.houstonchronicle.com/business/columnists/tomlinson/article/Drill-baby-drill-from-sea-to-shining-sea-or-12477347.php //DF

Personal choices also have national implications. Oil companies drill and refine crude because commuters demand it, especially in the U.S., where most people shun public transportation. If you drive an internal combustion vehicle to work alone, you encourage oil drilling. You can send out angry tweets, donate to environmental groups and call your lawmakers all day long, but only less demand for oil will truly curtail drilling. The good news is that changing energy and transportation markets will likely discourage drilling in most places, no matter what Zinke does. The world currently has about 1.5 million barrels a day of excess capacity, mostly created by American companies hydraulically fracturing shale. When OPEC allowed prices to float freely, crude dropped 50 percent. When shale drillers didn't shut down, OPEC took the excess barrels off the market to prop up prices before its members went broke. Today, oil prices are close to the actual cost of extracting <u>crude</u>, plus a reasonable profit, <u>about \$60 a barrel</u>. But that's only because the lowest-cost producers, <u>OPEC</u> and <u>Russia</u>, are holding back. If high-cost producers enter the market, as from Arctic wells, <u>OPEC and</u> <u>Russia will release their crude back into the market and shut them down</u>. That's why Zinke's "largest ever" lease sale in Alaska's Arctic Reserve was such a flop back in December. Producing oil there is so expensive that just two companies bid a total of \$1.2 million for only seven of the 900 tracts Zinke put up for

<u>auction</u>. The economics of drilling off the East and West coasts are equally daunting. Zinke can offer tracts, but state environmental laws may still apply, particularly to the vessels that supply the rigs and bring the product ashore.

Kennedy 15 Charles Kennedy [writer for oilprice.com], 4-29-2015, "Can Shell Afford To Drill In The Arctic?," OilPrice, <u>https://oilprice.com/Energy/Crude-Oil/Can-Shell-Afford-To-Drill-In-The-Arctic.html</u> //DF

Environmental group Oceana has opposed Shell's Arctic campaign from the start. It and other organizations have sued the federal government in hopes of nullifying Shell's Arctic leases. Now it is turning to the Securities and Exchange Commission (SEC), arguing in a petition that Shell is putting its shareholders at risk with its campaign in the Arctic. Having already spent more than \$6 billion, Shell has stated that it will spend another \$1 billion on drilling several wells in the Chukchi Sea. But Oceana argues that <u>the company's financial health is at risk</u> <u>should there be an oil spill, which would lead to unknown costs. BP is still reeling from its Deepwater</u> <u>Horizon disaster five years after it took place. If a similar event took place in the Arctic, it would be much</u>

<u>more difficult to clean up</u>, Oceana argues in its petition to the SEC. Shell has not spelled out those risks. "As we learned from Shell's experience in 2012, the Arctic Ocean is remote and unforgiving," Andrew Sharpless, Oceana's CEO, said in a statement. "Companies like Shell cannot run from the reality that proposed <u>oil drilling creates enormous risks for the ocean and for the company</u>.

The massive financial pressure on these companies and the harsh Arctic environment make a spill much more likely

Leber 15 Rebecca Leber, 7-15-2015, "Shell's Arctic Drilling Adventure Is a Disaster Waiting to Happen," New Republic,

https://newrepublic.com/article/122297/shells-arctic-drilling-adventure-disaster-waiting-happen //DF Even as a long-term prospect, Shell is years behind schedule as the problems add up. And it can't afford another slow season this year. The company faces pressure to prove to investors it can deliver on its \$7 billion bet. By 2017, the Times reported, Shell's first leases will expire if it doesn't begin producing oil a decade after it first acquired them. "<u>Everybody's watching to see if we're going to fail or</u> <u>succeed out there</u>," Ann Pickard, Shell's Executive Vice President running its Arctic division, told the Wall Street Journal. "<u>If we fail</u> for whatever reason ... I think the U.S. is another 25 years" away from developing Arctic resources. so <u>even minor delays</u> this year—like an incident akin to 2012's—<u>Could be devastating to Shell</u>. Above all else, it faces natural challenges. The weather is fickle, sea ice doesn't always melt on schedule, and there's a limited window of a few months a year when the Arctic is calm enough to drill. Interior has given Shell a hard stop to drilling in late September. Environmentalists say that <u>this pressure is</u> <u>exactly what makes Shell prone to risky decisions. "The Fennica could have easily travelled along a much</u> <u>safer route instead of going over a shallow, rocky shoal in an area that to begin with is not well charted</u>," said Chris Krenz, Arctic campaign manager and senior scientist for Oceana, an ocean advocacy organization campaigning against Shell's oil development, in a statement. <u>If Shell continues</u>, environmentalists warn <u>it's only a matter of time before the next big</u> <u>disaster strikes</u>. "I don't think it's possible for anyone to have a 'perfect season' in the Arctic," Nichols said. "The margin of error is so slim. Things that fly in the Gulf [of Mexico], even though they shouldn't," won't in the Arctic "because conditions are so hard."

Goldberg 17 Shelley Goldberg, 5-12-2017, "Trump's Plan for Arctic Drilling Won't Hit a Gusher," Bloomberg,

https://www.bloombergquint.com/markets/2017/05/12/trump-s-plan-for-arctic-drilling-won-t-hit-a-gus her#gs.sEQ=97g //DF

The timing, nevertheless, couldn't be worse, as the world faces an oil glut. Yet rig counts in the U.S. are increasing, as are oil exports, which were banned for 40 years, with minor exceptions, until 2016. As of May 5, the U.S. total rig count was 877, a year-on-year increase of more than 111 percent, according to the rig count by Baker Hughes. Meanwhile, the Organization of Petroleum Exporting Countries, which meets on May 25, may be forced to extend its ineffective output cut. Despite enhanced drilling technologies, the risks of drilling in the Arctic are too great and the area too sensitive. Millions of Americans don't want to put the Arctic Ocean, coastal communities and wildlife at risk of an ecological catastrophe. Paramount are the disastrous ramifications of an oil spill. It took a multi-month Herculean effort to wrangle BP's 2010 Gulf of Mexico's Deepwater Horizon disaster, even though it occurred just 40 miles off a more heavily populated and industrialized U.S. coast. The response involved mobilizing and coordinating an armada of vessels, crews and equipment. If a spill occurs off Alaska, getting the necessary ships and gear to the spill site would be much more difficult. According to the World Wildlife Fund, there's no proven effective method for containing and cleaning an oil spill in icy water. Deepwater occurred in a large, warm gulf populated by microbes that eat oil; quite unlike the Arctic Ocean's low temperatures and limited sunlight, making an oil spill more likely to fester, similar to the 1989 Exxon Valdez 10.8-million-gallon Alaska spill. The Arctic also lacks the required infrastructure to transport natural gas -- pipelines or facilities that convert natural gas to liquefied natural gas for eventual tanker shipment. Thus, offshore rigs would likely flare off the extra natural gas on-site. While flaring is preferable to letting the gas escape, since methane is a potent greenhouse gas, it can still produce other pollutants such as black carbon, causing ice and snow melt An additional concern is the acoustic disturbance to marine mammals from offshore oil development, as underwater noise can affect communication, migration, feeding and mating.

A spill is likely given the track record of oil companies, even if they make preparations to avoid it

Conathan 17 Michael Conathan and Shiva Polefka, 10-10-2017, "New Offshore Drilling Legislation Is Big Oil's Dream Come True," Center for American Progress,

https://www.americanprogress.org/issues/green/news/2017/10/10/440586/new-offshore-drilling-legisl ation-big-oils-dream-come-true///DF

While the BP disaster was easily the largest oil debacle of the decade, it certainly wasn't the only one. <u>Big Oil has a terrible track</u> record when it comes to offshore oil production in the stormy, ice-choked, and unpredictable <u>waters off northern</u> <u>Alaska</u>. In the summer of 2012, while drilling exploratory wells in the Chukchi Sea, Royal Dutch Shell proved correct the Deepwater Horizon commission's conclusions on the need for Arctic-specific drilling safety regulations. <u>Despite \$6 billion in preparations, the</u> <u>extreme conditions of the Arctic Ocean defeated Shell at every turn, resulting in destroyed</u> <u>well-containment equipment, disastrous vessel groundings, and</u> \$12.2 million in federal fines for <u>Safety and</u> <u>pollution control violations</u>. In the spring of 2017, the rupture of a gas pipeline in the Cook Inlet owned by Hilcorp Energy Co., the inlet's largest gas and oil producer, <u>had to be left to spew natural gas for weeks because the waters</u> <u>were too dangerous to mount a response</u>. As a result of the Deepwater Horizon commission's recommendations and the lessons learned from Shell's misadventures, the Department of the Interior under President Obama worked with industry, Alaska Native tribes, scientists, and the public to develop and promulgate a new suite of Arctic-specific drilling safeguards in 2016. But the ASTRO Act's sponsors included a provision in the bill to completely repeal these commonsense protections, reinforcing what appears to be the sponsors' goal of

3. Non unique: drilling may still be illegal under federal law, even if it becomes permissible under international law.

maximizing profit for the oil industry—irrespective of the risks and costs to native communities and the Arctic environment.

Gramer 17 Robbie Gramer, 3-24-2017, "Oil Companies Cool on Arctic Drilling. Trump Wants It Anyway.," Foreign Policy,

https://foreignpolicy.com/2017/03/24/oil-companies-cool-on-arctic-drilling-trump-wants-it-anyway-ene rgy-alaska-environment/ //DF

"Shale is more accessible and is going to come ahead of the Arctic," said Bud Coote of the Atlantic Council, formerly a CIA energy analyst. When oil companies like Shell did venture to the waters off Alaska several years ago, oil went for more than \$100 a barrel. That made all the extra costs involved in drilling at the edge of the earth a bit more bearable. "I think it has to be back up in that range" for companies to head north again, he told Foreign Policy. Yet crude has hovered around \$50 a barrel since late 2014. Big oil gave up on some \$2.5 billion in drilling rights in the U.S. Arctic in 2016; expensive plays as oil prices dropped just weren't worth the cost anymore. "High-cost frontiers," like the Arctic "will be

shunned," energy intelligence firm Wood Mackenzie said in December last year. **Former President Barack Obama** didn't help. He threw a wrench into Trump's energy plans when he **signed a series of midnight regulations on his way out the door**

designed to lock up the Arctic from drilling, with little consultation from Alaskan lawmakers. But despite the clear signals from the market, Trump is stubbornly pursuing Arctic energy plays. Trump and Zinke met with Sens. Lisa Murkowski (R.-Alaska) and Dan Sullivan (R.-Alaska) earlier this month to lay down plans for opening Alaska's coast to offshore drilling. (The Chukchi and Beaufort Seas off the Alaska coast are the only bits of the offshore U.S. Arctic that have been open at all for drilling.) That has energized Alaska lawmakers, whose state draws much of its revenue from drilling and land leases for oil exploration.

Lots of political problems

Mathiesen 15 Karl Mathiesen, 8-1-2015, "Can Shell afford Arctic oil?," Guardian,

https://www.theguardian.com/environment/2015/aug/12/can-shell-afford-to-drill-for-oil-in-the-arctic//DF

But for Shell, as long as they avoid a catastrophic spill, its a no-lose situation. If they find nothing, a loss of \$7bn could be absorbed just fine by the \$195.4bn corporation. It's the cost of doing business in the ever-tightening race for oil reserves. But in the end, <u>the decision may be out of Shell's hands</u>. Politics could prove decisive. <u>World leaders' response to climate change will influence the value of oil and hence the viability of Shell's Arctic expansion</u>. It could also have a more direct impact. Democratic front-runner <u>Hilary Clinton hinted</u> last month, that <u>she might reverse the Obama administration's decision to allow drilling to go ahead if she were elected president</u>. "I have doubts about whether we should continue drilling in the Arctic. And I don't think it is a necessary part of our overall clean energy climate change agenda," she said. <u>That could put an end to Shell's Arctic bet altogether.</u>

Have to believe that oil's not going to run out

Mathiesen 15 Karl Mathiesen, 8-1-2015, "Can Shell afford Arctic oil?," Guardian,

https://www.theguardian.com/environment/2015/aug/12/can-shell-afford-to-drill-for-oil-in-the-arctic//DF

Either way, any of those prices currently look out of reach with global market oil prices currently hovering around \$50 per barrel and potentially set to go lower. On Wednesday, the International Energy Agency reported a "glut" in oil supply that will continue to pile up in the years to come – despite increasing demand. The Organisation of the Petroleum Exporting Countries (Opec) does not predict the price to rebound any time in the next decade. But the current oil price is irrelevant, <u>a COMpany Spokesman told the Guardian: "If we do find a commercial discovery in Alaska, it will take 10 years or longer before first oil could be produced</u>." Predicting the price of oil at that range is "crystal ball stuff", said Henderson. But the factors that will affect it are becoming more democratic than ever before. The competitiveness of resources in Iran, Iraq and from US shale oil will continue to raise or lower the price of oil. But <u>adaptations to climate change</u>, such as electric vehicles and carbon pricing, will become increasingly important. "It's not just a supply-side risk anymore. <u>It's possibly a demand-side risk as we go into a more renewable and environmentally and hydrocarbon-unfriendly world</u>," he said. "Although in 10 years time oil is still likely to be the dominant fuel in transport. <u>For an Arctic project to work, you've got to believe that oil is going to be the dominant fuel for many decades beyond that." Perhaps as long into the future as 2050.</u>

A. Not until fracking runs out

Gardner 15 Timothy Gardner, 5-12-2015, "Here's Why Obama Is Approving Arctic Drilling Again," Scientific American

https://www.scientificamerican.com/article/here-s-why-obama-is-approving-arctic-drilling-again///DF While oil prices have fallen by more than half since last summer, <u>offshore Arctic drilling may not produce substantial new</u> <u>reserves for decades - when onshore shale deposits may start to wane</u>. The fracking revolution in North Dakota and Texas has led to the highest U.S. oil output since the early 1970s, but nobody knows how long shale will continue to produce at high rates. "<u>The trick of Arctic energy development is that the time horizons are extraordinary long, some 10 to</u>

30 years from when companies start these complex deals to even seeing when those resources would

get to market," said Heather Conley, an analyst at the Center for Strategic and International Studies. Shell will conduct tests to see how much oil and gas are in the Chukchi and Beaufort Seas. The Arctic is estimated to contain about 20 percent of the world's undiscovered oil and gas, 34 million barrels of oil in U.S. waters alone. Only Russia has bigger deposits. The National Petroleum Council, a group led by oil companies that advises the Energy Department, said in an assessment of Arctic potential last week that the region will boost U.S. energy security.

B. Infrastructure.

Varinsky 16 Dana Varinsky, 12-22-2016, "Here's what Obama's ban on arctic oil drilling actually means," Business Insider, <u>https://www.businessinsider.com/what-obamas-arctic-drilling-ban-means-2016-12</u> //DF

Mirman suggests that Obama's ban is largely symbolic, since Arctic exploration is such a risky, costly endeavor, and US shale now offers companies cheaper extraction options. (Plus, oil production in the Arctic makes up just 0.1% of the country's oil production, according to the Washington Post.) Oil giant Shell illustrated Mirman's point in 2015, when it abandoned its drilling operations after spending over \$7 billion hunting for oil in the Alaskan Arctic. "Also, <u>the infrastructure needed for such project is extremely expensive and</u> will take many years to build given the climate and available times to work in those areas," Mirman explains, suggesting that <u>exploration and production companies like his will focus instead on more cost-efficient</u> projects. Companies who still wish to pursue Arctic drilling, however, could do so in Alaska's state waters — the same 1953 law gives states control over the underwater area 3 miles offshore of their coastlines. After that, it's federal territory.

C. Arctic Council submissions.

Houck 13 James W. Houck, 2013, "The Opportunity Costs of Ignoring the Law of Sea Convention in the Arctic," Hoover Institution: Arctic Security Initiative,

https://elibrary.law.psu.edu/cgi/viewcontent.cgi?article=1240&context=fac works //DF UNCLOS also provides a process through which coastal states can reduce the potential for dispute and uncertainty over their continental margins' limits. This is particularly important in the Arctic where the U.S. extended continental shelf likely overlaps with that of both the Russian Federation and Canada. Under UNCLOS Article 76, a coastal state may obtain international recognition for the outer limits of its claim to an extended continental shelf by submitting a claim to the Commission on the Limits of the Continental Shelf (CLCS).77 The CLCS consists of twenty-one elected experts in geology, geophysics, or hydrography, and may only be nationals of UNCLOS State parties.78 A coastal state must gather scientific and technical data that describes the characteristics of the seabed and subsoil and submit its claim to the CLCS within ten years of becoming a party to UNCLOS.79 A seven-member CLCS subcommittee then analyzes the data and prepares "recommendations" regarding the outer limits of the continental shelf.80 The recommendations must be approved by a two-thirds majority of CLCS members.81 If the coastal state agrees to the approved recommendations, the limits are "final and binding" on the international community.82 There have been sixty-six extended continental shelf submissions to the CLCS made by fifty-four member states to date.83 This process takes several years to complete and it is anticipated that the CLCS will not render decisions on some submissions (for example, those submitted in 2010 or later) until as late as 2030.84 Pursuant to Article 77.3, the coastal state is entitled to explore and develop the resources of its extended continental shelf, subject to the royalty provisions set forth in Article 82.1 mandates that a state make annual payments with respect to its exploitation of non-living resources on its extended continental shelf. Beginning in the sixth year of production, payments are made starting at the rate of 1 percent of the total value of production at each site, increasing by 1 percent each year until the twelfth year when the payment plateaus at 7 percent of production value for every year thereafter.85

Not needed

Wanucha 14 Genevieve Wanucha [Oceans at MIT], 6-18-2014, "The cold, hard truth about Arctic policy," MIT http://news.mit.edu/2014/cold-hard-truth-about-arctic-policy //DF

There's an ongoing disagreement among the eight countries over who occupies what boundaries beyond their exclusive economic zones, all the way to the North Pole. Some mechanism will have to be found to sort out the competing claims. Moreover, there are other non-Arctic nations, along with nongovernmental actors, who see themselves as stakeholders as well. There's no treaty for the Arctic like there is for the Antarctic — although the Antarctic treaty isn't a good model for the Arctic, because it basically restricts almost all development. There are other international agreements that affect the ocean and the use and protection of ocean resources. The World Trade Organization has agreements, for example, that affect the trade of products from the ocean. So it not necessary that the UNCLOS be formally ratified by the United States for there to be

<u>clear norms</u> with regard to the use of coastal resources, fisheries, navigation, and a variety of other features of the Arctic. The United States is part of the Arctic Council, an intergovernmental forum that promotes cooperation among the Arctic nations. In fact, the United States is set to take over the chairmanship of the Arctic Council in 2015. There is some talk that Secretary [of State John Kerry] is going to appoint an Arctic ambassador shortly. The Arctic Council is not an entirely adequate mechanism for coping with the changes in the Arctic. For example, it offers no way to resolve disagreements among claimants, as there is in the Antarctic. And indigenous peoples feel that they should have more of a formal role in the Arctic Council.

Guardian 18 5-20-2018, "Oil price keeps rising – will it come back to earth with a bump?," Guardian, <u>https://www.theguardian.com/business/2018/may/20/oil-prices-rising-but-set-to-fall-in-2019</u> //DF To be sure, there are reasons to think oil prices may hit \$100 a barrel and carry on rising. With Trump in the White House, anything could happen. The Middle East could erupt into a full-scale conflict between Iran and Israel. The brittle detente between North Korea and the US could break down. In those circumstances, the cost of crude would stay higher for longer. But in the absence of a new geopolitical shock, <u>Oil</u> <u>prices will eventually start falling</u>. In oil-importing countries, more expensive crude will eat into the <u>discretionary spending power of consumers, leading to weaker demand in 2019</u>. This will happen just as the US public is starting to feel the impact of higher interest rates, and as the effects of the tax cuts are wearing off. <u>On the supply side</u>, two things will happen. <u>First, US shale production –</u> which is highly profitable with oil at \$80 a barrel – <u>will expand</u>. <u>Second</u>, <u>Opec producers will</u> – whatever they say in public – <u>quietly start to exceed their quotas in order to make up for</u> <u>the shortfall caused by sanctions on Iran</u>. <u>Demand for oil is going to fall while supply is going to rise</u>. Markets do not always behave in the way the economics textbooks predict, but this time, they will. MPs were right to give Carillion chiefs a markets do not always behave in the way the economics textbooks predict, but this time, they will. MPs were right to give Carillion chiefs a

roasting The language of the joint select committee report into the collapse of Carillion was punchy, even bombastic. It told of "recklessness, hubris and greed" at the failed outsourcing firm, lamented a "rotten corporate culture" and named and shamed three directors.

1. Non Unique. Russia will in the Arctic anyway, meaning our opponents impact of melting will happen no matter what. Gurzut of Politico writes in 2016: Under pressure from its troubled fossil fuel-driven economy, Russia is moving ahead with risky projects to drill for oil and gas in the ice-clogged Arctic Ocean. [this is because] Russia's onshore oil and gas fields "are depleting and are depleting fast. This is further explained by Pereskova of Oil Prices in October, who writes: Neither sanctions nor persistently low oil prices are hindering Russia's ambitions or plans to develop oil resources in its sections of the Arctic. In April, state-controlled oil giant Rosneft started drilling the northernmost well on the Russian Arctic shelf. Anca Gurzut, 9-7-2016, "Economic pain pushes Russia to drill in high Arctic," POLITICO, https://www.politico.eu/article/economic-pain-pushes-russia-to-drill-in-high-arctic-oil-energy-natural-gas/ (NK) HELSINKI — Under pressure from its troubled fossil fuel-driven economy, Russia is moving ahead with risky projects to drill for oil and gas in the ice-clogged Arctic Ocean. Russia's onshore oil and gas fields "are depleting

and are depleting fast," said Mikå Mered, managing partner at Polarisk, a consultancy specializing in polar issues. "If you are the Russian government today and if you want to keep having your oil and gas, you need to start developing offshore Arctic oil and gas fast." Moscow's plans are poles apart from those of the U.S. and Canada, which have for now dropped offshore development projects on financial and environmental grounds. U.S. prospects for offshore Arctic drilling fell even further last week, with new and expensive safety procedures being mooted by the White House. Those concerns matter less in Russia, which saw its GDP shrink 3.7 percent in 2015 with another 0.7 percent contraction expected this year. Tsvetana Paraskova, October 2017, "Russia Goes All In On Arctic Oil Development," OilPrice, https://oilprice.com/Energy/Crude-Oil/Russia-Goes-All-In-On-Arctic-Oil-Development.html (NK) Neither sanctions nor persistently low oil prices are hindering Russia's ambitions or plans to develop oil resources in its sections of the Arctic shelf in the Khatangsky license area in the Laptev Sea.</u> In June, Rosneft struck first oil in the Eastern Arctic in this license. Earlier this month, the oil firm said that recoverable reserves at the field exceed 80 million tons of oil, which is equal to around 586.4 million barrels. Geological data point to reserves at the field at 298 million tons of oil, or some 2.184 billion barrels, and the oil is high quality—light and low-sulfur, according to Rosneft.

2. No link: companies are not barred from oil drilling offshore just because the U.S. hasn't ratified the law of the sea because the U.S. still has the right to declare ocean territory it controls. Steven Groves writes in 2014: through bilateral treaties with the Cook Islands, Cuba, Mexico, Russia, the UK, and Venezuela, the US has successfully established its various maritime boundaries and limits of its continental shelf. Foreign nations recognize and respect U.S. maritime claims and boundaries, and vice versa, as long as those claims and boundaries conform to widely accepted international law. Groves 14 Steven Groves, 6-26-2014, "Accession to Convention on the Law of the Sea Unnecessary to Advance Arctic Interests," Heritage Foundation,

https://www.heritage.org/global-politics/report/accession-convention-the-law-the-sea-unnecessary-adv ance-arctic-interests //DF

Securing Arctic Hydrocarbon Resources. The notion that there is a "race" to exploit Arctic resources that will inevitably lead to conflict is farfetched. While many nations are interested in developing Arctic hydrocarbons, there is no indication that Russia, Canada, or any other nation—Arctic or non-Arctic—will infringe in any way on U.S. jurisdiction and control over its resources on the U.S. continental shelf, including its extended continental shelf (ECS) that extends north of the 200 nm EEZ. Proponents of U.S. accession to UNCLOS claim that the United States cannot fully exploit hydrocarbon resources on its ECS unless it joins the convention. For example, former Senator Richard Lugar (R–IN), a longtime supporter of U.S. membership in the convention, maintained that accession is essential to establishing a valid claim to the ECS in the Arctic: "If the United States does not ratify this treaty, our ability to claim the vast extended Continental Shelf off Alaska will be seriously impeded." [26] To treaty supporters, the right to claim resources on the U.S. ECS hinges on the approval of the Commission on the Limits of the Continental Shelf (CLCS), a special committee established by UNCLOS to review the claims made by nations to areas of ECS. Yet history has repeatedly and definitively debunked the notion that recognition of U.S. ECS claims is contingent on U.S. membership in UNCLOS or on the approval of an international commission. To the contrary, through bilateral treaties with the Cook Islands, Cuba, Mexico, Russia, the United Kingdom, and Venezuela, the United States has successfully established its various maritime boundaries and the limits of its continental shelf and ECS. The United States has also acted unilaterally through presidential proclamations and acts of Congress to set its maritime boundaries and lay claim to the natural resources within its maritime zones and continental

shelf: In 1945, President Harry Truman issued two proclamations. The first, the Policy of the United States with Respect to the Natural Resources of the Subsoil and Sea Bed of the Continental Shelf, claimed jurisdiction and control over the natural resources of the U.S. continental shelf.[27] Truman's second proclamation established a conservation zone for U.S. fishery resources contiguous to the U.S. coast.[28] In 1953, Congress codified Truman's continental shelf proclamation by enacting the Outer Continental Shelf Lands Act, which declared that "the subsoil and seabed of the outer Continental Shelf appertain to the United States and are subject to its jurisdiction, control, and power of disposition."[29] In 1983, in the wake of his decision not to sign UNCLOS, President Reagan proclaimed the existence of "an

Exclusive Economic Zone in which the United States will exercise sovereign rights in living and nonliving resources within 200 nautical miles of its coast." [30] In 1988, Reagan followed up his EEZ proclamation by extending the breadth of the U.S. territorial sea from 3 nm to 12 nm. [31] In 1999, building on Reagan's maritime proclamations, President Bill Clinton extended the U.S. contiguous zone from 9 nm to 24 nm. [32] <u>No</u> nation or group of nations, much less the "international community" as a whole, has objected to or otherwise challenged the unilateral proclamations by Presidents Truman, Reagan, and Clinton. No nation disputes that the United States has a 12 nm territorial sea, a 24 nm contiguous zone, a 200 nm EEZ, or jurisdiction and control over the natural resources of its continental shelf and ECS. In fact, foreign nations recognize and respect U.S. maritime claims and boundaries, and vice versa, as long as those claims and boundaries conform to widely accepted international law, including provisions of customary international law reflected in UNCLOS.

Oil companies just don't wanna drill; it's too expensive and shale looks better

Gramer 17 Robbie Gramer, 3-24-2017, "Oil Companies Cool on Arctic Drilling. Trump Wants It Anyway.," Foreign Policy,

https://foreignpolicy.com/2017/03/24/oil-companies-cool-on-arctic-drilling-trump-wants-it-anyway-ene rgy-alaska-environment///DF

But in the Arctic, energy experts are throwing freakishly-warm-but-still-cold water on those plans. And it's not regulations that are making Arctic drilling unappealing: It's market forces themselves, especially crude oil prices that have spent the last two years in the doldrums. "<u>We</u> think there is almost no rationale for Arctic exploration," Goldman Sachs commodity expert Michele Della Vigna said on CNBC's Squawk Box Thursday. "<u>Immensely complex, expensive projects like the Arctic we think</u> can move too high on the cost curve to be economically doable," he said. Part of the reason is the shale revolution in the United States, which undercut frontier projects like deepwater or the Arctic. "<u>Shale is more accessible and is going to</u> come ahead of the Arctic," said Bud Coote of the Atlantic Council, formerly a CIA energy analyst. When oil companies like Shell did venture to the waters off Alaska several years ago, oil went for more than \$100 a barrel. That made all the extra costs involved in drilling at the edge of the earth a bit more bearable. "I think it has to be back up in that range" for companies to head north again, he told Foreign Policy. Yet crude has hovered around \$50 a barrel since late 2014. Big oil gave up on some \$2.5 billion in drilling rights in the U.S. Arctic in 2016; expensive plays as oil prices dropped just weren't worth the cost anymore. "High-cost frontiers," like the Arctic "will be shunned," energy intelligence firm Wood Mackenzie said in December last year. Former President Barack Obama didn't help. He threw a wrench into Trump's energy plans when he signed a series of midnight regulations on his way out the door designed to lock up the Arctic from drilling, with little consultation from Alaskan lawmakers.

2. Non-unique: Companies don't want to drill in the Arctic, not because we haven't signed the treaty, but because it's not profitable. Mark Rosen writes in 2017: Profitable extraction will require technological development, such as new drilling technologies and systems that can withstand strong Arctic storms and infrastructure that remains stable as melting permafrost shifts below it. Companies will need to develop or adopt adequate (and expensive) technology or face steep consequences. Rosen 17 Mark E. Rosen [Senior Vice President General Counsel], 11-2017, "Unconstrained Foreign Direct Investment: An Emerging Challenge to Arctic Security," CNA Corporation, https://www.cna.org/cna_files/pdf/COP-2017-U-015944-1Rev.pdf //DF Despite the vast quantity and value of resources in the Arctic, this analysis does not predict that a resource "rush" will occur in the next few years. There are several reasons for this. First, while Arctic resources

are becoming more accessible due to technological advancements and climate change, that doesn't

mean they are as profitable as resources elsewhere. At present and for much of the foreseeable future, the impact of climate change will make some resources (such as off shore hydrocarbons) more accessible due to retreating glaciers and less sea ice, but it will not make them completely accessible. Profitable extraction of certain resources will require technological development, such as new drilling technologies and systems that can withstand strong Arctic storms and infrastructure that remains stable as melting permafrost shifts below it. Wherever regulations require that resources must be extracted and transported in an environmentally responsible manner, <u>companies will need to develop or adopt</u> adequate (and expensive) technology or face steep consequences. Such regulations apply in the United States, Canada and Norway but less so in Russia and, perhaps, Greenland, which have lower standards and less monitoring. <u>Second, the emerging</u> freeze-thaw cycles of the Arctic permafrost pose serious challenges to development in the Arctic. As the permafrost melts and refreezes, infrastructure dilapidates at a much faster rate than in lower latitudes. Climate change is making the problem worse by increasing the depth of soil thawing and by

melting ice roads. In 2007, the University of Alaska estimated that melting permafrost from climate change would add \$5.6–7.6 billion dollars to the anticipated costs of replacing worn out infrastructure in the state, representing a 10-12 percent increase [64]. Water and sewer systems are expected to account for the largest share of extra costs, with roads and airport runways following close behind. This trend is also observed elsewhere in the Arctic. Russia is acutely vulnerable to warming permafrost due to the urban design of Russian Arctic cities. Most urban infrastructure consists of standard design — five-tonine-story buildings with concrete pile foundations. Recent analysis of the impacts of warming permafrost projections conservatively anticipate that by 2040, the Russian cities of Salekhard, Norilsk, Yakutsk, and Anadyr will experience critical (<55 percent) reductions in the load bearing capacity of the standard pile foundations that underlie the majority of built infrastructure [65]. If the rates of warming due to climate change are more rapid, this deterioration can be expected to occur sooner, perhaps as early as the mid-2020s. Such significant reductions in load bearing capacity would exceed the safety factors incorporated into the building designs by Soviet engineers, leading to potentially catastrophic building failure and collapse. In addition to building new infrastructure to support development, the current structures in the Russian Arctic will need to be evaluated and either retrofitted or rebuilt to sustain the impacts of melting permafrost, requiring even greater investment. Melting permafrost will complicate development of natural resources at every step of the process. In the extraction phase, seasonable variability in the stability of the permafrost will cause extraction equipment to shift, sometimes unexpectedly. Buildings such as offices, housing, and community infrastructure will also face challenges due to instability in the permafrost. Transporting extracted resources, whether through the sparse pipeline, road, or rail systems, will also be more difficult and dangerous with melting permafrost. Foundations of pipelines could shift, causing leaks that damage the Arctic environment. Road and rail infrastructure can rapidly deteriorate from season to season, increasing the risk of accidents. Third, the Arctic lacks infrastructure (see figure 12). Before the vast mineral, fossil, and food resources can be exploited, developers will need to construct the infrastructure that will facilitate extraction, processing, transport, export, and housing for operators and their families. Inconveniently, the melting of the permafrost on land, high rates of erosion, and severe weather pose severe and costly challenges to the larger engineering projects that would be needed to support resource extraction. On the U.S. side of the Arctic, there is very little infrastructure north of the Bering Strait.19 Shortly after Shell pulled out of its exploratory oil and gas project in the Chukchi Sea, the U.S. Army Corps of Engineers postponed efforts to study the creation of U.S. Arctic deepwater port. This means that any ores that are mined would have to transit out of the U.S. Arctic before they could be offloaded for processing. Norway's Tschudi Shipping, by contrast, is building a major bulk commodity handling port in the vicinity of Kirkenes to service a nearby iron ore mine as well as to serve as a receiving and transshipment port for other minerals. The nearby Russian Port of Murmansk also has significant bulk cargo handling capabilities[66]. Fourth, commodity prices do not currently encourage the development of some mineral resources, especially oil and gas. The low market price of hydrocarbons does not encourage a high-risk, infrastructure intensive resource exploration in a climatically turbulent and distant part of the world. For these resources to be appealing to large, well-established, and well-capitalized oil operators, the global market price of oil will need to rise.

But no company is spending significant money in investment because they're making a lot more money extracting cheap natural gas. Timothy Puko explains in 2018: The

industry is still recovering from a world-wide glut that has slashed prices since 2014 as scientific advances caused U.S. output to skyrocket. With so much oil available, companies cut their Arctic exploration budgets by more than half in the years since. This strategy will work for many years as well, as Tabuchi of the New York Times Reports in 2018 that two-thirds of the nation's oil reserves that companies can hope to drill for lie in seas already open to drilling, such as the Gulf of Mexico. This means there is no need for the Arctic's extra reserves.

Puko 17 Timothy Puko, 12-2-2017, "For Oil Drillers, Glut Damps the Excitement as Arctic Opens Up," WSJ,

https://www.wsj.com/articles/oil-glut-makes-alaska-reserves-less-attractive-to-drillers-1513765801 //DF

Yet many investors and analysts expect only tepid interest if Congress and the Trump administration follow through on plans to lease out what some think are the biggest untapped oil fields left in the U.S. Though promising, the lands up for consideration in offshore ocean waters and the Alaskan Arctic haven't been the sort to attract companies in recent years. "We have long supported access. I can't guarantee any companies will show up," said Kara Moriarty, leader of the Alaska Oil and Gas Association, one of a number of advocacy groups and oil companies that have pushed for the changes. "It is the government's responsibility to offer the lease sale and let the market decide if there is interest." The industry is still recovering from a world-wide glut that has slashed prices since 2014 as scientific advances caused U.S. output to skyrocket. With so much oil available, companies cut their [Arctic] exploration budgets by more than half in the years since, to \$40 billion from a 2014 peak of \$95 billion, according to the energy consultancy Wood Mackenzie. It is at a <u>record low share of their investment budgets, just 8%</u>. That trend is likely to undermine any lease sale the government holds, especially for more remote or environmentally-sensitive areas like Alaska and offshore fields. The costs and risks there are high, so oil companies are drilling more in Texas and other parts of the contiguous U.S. even as they keep pulling rigs from Alaska and offshore sites.

3. Non-unique: companies won't drill because by the time it would become more profitable than fracking, it will be less profitable than renewable energy. Timothy Gardner wirtes 2015: offshore Arctic drilling may not produce substantial new reserves for decades - when onshore shale deposits may start to wane. Time horizons are extraordinary long, some 10 to 30 years from when companies start deals to even seeing resources get to market.

Gardner 15 Timothy Gardner, 5-12-2015, "Here's Why Obama Is Approving Arctic Drilling Again," Scientific American

https://www.scientificamerican.com/article/here-s-why-obama-is-approving-arctic-drilling-again/ //DF While oil prices have fallen by more than half since last summer, <u>offshore Arctic drilling may not produce substantial new</u> <u>reserves for decades - when onshore shale deposits may start to wane</u>. The fracking revolution in North Dakota and Texas has led to the highest U.S. oil output since the early 1970s, but nobody knows how long shale will continue to produce at high rates. "<u>The trick of Arctic energy development is that the time horizons are extraordinary long, some 10 to</u> <u>30 years from when companies start these complex deals to even seeing when those resources would</u>

get to market," said Heather Conley, an analyst at the Center for Strategic and International Studies. Shell will conduct tests to see how much oil and gas are in the Chukchi and Beaufort Seas. The Arctic is estimated to contain about 20 percent of the world's undiscovered oil and
gas, 34 million barrels of oil in U.S. waters alone. Only Russia has bigger deposits. The National Petroleum Council, a group led by oil companies that advises the Energy Department, said in an assessment of Arctic potential last week that the region will boost U.S. energy security.

But the future is headed towards renewables, not fossil fuels. Travis Hoium writes in 2017: Over the past decade, energy from wind and solar has become so cheap that it's making new fossil fuel plants nearly obsolete. The conditions for the demise of fossil fuels are already in place and a massive disruption of the fossil fuel industry is on the horizon.

Hoium 17 Travis Hoium, 11-24-2017, "How Renewable Energy Will Destroy Fossil Fuels," Motley Fool, https://www.fool.com/investing/2017/11/24/how-renewable-energy-will-destroy-fossil-fuels.aspx //DF There's an energy revolution taking place before our eyes, but it doesn't seem to be getting a lot of attention from the media or investors. Over the past decade, energy from wind and solar has become so cheap that it's making new fossil fuel plants nearly obsolete. This isn't just happening in the U.S. but in China and India as well, where <u>Coal plants are being</u> shut down in favor of wind and solar energy. Close behind renewable energy is improving battery technology that's making electric vehicles and energy storage viable options for consumers and businesses. As this combination of technologies improves and grows, it will slowly but surely replace fossil fuel use as we know it today. Let me be clear about what I'm saying: <u>The Conditions for the</u> demise of fossil fuels are already in place and a massive disruption of the fossil fuel industry is on the

horizon. Electric grid disruption has already begun Renewable energy changes the energy paradigm for the electric grid, and there will be a lot of casualties in the old world of energy. For example, ever since Thomas Edison invented the light bulb, people have relied on electricity from their electric grid to power their homes and any electric devices they own. For the first time ever, over a million homes are now their own mini-power plants with solar panels on their roofs. Given another year or two, energy storage will begin to be commonplace and removing yourself from the grid altogether will be a viable option for consumers. Utilities, power generators, and companies supplying fuel will all be disrupted in the process. Gasoline will go the way of the horse and buggy Rapid advances in battery technology are likely to make gasoline vehicles all but obsolete in a decade or two. Electric vehicles are already cheaper to fuel and maintain than traditional vehicles. The obstacle to a complete takeover of the auto market is the vehicle's range and the lifecycle of batteries. Tesla (NASDAQ:TSLA) has made the biggest strides in range and lifecycle, offering a 337-mile range for the 100D model. Its warranty also runs for eight years and unlimited miles for new vehicles.

Kyree Leary furthers in 2018: In the United States, solar and wind power accounted for nearly 95 percent of all new electricity capacity added last year. The cost of renewable energy will experience a noticeable drop by 2020, putting it on par with, or cheaper than, fossil fuels.

Leary 18 Kyree Leary, 2, 1-17-2018, "Renewable energy will be cheaper than fossil fuels by 2020, according to a new report," Business Insider,

https://www.businessinsider.com/renewable-energy-will-be-cheaper-than-fossil-fuels-by-2020-2018-1 //DF

Renewable energy may not be completely replacing fossil fuels just yet, but it's undeniable that society is warming to the idea of using solar and wind power in place of coal. In some parts of the world we're already beginning to see the effects of such a paradigm shift: Last year, Britain began generating twice as much electricity from wind than coal, which contributed to 2017 being the greenest year ever for the United Kingdom. In the United States, solar and wind power accounted for nearly 95 percent of all new electricity capacity added last year, according to Engadget. That success can also be partially attributed to the closures of fossil fuel plants. In the coming years, we're sure to see renewable energy become a real competitor in the fossil fuel industry. A new report recently published by the International Renewable Energy Agency (IRENA), predicts the cost of renewable energy will experience a noticeable drop by 2020, putting it on par with, or cheaper than, fossil fuels. The report, titled "Renewable Power Generation Costs in 2017," read: "[By 2020,] all the renewable power generation technologies that are now in commercial use are expected to fall within the fossil fuel-fired cost range, with most at the lower end or undercutting fossil

<u>fuel</u>."Fossil fuel generation today costs between \$0.05 - \$0.17 per kilowatt hour in G20 countries, including the U.S., the U.K., Russia, Japan, India, and Germany. By 2020, however, renewables are expected to cost \$0.03 - \$0.10 per kilowatt hour, with the price of onshore wind power and solar photovoltaic (PV) projects expected to be as low as \$0.03 per kilowatt hour by 2019. Presently, offshore wind projects and solar thermal energy can still be quite costly, but they too are expected to drop in price between 2020 and 2022 — to \$0.06 - \$0.10 per kilowatt hour. "This new dynamic signals a significant shift in the energy paradigm," said Adnan Z. Amin, IRENA Director-General, in a statement. "<u>These cost declines across technologies are unprecedented and representative of the degree to which</u> renewable energy is disrupting the global energy system."

Tabuchi 18 Hiroko Tabuchi, 1-23-2018, "Trump Would Open Nearly All U.S. Waters to Drilling. But Will They Drill?," NYT, https://www.nytimes.com/interactive/2018/01/23/climate/trump-offshore-oil-drilling.html //DF

The Bureau of Ocean Energy Management, which manages offshore leasing, estimates that the areas opened up to drilling under Mr. Trump's plan hold nearly 45 billion barrels of oil, of which 21 billion barrels would be economically recoverable assuming oil prices remain around \$60 a barrel. (To put that in perspective, since 1970, the western and central zones of the Gulf have yielded about 14.5 billion barrels of oil.) While those are large amounts, <u>there are significant oil reserves still to be found in the western and central Gulf,</u> which are already open to drilling. There, some 45 billion barrels of oil reserves are up for grabs, of which 37 billion barrels could be produced economically at current oil prices. Stated another way: Almost <u>two-thirds of the nation's oil reserves that</u> companies can hope to drill for while still turning a profit lie in seas already open to drilling. Meanwhile, there's little recoverable oil and gas in the South Atlantic or the Straits of Florida, or off the Washington and Oregon coast, or off Alaska outside the north shore. The abundance of cheap oil and gas from onshore fracking in the United States has already diminished the incentive for companies to go drill in new offshore zones. Given the risks and costs of building wells in seas that have seen little development to date, not to mention the possibility that <u>a new administration could</u> again change offshore policy down the road, analysts don't expect a rush into newly opened waters soon.

Green tech is a highly supported industry that will take over as the main way to get energy in the future.

Steven Cohen, 7-17-2017, "Why Renewable Energy Will Replace Fossil Fuels," HuffPost, https://www.huffingtonpost.com/entry/why-renewable-energy-will-replace-fossil-fuels_us_596cad4de4 b022bb9372b313

Gallup's view that good economic news leads to greater support for environmental protection must be viewed in light of Pew's age cohort analysis. Young people tend to have the fewest economic resources so economic plenty does not explain their view. Moreover, if the young maintain these views as they age, the views of older, more fossil fuel oriented people will be replaced by the views held by today's millennials. Our economy is built on energy, and assumes energy will be reliable accessible and relatively inexpensive. Transitioning away from fossil fuels will be a long process. But it **(green tech) is a transition that young Americans strongly support.** People raised in a world of constant technological change have a different attitude toward technology than those raised in an era of gradual technological change. Young people are constantly learning how to use new software programs and how to make the technologies they use function correctly. People my age frequently rely on younger people to explain how to set up and fix those programs and technologies. New applications arrive, new forms of social media fall in and out of style, and these remarkable changes are considered quite ordinary by millennials who have grown up with constant change. While people would like to see an alternative to fossil fuels, that does not mean they will use them if they become available. The alternatives must be convenient, reliable, and relatively inexpensive. We all have sunk costs in current energy investments: our car, our water heater, and the rest of the appliances in our homes, these are barriers that will slow the transition to a new energy system. The electric car will need to be better and cheaper than the internal combustion car if it is to take over the market. That is true for renewable energy at home. But these **technologies are improving on a daily basis.** The electric version of the Model T is coming and it will transform personal transportation. Home battery storage is improving its reliability and coming down i

these technologies improve, they will drive fossil fuels from the marketplace. Har convinced that this

transition is coming but know it would be a whole lot faster if we didn't have a president who equated fossil fuels with wealth and national might. The effort to revive the fossil fuel industry in the United States is not helpful and we may lose our technological advantage in the renewable energy innovation race. But China, Japan, India and Europe are more than ready to fill in for us if we falter. Japan has no fossil fuels and is desperate to wean itself from nuclear in an energy

Renewable energy will replace fossil fuels because they will be less expensive, as reliable, and as

convenient as fossil fuels. The polls indicate that the latent market for renewables in already in place. The issue is not if, but when. The health of our planet requires that this transition take place as soon as possible. Government incentives could and should be used to accelerate this process. In the United States, these incentives will need to come from states and cities since it is clear our dysfunctional federal government will do little or nothing to help.

US lacks needed infrastructure, and would take a long time to develop

Ford 18 Peter Ford, 5-18-2018, "Polar power play: Who will prevail at the rooftop of the world?," Christian Science Monitor,

https://www.csmonitor.com/World/2018/0518/Polar-power-play-Who-will-prevail-at-the-rooftop-of-th e-world //DF

No such grand infrastructure projects are under way in the US Arctic. None, in fact, have been built since the trans-Alaska oil pipeline was commissioned <u>40 years ago</u>. "We are an Arctic nation," says Dr. Brigham, "but we lack infrastructure." <u>All</u> <u>the practical stuff, such as docks, ship repair facilities, and salvage operations, "is missing,"</u> he adds. The US certainly has plenty of military assets in the Arctic, with airbases, ballistic defense installations, and nuclear missiles at Thule in Greenland and Fort Greely in Alaska. Its nuclear submarines prowl beneath the Arctic ice. In March, US forces staged exercises testing new under-ice weapons systems. But since the cold war ended, the US Navy has focused more on the Pacific than the Arctic, even though the region "is vitally important to our interest" for economic and national security reasons, former Secretary of State Rex Tillerson told researchers at the Wilson Center, a think tank in Washington, last November. "We're late to the game." Mr. Grímsson, the former Icelandic president, jokes that during his years in office, from 1996 to 2016, he visited Alaska more often than any of his US counterparts. <u>The US Coast Guard has only</u> <u>one fully functional icebreaker. For eight months of the year, no US Navy surface vessels can function in</u> <u>Arctic waters</u>. The Russians "have got all their chess pieces on the board right now, and right now we've got a pawn and maybe a rook," Zukunft lamented last year at an event hosted by the CSIS. "If you look at this Arctic game of chess, they've got us at checkmate right at the very

beginning." <u>Congress has now approved the funds to build a new icebreaker, due to launch in 2023, but the</u> <u>problem</u>, says CSIS expert Conley, <u>is that Washington "does not have a long-term strategic view of the Arctic,</u> <u>and a new icebreaker will not solve the policy deficit</u>." Perhaps even more ominous for the US, China and Russia are cooperating closely in the region. The Arctic could become a testing ground for a challenge to Washington and the prospects for a new, more multipolar world order.

R/T Arctic Conflict

<u>Offense</u>

Non-unique: risk of conflict increasing now because climate change is reducing past barriers

Watson 17 Paul Watson, 3-29-2017, "A Melting Arctic Could Spark a New Cold War," Time, http://time.com/4773238/russia-cold-war-united-states-artic-donald-trump-barack-obama-vladimir-put in/

The U.S. military warns that rising seas already threaten coastal bases and "will present serious risks to military readiness, operations and strategy," an expert panel reported last fall. Oil refineries along the Gulf Coast are increasingly vulnerable to storm surges. Around the world, millions of people living near oceans and river deltas may become refugees as homes and farms, factories and offices, end up under water. For centuries, ice barriers have protected the High Arctic from the bloody competition for resources that has scarred other parts of the planet. They are collapsing. This opens new perils for international security. Russia is expanding on its substantial, Soviet-era lead in Arctic military power and civilian infrastructure. The Trump Administration is committed to responding to what it calls Russian aggression. As the Arctic rapidly warms, and the sea ice barrier recedes, cooperation that has been the hallmark of circumpolar politics since the end of the Cold War is fracturing. "The Arctic is key strategic terrain," Secretary of Defense James Mattis told Congress during his confirmation hearings. "Russia is taking aggressive steps to increase its presence there. I will prioritize the development of an integrated strategy for the Arctic." Russian President Vladimir Putin's military buildup has included moving two brigades to the Far North, reopening several airstrips, and starting construction of a new base in the Laptev Sea. Mattis also told Congress "climate change is impacting stability in areas of the world where our troops are operating today" and combat planners need to take a warming planet into account. That's especially true in the Arctic, where Russia has long been the dominant power. Russia has more icebreakers than the rest of the world combined, with plans for at least 11 more, including nuclear-powered vessels strong enough to penetrate ice several yards thick. The U.S. Coast Guard has two seaworthy conventional icebreakers, the medium-class USCGC Healy and the much older USCGC Polar Star, a heavy icebreaker commissioned in 1976. The Coast Guard, which needs a fleet of six icebreakers according to a Department of Homeland Security assessment, has only one in the design stage. If built, it could cost \$1 billion. At a recent conference on the Arctic in Archangelsk, Putin tried to calm security concerns by stressing a desire to "maintain the Arctic as a space of peace, stability and mutual cooperation." But Russia's Arctic neighbors remain suspicious. Sweden brought back the military draft in March and, along with Finland, is debating whether to join NATO, which could spur Russia to further strengthen its Arctic forces.

UNCLOS provides dispute mechanisms that can reduce the risk of conflict

Gray 13 Daniel W. Gray [U. S. Coast Guard], 2-5-2013, "CHANGING ARCTIC: A STRATEGIC ANALYSIS OF UNITED STATES ARCTIC POLICY AND THE UNITED NATIONS CONVENTION ON THE LAW OF THE SEA," NATIONAL DEFENSE UNIVERSITY, JOINT FORCES STAFF COLLEGE,

http://www.dtic.mil/dtic/tr/fulltext/u2/a581139.pdf //DF

The International Tribunal for the Law of the Sea serves as a forum to resolve disputes between states over application or interpretation of UNCLOS articles. This body hears cases dealing with a wide range of issues such as fishing rights, international pollution, and freedom of navigation. Many of these cases involve the alleged violation of resource harvesting within a state's EEZ or territorial seas. The creation of ITLOS is a new phenomenon to the international maritime community. Previous to the creation of ITLOS, states had no other venue to address

grievances except through direct contact with another state. In some cases, this had led to conflict. In 2010, Russia and Norway

were able to resolve a long standing Arctic EEZ dispute using UNCLOS framework. An area in the Barents Sea,

approximately half the size of Germany, has been an area of friction between the two nations since the 1970s. The dispute originally began over fishing rights but became even more contentious when oil was discovered. Both countries agreed to a treaty that

split the area in half. Since the U.S. is not a ratified party to UNCLOS, it does not have the luxury of utilizing three of the four <u>dispute resolution mechanisms laid out in UNCLOS</u> (the U.S. can still use the International Court of Justice because it is a member of the United Nations). <u>The United States will be limited in its ability to conduct dispute</u> <u>resolution with other Arctic states</u> as every other Arctic state (besides the U.S.) is party to UNCLOS. Because of this, the U.S. will have to rely almost solely on bilateral diplomacy in dealing with any future Arctic dispute.

<u>Defense</u>

Less than a decade ago, many geopolitical analysts warned that the Arctic had all of the makings for great-power rivalry reminiscent of the Cold War. However, the movement has gone quite the other way. Despite a few remaining territorial disputes, the overwhelming majority of Arctic resources fall within accepted national boundaries and <u>all Arctic governments have committed to settling disagreements peaceably. Notably, Russia and Norway resolved a decades-old maritime border dispute in 2010, equally dividing</u> some 67,600 square miles of water in the Barents Sea, and partnering in the region on energy development. The historic deal is often cited as a model for future Arctic diplomacy. The Arctic Council, the leading international forum for cooperation in the region, was established by the eight Arctic states in 1996 with participation from indigenous peoples like the Inuit and Saami, and all member states except the United States and Norway have appointed ambassador-level diplomats to represent their interests in the region. With a secretariat in Tromsø, Norway, the council is a forum that sponsors major assessments and studies, and develops policies and guidelines that focus on environmental protection and sustainable development. Chairmanship of the council rotates every two years. But Arctic cooperation takes place in a variety of other forums. Nordic nations—Denmark, Sweden, Norway, Finland, and Iceland—also partner on sustainability and issues related to Arctic indigenous peoples via the Nordic Council. Nineteen countries are party to the International Arctic Science Committee, a nongovernmental organization dedicated to research. The nonprofit Arctic Circle, formed in 2013 by Icelandic president Ólafur Ragnar Grímsson, aims to provide a setting for political and business groups, as well as other organizations from around the world, to discuss Arctic issues.

R/T South China Sea

Appeasement turn (Newsham - National Interest)

Grant Newsham, 9-8-2014, "China, America and the "Appeasement" Question," National Interest,

https://nationalinterest.org/blog/the-buzz/china-america-the-appeasement-question-11226 (NK) Even President Jimmy Carter, once he overcame his "inordinate fear of communism," tried something akin to appeasement as national policy. It was not until the Soviets invaded Afghanistan that Carter learned his lesson. It perhaps will take another case of an authoritarian regime rearranging its neighborhood to understand the cost of modern appeasement. US policy towards China over the last 30 years, and particularly in recent times, seems familiar. The United States does its best to understand the PRC's concerns and its resentments going back to the Opium Wars and the 'century of humiliation', to accommodate these resentments, and to ensure China does not feel threatened. Defense and State Department officials enthusiastically seek greater transparency and openness – especially in the military realm – as such openness is perceived as inherently good. In return, the PRC is expected to change, to show more respect for human rights and international law and to become a "responsible stakeholder" in the international community. We now have several decades of empirical evidence to assess this concessionary approach. It has not resulted in improved, less aggressive PRC behavior in the South China Sea or the East China Sea, or even in outer space. Indeed, it seems to have encouraged Chinese assertiveness as manifest in threatening language and behavior towards its neighbors. Nor has the PRC regime shown more respect for human rights, rule of law, consensual government or freedom of expression for its citizens. Serial intellectual property theft continues unabated, as does support for unsavory dictators. Nonetheless, we invite the

PRC to military exercises and repeat the "engagement" mantra - expecting that one day things will

magically improve. Some argue that letting the PRC see US military power will dissuade it from challenging us. Perhaps, but we are just as likely to be seen as naïve or weak. From the Chinese perspective, there is no reason to change since they have done very well without transforming and the PRC has never been stronger. Indeed, the PRC frequently claims that human rights, democracy, and the like are outmoded Western values having nothing to do with China.

Offense

There is still time to turn things around

Roughneen 18 Simon Roughneen, 6-13-2018, "Shifting US policy leaves Asian allies at sea," Nikkei Asian Review, <u>https://asia.nikkei.com/Spotlight/Cover-Story/Shifting-US-policy-leaves-Asian-allies-at-sea</u> //DF Trump's inconsistency -- alienating and insulting America's closest allies while heaping praise on the increasingly authoritarian Xi -- has intensified doubts about overall U.S. strategy. Trump's offer to suspend U.S. joint military exercises with South Korea following his June 12 meeting with North Korea's Kim Jong Un -- a major concession if it happens -- appeared to unsettle America's regional allies. At the same time, China is using its wealth and industrial might to draw Asian countries into its economic orbit -- including some of the countries with which it has territorial disputes. <u>Asked on June 2 if American protectionism could help China in its one of its alleged</u> "strategic aims" -- namely "to separate the United States from its allies and partners" -- Mattis conceded

that "certainly, we have had some unusual approaches -- I'll be candid with you, some unusual approaches to how we deal with these issues." According to Princeton University's Aaron Friedberg, author of a new report on U.S.-China policy, the U.S. "needs to step up diplomatic and military efforts to maintain a balance of power." Gregory Poling, director of the Asia Maritime Transparency Initiative at the Center for Strategic and International Studies, agreed that the U.S. needs to rethink its South China Sea policies. "The U.S. and the Southeast Asian claimants haven't lost yet, and it's not too late to protect their rights despite Chinese bullying, but the current U.S. policy isn't up to the challenge," he said.

The SCS nations are being coerced into diplomacy

Poling 18 Gregory Poling, 1-25-2018, "Why a South China Sea Diplomatic Breakthrough Is Unlikely," Foreign Affairs,

https://www.foreignaffairs.com/articles/china/2018-01-25/why-south-china-sea-diplomatic-breakthrou gh-unlikely //DF

Since the fall of 2016, Beijing has extended a diplomatic olive branch to many Southeast Asian states and avoided provoking major new standoffs in the South China Sea. In May 2017, China's foreign ministry announced that negotiators had reached agreement on a draft "framework" for a South China Sea COC between China and the members of the Association of Southeast Asian Nations (ASEAN). The foreign ministers of the 11 negotiating countries officially adopted the one-page framework in August 2017 and hope to start negotiations on the COC itself in March 2018. Tensions remain in China's relationships with Indonesia, the Philippines, and, especially, Vietnam, but they have undeniably eased. The question is whether that progress marks a long-term strategic shift by Beijing or merely a tactical adjustment before the next round of escalation. In other words, is China really acting in good faith? A POLICY OF COERCION The debate between China skeptics and those promoting accommodation is not a uniquely Philippine phenomenon. It is happening in all nations that have a major role in the South China Sea disputes, including Indonesia, Singapore, Vietnam, and even the United States. After nearly a decade of steady escalation and no real prospects for resolving the maritime disputes, the allure of a sudden diplomatic breakthrough, however unlikely, and the willingness to bank on Chinese good faith to make it happen are understandable. The alternative would be to prepare for another years-long slog of rising military tensions, sporadic clashes, and diplomatic naming and shaming, with no guarantee of successful resolution. Unfortunately, the facts do not support the hypothesis that China is prepared to forego military coercion and cut a fair deal

with its neighbors. Over the course of 2017, while talking up diplomatic efforts its fellow claimants, China built facilities covering about 72 acres, or 290,000 square meters, of land in the disputed Spratly and Paracel Islands. The largest of its outposts in the Spratlys, on Fiery Cross, Mischief, and Subi Reefs, now sport large underground facilities to store the water, fuel, and ammunition necessary for substantial naval and air bases. Each of the outposts is bristling with new radars, sensors, and other signals intelligence capabilities to ensure that nothing moves in the South China Sea without Beijing's knowledge. Operations by People's Liberation Army Air Force fighter jets and military transport planes in the Paracels in October and November of last year presaged things to come in the Spratlys, where 72 hangars for fighter jets and about a dozen for larger aircraft are awaiting the first deployments. And hardened shelters stand ready to house the mobile missile platforms that will protect these offensive capabilities from retaliation by the United States or regional parties.

China is still being aggressive

Poling 18 Gregory Poling, 1-25-2018, "Why a South China Sea Diplomatic Breakthrough Is Unlikely," Foreign Affairs,

https://www.foreignaffairs.com/articles/china/2018-01-25/why-south-china-sea-diplomatic-breakthrou gh-unlikely //DF

Unfortunately, the facts do not support the hypothesis that China is prepared to forego military coercion and cut a fair deal with its neighbors. Over the course of 2017, while talking up diplomatic efforts with its fellow claimants, China built facilities covering about 72 acres, or 290,000 square meters, of land in the disputed Spratly and Paracel Islands. The largest of its outposts in the Spratlys, on Fiery Cross, Mischief, and Subi Reefs, now sport large underground facilities to store the water, fuel, and ammunition necessary for substantial naval and air bases. Each of the outposts is bristling with new radars, sensors, and other signals intelligence capabilities to ensure that nothing moves in the South China Sea without Beijing's knowledge. Operations by People's Liberation Army Air Force fighter jets and military transport planes in the Paracels in October and November of last year presaged things to come in the Spratlys, where 72 hangars for fighter jets and about a dozen for larger aircraft are awaiting the first deployments. And hardened shelters stand ready to house the mobile missile platforms that will protect these offensive capabilities from retaliation by the United States or regional parties. Nor did China remain entirely placid while improving its military bases in 2017. In August, Beijing deployed a flotilla of military and civilian ships off Philippines-occupied Thitu Island, which houses about 100 civilians, in response to the landing of Filipino fishers on an unoccupied sand cay nearby. Chinese operators had previously warned away a plane carrying Lorenzana on a visit to the island in April, insisting he was flying through Chinese airspace. At the time, the defense secretary responded by brushing off the incident, telling the press that it happens whenever a Philippine plane lands on Thitu. Also in April, personnel aboard a China Coast Guard vessel reportedly shot at Filipino fishers near an unoccupied disputed reef. Throughout the year, China Coast Guard vessels maintained a regular presence at Luconia Shoals off the coast of Malaysia and at Scarborough Shoal, where Filipino fishers were allowed to operate around the reef under the watchful eye (and occasional harassment) of Chinese personnel but not enter the cordoned off lagoon controlled by China. Most worryingly, in July the Chinese government reportedly threatened military force to prevent Vietnam from moving forward with oil and

gas drilling by a Spanish company, Repsol, on Vanguard Bank—a piece of the seabed at the southern edge of China's vague "nine-dash line," which it uses to demarcate its maritime claim. Hanoi was forced to suspend Repsol's contract after it had already spent hundreds of millions of dollars on exploration and drilling.

States like the Philippines want US support

Poling 18 Gregory Poling, 1-25-2018, "Why a South China Sea Diplomatic Breakthrough Is Unlikely," Foreign Affairs,

https://www.foreignaffairs.com/articles/china/2018-01-25/why-south-china-sea-diplomatic-breakthrou

gh-unlikely //DF

Across Asian capitals and in Washington, pragmatists would welcome a sudden diplomatic breakthrough, but it would be a mistake to count on China's good faith amid so many negative signs. The chances of concluding an effective COC in the short term appear dim. Meanwhile, it seems likely that Chinese combat aircraft will soon begin operating regularly from air bases in the Spratly Islands, working in tandem with an ever-growing naval and paramilitary presence to enforce Beijing's claims at the expense of those of its neighbors. Since 2016, China has steadily increased its power projection capabilities throughout the nine-dash line while the relative positions of Southeast Asian claimants and outside parties like the United States have eroded. In Manila, the defense secretary and other cool heads have mitigated the worst impulses of those determined to pursue détente with China at any cost. This has included salvaging the defense relationship with the United States, at least partially in preparation for the day when China's aggressive pursuit of its claims leads to a new round of standoffs and clashes. For its part, the Trump administration's narrow focus on the current crisis in North Korea has left little time or energy for tackling a future crisis in the South China Sea. The State Department has reduced the issue to a secondary concern in diplomatic engagements with regional partners, and the White House has made no effort to formulate a whole-of-government strategy on the disputes. The Department of Defense has regularized freedom of navigation operations, but that has little effect in isolation. The U.S. military is returning to a regular tempo of training and joint exercises with the Armed Forces of the Philippines and continues to provide funds for capacity building. But the Enhanced Defense Cooperation Agreement, which was signed in 2014 to give U.S. forces limited access to Philippine bases, is being only partially implemented and is unlikely to enable a credible U.S. response to Chinese deployments in the Spratlys.

R/T Code of Conduct

Nah this is bad

Poling 18 Gregory Poling, 1-25-2018, "Why a South China Sea Diplomatic Breakthrough Is Unlikely," Foreign Affairs,

https://www.foreignaffairs.com/articles/china/2018-01-25/why-south-china-sea-diplomatic-breakthrou gh-unlikely //DF

Policymakers such as Roque and Philippine Secretary of Foreign Affairs Alan Peter Cayetano have ignored or explained away these instances of coercive behavior and continued militarization because they consider them relatively unimportant when weighed against the prospect of finally negotiating a COC. With a framework agreement in hand and talks expected to begin in March, that sentiment is understandable but premature. The framework agreement amounts to a single page of generalities and ellipses. It does not touch upon any of the most difficult issues that need to be reconciled for a COC to be effective, and China has given no indication that it is prepared to

<u>compromise on any of them</u>. Much debate has surrounded whether Beijing will agree to make the COC legally binding—something which is not discussed in the framework but seems integral to an effective agreement. But that is not necessarily the most difficult issue to resolve, nor the most important. For instance, there is no indication that states are on the same page about where the COC will apply. Will it encompass the Paracels as well as the Spratlys? What about places such as Vanguard Bank that only China sees as disputed? Official discussions have not even begun to touch on details such as fisheries management, joint development of oil and gas, environmental protection, or law enforcement in disputed waters. How will states reconcile China's claim to historic rights with their

own domestic and international laws? And how will disagreements over interpretation of the code be resolved? None of these issues are unsolvable, but even if

all the parties are committed to working them out, reconciling them will likely take years. In the decade and a half since China and the ASEAN states signed the non-binding Declaration on the Conduct of Parties in the South China Sea, in 2002, they have made no appreciable progress on any of these topics. Difficult issues were not even included in the framework negotiations last year because they would have made it impossible to reach the parties' self-imposed midyear deadline. To break this logiam and reach an effective

agreement in a reasonable time frame—for instance in the few years left before a devastating fisheries collapse takes place in the South China Sea—would require a radical shift in positions and a willingness to make broad concessions. This is especially true for China and its far-reaching but ambiguous claim to historic rights. Unfortunately, it is hard to reconcile the idea that such will might exist in Beijing with the continued military buildup and coercive tactics seen throughout 2017. The most optimistic conclusion is that China's government is of two minds on the South China Sea—willing to flirt with diplomatic efforts while simultaneously seeking

dominance over its neighbors through military and paramilitary means. The more cynical view is that the diplomatic outreach of the last year

and a half has been primarily a delaying tactic meant to distract Southeast Asian claimants and deflect external criticism while Beijing prepares for the next cycle of military escalation. A CREDIBLE DETERRENT ACTORS Asian capitals and in Washington, pragmatists would welcome a sudden diplomatic breakthrough, but <u>it would be a mistake to count on China's</u> good faith amid so many negative signs. The chances of concluding an effective COC in the short term

appear dim. Meanwhile, it seems likely that Chinese combat aircraft will soon begin operating regularly from air bases in the Spratly Islands, working in tandem with an ever-growing naval and paramilitary presence to enforce Beijing's claims at the expense of those of its neighbors.

R/T Tribunals

Most countries side with the US' interpretation that permits military activity

Pham 18 Tuan N Pham, 6-29-2018, "The world is pushing back in the South China Sea," East Asia Forum, http://www.eastasiaforum.org/2018/06/29/the-world-is-pushing-back-in-the-south-china-sea/ //DF he Chinese argument on the permissibility of military activities in EEZs is counter to the US position. The United States believes that while coastal states under UNCLOS have the right to regulate economic activities in their EEZs, they do not have the right to regulate foreign military activities in their EEZs. Beijing contends that military activities — such as ISR flights, maritime survey operations and military exercises — on the high seas and <u>in EEZs are unlawful</u> according to UNCLOS, and that it is a requirement under UNCLOS that the high seas are used only for peaceful purposes, despite itself doing exactly the opposite. Beijing's interpretation of UNCLOS is a minority position held by 27 states, while the vast majority of states (over 100, including all permanent United Nations Security Council members other than China) do not hold this position. The region and the world have come to the realisation that Beijing's actions in the SCS are dangerously undermining the extant global order that China itself has benefited from. Other countries must now be more assertive to encourage and challenge China to become a more responsible global stakeholder that contributes positively to the international system. Otherwise, Beijing will be further emboldened to expand and accelerate its campaign to control the disputed and contested strategic waterway through which trillions of dollars of global trade flows each year.

R/T US influence

Dan Blumenthal & Michael Mazza, The Diplomat, 2-17-2012, "Why to Forget UNCLOS," Diplomat, <u>https://thediplomat.com/2012/02/why-to-forget-unclos/</u>//EH

The Obama administration seems determined to put political science theories to the test by "binding" China into the rules-based order over which the United States presides. Only this time, China is already a signatory to the rules in question. The Obama administration seems to think it is the United States that needs the binding. The timing of this new push over the U.N. Convention on the Law of Sea, signed by President Bill Clinton and then defeated by the Senate in 1994, is curious. One need only scan the past three years of Chinese activities in the South China,

East China, and Yellow seas to find evidence that China intends to change the maritime status quo in ways detrimental to U.S. interests.

Despite ratifying UNCLOS, China's maritime behavior in East Asia runs contrary to international law

and custom as they have been commonly understood for centuries. Where customary international law has protected the traditionally expansive understanding of freedom of the seas – allowing open access to all but narrow bands of territorial waters along national coastlines – China is trying to curtail that access, fence off its peripheral waters, and deny to other maritime nations the freedom

of navigation they have long and lawfully enjoyed. What's the argument for signing UNCLOS when China itself doesn't adhere to the law? When it turns out that the letter of the law is less clear than its proponents think? Given these problems, <u>U.S. ratification of</u>

UNCLOS won't resolve Sino-U.S. disagreements; it will only lead to endless legal and diplomatic

wrangling. Enjoying this article? Click here to subscribe for full access. Just \$5 a month. Arguments for UNCLOS ratification now are even more bizarre given that international law and the balance of power favor the United States.

R/T Tribunals

Join UNCLOS does not give us extra say in tribunals, because the people who we elect are not allowed to take instructions from the US government and thus act as neutral actors. If anything, US presence would just amplify the voice of hardliners in China who view international legal regimes as a vehicle for advancing U.S. interests (Fuchs - National Interest)

Michael Fuchs, 8-3-2016, "UNCLOS Won't Help America in the South China Sea," National Interest, <u>http://nationalinterest.org/feature/unclos-wont-help-america-the-south-china-sea-17235</u> (NK)

While there are many reasons the United States should ratify UNCLOS—which we strongly support—gaining an advantage in the South China Sea is not one of them. First, <u>W</u>hile the United States has a strong interest in peaceful resolution of competing territorial claims in the South China Sea, it is not itself a claimant, and thus UNCLOS would provide no additional tools for the United States to use in addressing disputes in the South China Sea. <u>While U.S. ratification of UNCLOS would allow U.S. nationals to serve on arbitration</u> <u>panels, such representatives are expected to exercise independent reasoning and do not take</u> <u>instructions from member governments. If anything, the presence of an American on the panel would</u> <u>have played to the suspicions of hardliners in China who view international legal regimes as a vehicle</u> <u>for advancing U.S. interests. If this sounds farfetched, consider that the Chinese ambassador to ASEAN</u> <u>recently accused Washington of "staying behind the arbitration case as the manipulator, and doing</u> <u>whatever it can to ensure that the Philippines wins the case.</u>" Second, the only thing that the United States would achieve by joining UNCLOS—at least from the perspective of modifying Chinese behavior—would be to deprive Beijing of its talking point that U.S. exhortations to claimant states to comply with UNCLOS amount to "hypocrisy." Deprived of this talking point, there's no reason to believe that Beijing would submit to the tribunal's authority. Although U.S. ratification of UNCLOS would be a boost to the prestige of the convention, Beijing has evidently made a calculated judgment that defending its perceived sovereignty and the strategic value of physical control of large

stretches of the South China Sea outweighs whatever reputational damage it suffers as a result of flouting the tribunal's decision.

R/T Piracy

1. Non Unique: piracy is increasing now. Monks in 2018 explains: The region had seen a steady decline in piracy over recent years. Attacks surged off the West Coast of Africa with 95 incidents in 2016, up from 54 in 2015.

Monks 18 Kieron Monks, Cnn, 1-3-2018, "Piracy threat returns to African waters," CNN, https://www.cnn.com/2017/05/25/africa/piracy-resurgence-somalia/index.html //DF

The attack is the latest in a series of hijackings in the designated High Risk Area (HRA) off Somalia since the Aris-13 tanker was taken on March 13. The region had seen a steady decline in piracy over recent years, after gaining notoriety for the frequency of attacks around the turn of the decade. In 2010, Somali pirates hijacked 49 ships and took over 1,000 hostages, according to the International Maritime Bureau. There are mounting concerns that the period of relative calm may be over, and the threat from piracy could increase further. A recent report from the NGO Oceans Beyond Piracy (OBP) found that <u>piracy is spreading and</u> evolving. Beyond the HRA, <u>attacks surged off the West Coast of Africa with 95 incidents in 2016, up from 54 in</u> <u>2015. The majority took place in Nigerian waters</u>. The report also noted a sharp rise in kidnap for ransom attacks in the

region, with 96 hostages taken compared with 44 the previous year, but just a single instance of hijacking for cargo. Economic losses through piracy in West Africa increased by more than 10 percent to \$793.7 million. "The increase in kidnap and ransom attacks is troubling as they tend to entail greater violence," said report co-author Maisie Pigeon. "They involve less risk to the pirates themselves and can produce lucrative returns." Kidnap attacks also increased in Asia, where pirates took 67 hostages and killed six seafarers in 2016. The Somali coast was relatively quiet last year, with no successful hijackings. But the report noted that the vigilance of vessels in the area had decreased, which Pigeon believes played a part in the spate of attacks in 2017. "The perception of risk to shipping decreased, which gave pirate groups the opportunity to commit attacks," she says. "In East Africa, the intent and capability to attack has never gone away. Now we're seeing opportunities return."

2. Turn: It will be better because all countries have to participate to their fullest ability

Article 100: Duty to cooperate in the repression of piracy

All States shall cooperate to the fullest possible extent in the repression of piracy on the high seas or in any other place outside the jurisdiction of any State.

R/T REMs Bad

R/T Environmental Harms

Current mining techniques are a major contributor to deforestation

Moss 18 Jacques Moss, 8-1-2018, "Renewable Energy's Deep Sea Mining Conundrum," No Publication, <u>https://knect365.com/energy/article/9c1b0a6e-e73e-4360-9485-adf5cf141b33/renewable-energys-dee</u> <u>p-sea-mining-conundrum</u> //DF

Child labour and exploitation of workers - Amnesty International warns that many of the largest cobalt consuming companies are not doing enough to prevent the practice of child labour among their suppliers, including Microsoft, Renault, and Huawei. The conflict stricken Democratic Republic of the Congo is currently the world's largest supplier of the metal, which is a crucial component in the manufacture of the lithium ion batteries used in EV's, laptops and smartphones. The DRC, where child labour and unsafe working conditions are rife, is on track to achieve a 73% share of the cobalt market by 2023. The World Ocean Review estimates that the Pacific Ocean's Prime Crust Zone – a cobalt rich region of seabed approximately the size of Europe – may contain as much as 7.5 billion tonnes of the substance. Deforestation and destruction of land-based ecosystems: It is well understood that <u>CONVENTIONAL MINING OPERATIONS are a significant cause of</u> <u>deforestation</u>. But a 2017 study by researchers at the University of Vermont suggests that we may be underestimating their contribution. The study found that <u>mining was directly responsible for 10% of deforestation in the Amazon basin over the</u> <u>decade from 2005-2015</u>. This was much higher than previous estimates, because 90% of these mining activities were undertaken without mining leases granted by the Brazilian government.

Deep seabed mining better for the environment (immediately) than land mining

Shukman 17 David Shukman, 4-1-2017, "Renewables' deep-sea mining conundrum," BBC News, <u>https://www.bbc.com/news/science-environment-39347620</u> //DF

"We either dig them up from the ground and make a very large hole or dig them from the seabed and make a comparatively smaller hole. "It's a dilemma for society - nothing we do comes without a cost." Scientists are now weighing up the relative risks and merits of mining on land as opposed to on the seabed. Mines on land often require forests and villages to be cleared, overlying rocks to be removed and roads or railways to be built in order to extract ores with relatively weak concentrations of minerals. By contrast, mines on the seabed would extract far richer ores, covering a smaller area and with no immediate impact on people - but instead killing marine life wherever digging machines are deployed and potentially devastating a far wider area. One major concern is the effect of plumes of dust, stirred up by excavation of the ocean floor, spreading for long distances and smothering all life wherever it settles. To understand the implications, the expedition to Tropic Seamount conducted an experiment, the first of its kind, to mimic the effects of mining and to measure the resulting plume. Deploying from the UK

research ship James Cook, a remotely operated vehicle deliberately pumped out hundreds of litres of sediment-filled water every minute while other robotic sensors were positioned downstream in the ocean current. According to Dr Murton, early results indicate that <u>dust was</u> <u>hard to detect 1km away from the source of the plume, suggesting that the impact of mining could be</u> <u>more localised than many fear</u>. But this comes as different disciplines within marine science are coming up with a range of perspectives on this emerging development.

Struck 18 Doug Struck, 8-13-2018, "Treasures of the Deep: Tapping a Mineral-Rich Ocean Floor," No Publication,

https://magazine.pewtrusts.org/en/archive/summer-2018/treasures-of-the-deep-tapping-a-mineral-rich -ocean-floor //DF

"As an engineering proposition, taking potato-sized rocks from an abyssal plain looks to be a lot less complicated than peeling off the skin of a seamount or maneuvering through hydrothermal zones," says Pew's Nugent. "And I think you'll find a consensus among the scientists that the vastness of the plain provides a more comfortable margin of error than the crowded ecosystems of seamounts and vent zones. On the other hand, the nodules on the abyssal plains can only regenerate over hundreds of million years. So you have to write conservation insurance policies tailored to regional particularities. And when in doubt, rope off giant no-mining areas."Indeed, proponents of deep-sea mining say it may well be better for the planet to collect minerals from the seafloor rather than puncture the earth on land. Land mining can leave "giant open pits, massive waste dumps, great big huge mounds of tailings," says Michael Johnston, CEO of Nautilus Minerals, which from its operations headquarters in Australia hopes to mine copper and gold off Papua New Guinea. He says <u>as the world moves from fossil fuels to technologies like electric cars, "some of the key elements—nickel and cobalt is northighted and the planet to collect more on the seafloor then the land we have the lead we deterd the says the double of the land cobalt is northighted and cobalt is northighted</u>

in particular—are more common on the seafloor than the land. Undersea mining "might have a smaller ecological footprint than, say, a copper mine in the Democratic Republic of Congo," Nugent acknowledges. But, he notes, we don't know for sure. "It's not proven at all, and the more the scientists examine the abyss, they find the abyss is not so abysmal. It teems with life."

R/T Killing Phytoplankton

Non-unique: Phytoplankton are dying off left and right.

Watts 17 Sarah Watts, 12-29-2017, "Global Warming Is Putting the Ocean's Phytoplankton in Danger," Pacific Standard, <u>https://psmag.com/environment/global-warming-is-putting-phytoplankton-in-danger</u> //DF

For decades, researchers have pointed to phytoplankton as one of the planet's most valuable resources. They form the basis of the marine food chain and provide half the ocean's oxygen (while trees, shrubs, and grasses provide the other half). Hurricanes churn the ocean, bringing up nutrients like nitrogen, phosphate, and iron from the depths of the ocean and introducing them to the surface levels where plankton live. In turn, the phytoplankton bloom and spread, and marine life grows with it. But even as hurricanes are increasing and intensifying, scientists say that **phytoplankton is** still **in serious danger of dying out**. "Over the next 100 years, the climate will warm as greenhouses gases increase in our atmosphere," says Andrew Barton, oceanographer and associate research scholar at Princeton University. <u>As the</u> **climate warms, Barton says, so will the oceans—bad news for phytoplankton, since warm waters**

contain less oxygen, and therefore less phytoplankton, than cooler areas. Already, gradually warming ocean waters have killed off phytoplankton globally by a staggering 40 percent since 1950. But it's not just phytoplankton death that's concerning scientists. Because phytoplankton thrive better in cooler waters, these organisms migrate to cooler patches of the ocean when other parts become too warm. In 2015, Barton and a team of fellow oceanographers tracked environmental changes like temperature and salinity to approximate where phytoplankton will migrate over the course of the next century. They predict that phytoplankton along the North Atlantic coast will migrate toward cooler waters off the coast of Greenland, lessening the food source for fish and other marine life.

Phytoplankton recover quickly because they've become highly resistant over time (need better evidence b/c this is kinda contradictory)

Schmidt 15 Charles W. Schmidt [MS, an award-winning science writer from Portland, ME, has written for Discover Magazine, Science, and Nature Medicine], 10-2015, "Going Deep: Cautious Steps toward Seabed Mining," PubMed Central (PMC), <u>https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4559946/</u>//DF

"It's possible that all life on earth emerged from these hydrothermal systems," says Richard Steiner, a marine conservation biologist and consultant based in Anchorage, Alaska. "And since there are only [an estimated] five hundred to five thousand hydrothermal vent systems in the world ocean,13 each one averaging a square kilometer each, they're also extremely rare." Scientists point out that <u>SMS ecosystems</u> evolved to recover quickly from violent disturbances. Indeed, the Solwara 1 site lies within 500 m of an

active volcano that, according to unpublished findings from Tivey and colleagues, deposited 6 million tons of fresh sediments between 2005 and 2011. However, mining has also been proposed for inactive vent sites, which may have lost some of this resiliency and thus may be likely to recover much more slowly, says Lisa Levin, a professor at the Scripps Institution of Oceanography. Scientists know little about the benthic (deep-sea) species residing in the abyssal plains, but what they're learning shows them to be highly adapted to an extreme environment, where temperatures hover just above freezing and pressures become crushing.14 Studies show much of the fauna to be limited in size, slow to mature and with low rates of metabolism, reproduction, and colonization.3

Economy Advantage

There are economically significant amounts of REMs beyond our EEZ that require UNCLOS ratification

Conathan 12 Michael Conathan, 6-13-2012, "Conservatives Disregard Traditional Allies to Oppose the Law of the Sea," Think Progress

http://thinkprogress.org/climate/2012/06/13/498060/conservatives-disregard-traditional-allies-to-oppo se-the-law-of-the-sea/ //DF

And it's not just about oil and gas. Rare-earth metals are compounds integral to the production of modern devices including cell phones, hybrid cars, and even precision-guided missile systems. Currently more than 95 percent of rare-earth metals are produced in China, which has begun restricting its export. But <u>nodules found on the deep seabed—well outside even extended continental</u> <u>shelves—have "economically significant" amounts of rare-earth metals, and Lockheed Martin and other companies would like to begin exploration to determine the viability of tapping this source. Access to these areas that are beyond any national claim of jurisdiction will have to be regulated by an international body—in this case, the ISA—which explains Lockheed Martin's support for U.S. ratification</u>

of the Law of the Sea. The United States has a clear choice: Agree to limited revenue sharing under the treaty and bankroll more than 93 percent of total revenue from extended continental shelf and high seas activities, or get nothing at all and lose the ability to challenge claims made by other nations.

Moore 12 John Norton Moore [Director, Center for Oceans Law & Policy at the University of Virginia], 7-27-2012, "Restoring America's Oceans Leadership," HuffPost,

https://www.huffingtonpost.com/john-norton-moore/restoring-americas-oceans b 1712081.html //DF

Our economy is hurt when delimitation of our extended continental shelf is delayed and when legal uncertainties from non-membership prevent our oil and gas industry from exploiting the rich continental margin, especially in the Arctic. Development of resources in the Chukchi and Beaufort Seas off Alaska's coast would create approximately 54,700 jobs per year nationwide with a \$145 billion payroll and would generate \$193 billion in federal, state and local revenue according to a study done by the University of Alaska's Institute of Social and Economic

Research. The delay in ratifying this treaty has already cost the loss of one of our four seabed mine sites, the richest in the world, and if we do not soon adhere the United States risks losing the remaining three, with billions in the strategic minerals manganese, copper, cobalt and nickel at stake. A single seabed mining operation would spur the economy with total capital purchases of close to one and a half billion dollars and would stimulate robust job creation. Further, for our nation to lose this new industry would cost millions in consumer

<u>IOSSE</u>s and foregone tax revenues and billions in our balance of trade as the United States was forced to import rather than produce these strategic minerals. Undersea cables carry more than 95% of international Internet and telephonic transmissions. These crucial cables also transmit financial data and transactions worth trillions every day. The Convention establishes the legal underpinning for protecting and managing these cables. At a National Press Club event a spokesman for AT&T warned that not being a party places America's crucial communication links at risk

Renewable Energy Advantage

Current reserves are declining now

Moss 18 Jacques Moss, 8-1-2018, "Renewable Energy's Deep Sea Mining Conundrum," No Publication, <u>https://knect365.com/energy/article/9c1b0a6e-e73e-4360-9485-adf5cf141b33/renewable-energys-dee</u> <u>p-sea-mining-conundrum</u> //DF

Presently, around 90% of the world's production of rare earth minerals takes place in China. It's a market the country has had cornered since the early 1990's. This has given China immense sway over the development of the renewable energy industry and over other high-tech forms of manufacturing. The geopolitical implications in a world dependent on renewables to meet the majority of its energy needs are obvious. If that concerns you, the good news is that by then we may not need to worry about a repeat of Chinese embargoes of rare earths. China's stocks are depleting quickly. According to a whitepaper released by the Chinese government in 2012, the country's reserves are likely to last only another 20 years, based on current patterns of consumption. The richest seams have already been mined, which means that the remaining reserves will be more expensive to extract. So the question remains – where are the resources needed to bring about the energy transition going to come from?

Bourzac 11 Katherine Bourzac, 4-19-2011, "The Rare-Earth Crisis," MIT Technology Review,

https://www.technologyreview.com/s/423730/the-rare-earth-crisis/ //DF

If the supply of rare earths falls short of demand in the coming years and no substitutes that approach their performance are found, makers of hybrid and electric cars will probably try to develop new motor designs that rely on induced rather than permanent magnetism, says Eric Rask, a researcher at Argonne National Laboratory. Before joining Argonne two years ago, Rask worked on the power-train system for General Motors' electric Volt, which uses a rare-earth permanent magnet. But, he says, "the reason permanent-magnet motors are used is that their efficiency is almost always higher in the range where you use it a lot—typically you can get more torque for a given supply of current." **Few experts**

express optimism that there will be enough rare-earth materials to sustain significant growth of clean energy technologies like electric cars and wind power, which need every possible cost and efficiency

advantage to compete. "The writing is already on the wall," says Patrick Taylor, director of the Kroll Institute for Extractive Metallurgy at the Colorado School of Mines. "You want to develop this big new energy economy, but there's a limited supply

and an ever-increasing demand." Asked how China gained its edge over the rest of the world, Taylor points out that most of the necessary expertise and industry began moving to that country nearly two decades ago. Back then, he adds, no one was even paying attention.

US has lots of REMs generally

Bushong 13 Steven Bushong, 6-4-2013, "Rare earths, minerals used in windpower technology, could fall into short supply," Windpower Engineering & amp; Development,

<u>https://www.windpowerengineering.com/business-news-projects/uncategorized/rare-earths-minerals-used-in-windpower-technology-could-fall-into-short-supply///DF</u>

To address concerns of market dependence, industry, and governments are looking for ways to substitute the rarer, more expensive rare earths with less costly alternatives that have a lower supply risk. The elements neodymium, dysprosium, and samarium, found in rare earth permanent magnets, have been placed on a list of critical elements by the European Commission and the U.S. government. Leading up to 2012, there was practically no recycling of end-of-life magnets, but the issue of recycling the rare earth elements in these magnets has become a high priority issue. The Japanese government is committed to finding ways to decrease demand of rare earths from China, and has invested in rare earth projects in Vietnam and Kazakhstan to try and secure supply. The country announced a special budget in 2011 to reduce consumption and develop alternative materials, which includes projects in rare earth recycling and finding suitable substitutes for rare earths in applications such as in PMs. The U.S. has estimated rare earth reserves of more than 13 million metric tons, the largest

<u>reserve outside China</u> and the CIS. The rare earth mine of Mountain Pass, Calif., which was reopened in 2012 after being closed for 10 years, is operated by Molycorp, and holds one of the major world reserves of rare earths. Other reserves of REOs are located primarily along the eastern seaboard of the U.S., in Florida, Georgia, and South Carolina. Rare earth minerals are also found in Wyoming, Colorado, Idaho, New Mexico, New York, and Tennessee.

The US has significant offshore reserves

Schofield 13 Clive Schofield, 2013, "New Marine Resource Opportunities, Fresh Challenges Panel 4: Emerging International Regimes to Control Environmental Impacts," University of Hawai'i Law Review, <u>https://heinonline.org/HOL/LandingPage?handle=hein.journals/uhawlr35&div=28&id=&</u> page= //DF

Such developments illustrate the potential for such novel developments among the Pacific island States more generally. 75 Analogous interest in seabed mining, including on areas of outer continental shelf, has been expressed by states such as the Cook Islands, the Federated States of Micronesia, Fiji, Kiribati and Palau. Some of the figures relating to potential reserves and associated potential financial benefits to these generally small developing Pacific Island nations are staggering. For example, in August 2013 it was reported that seabed mining of manganese nodules could yield "tens of billions" of dollars in earnings for the Cook Islands alone, potentially increasing gross domestic product "a hundredfold" and transforming the Cook Islands into "one of the richest in the world in terms of per capita income."76 While such statements appear, at first glance, more than a little far-fetched, it is nonetheless clear that interest in seabed mining opportunities is sharply on the rise. Advances in deep sea resource exploration and exploitation technologies have also given rise to the prospect of accessing seabed resources not only within areas of outer continental shelf but in deeper waters and areas beyond national jurisdiction. While developments in the area are proceeding apace, notably in respect of the Clarion-Clipperton Zone in the Equatorial North Pacific Ocean and in the Central Indian Basin of the Indian Ocean,n areas of outer continental shelf subject to national jurisdiction are likely to be particularly attractive areas for development from the perspective of the coastal states, which hold sovereign rights over these areas. Indeed, it has been estimated that the Clarion-Clipperton Zone alone holds more than 27 billion tonnes of nodules containing of the order of 7 billion tonnes of manganese, 340 million tonnes of nickel, 290 million tonnes of copper and 78 million tonnes of cobalt as well as rare earths needed for the production of many hi-tech products such as smart phones.78 This led the International Seabed Authority's (ISA) Legal Counsel, Michael Lodge, to comment in May 2013 that "We are on the threshold of a new era of deep seabed mining."79 While the figures suggested may appear extraordinary, there seems little doubt that interest in the exploitation of these resources will be sustained so long as commodity prices remain high. The ISA's approval of exploration plans for the development of cobalt-rich manganese crusts by Chinese and Japanese concerns during its nineteenth session in July 2013 also appears to bear out the seriousness of this interest.so

Deep sea mining needed since on land resources are diminishing

Struck 18 Doug Struck, 8-13-2018, "Treasures of the Deep: Tapping a Mineral-Rich Ocean Floor," No Publication,

https://magazine.pewtrusts.org/en/archive/summer-2018/treasures-of-the-deep-tapping-a-mineral-rich -ocean-floor //DF

"There's a couple of billion people trying to get into the middle class. It's requiring a vast amount of new metals," says James Hein, a veteran geologist who has been studying undersea minerals for 42 years for the U.S. Geological Survey in Santa Cruz, California. "All their new homes need metals, not only in the building itself, but in all the things you put into a home." <u>Many of the high-grade seams on land</u> <u>have been dug out, and prospectors must go deeper or to more remote places</u>. Added to that is a surge in demand for metals for high technology, and—counterintuitively—for so-called "clean" energy. "<u>Green tech, moving from hydrocarbons</u> to renewable resources, is requiring a vast amount of rare metals. For some of the green technologies, there is not enough to go around" on land, says Hein. "<u>But there is tons of it in the oceans</u>." Wind turbines, for example, evoke the vision of a clean, pollution-free future. But the wind-nudged turbine blades make electricity by turning powerful magnets made of rare metals. A typical 2-megawatt turbine has about 900 pounds of neodymium and dysprosium, which make magnets hundreds of times more powerful than steel magnets. The turbine also contains 6 tons of copper.

Just for clarification, the CCZ is in US accessible area

PewTrusts 17 12-15-2017, "The Clarion-Clipperton Zone," Pew Trusts,

https://www.pewtrusts.org/en/research-and-analysis/fact-sheets/2017/12/the-clarion-clipperton-zone //DF

<u>The Clarion-Clipperton Zone (CCZ) spans 4.5 million square kilometers (1.7 million square miles)</u> <u>between Hawaii and Mexico, an abyssal plain as wide as the continental United States and punctuated</u>

<u>by Seamounts</u>. Lying atop the muddy bottom or embedded just beneath it are trillions of potato-size polymetallic nodules. These rocklike deposits contain nickel, manganese, copper, zinc, cobalt, and other minerals. At these depths—completely dark but for occasional flashes of bioluminescence—the nodules are often the only hard substrate on a seabed of soft clay, which makes them attractive homes for creatures in need of anchor or habitat. The sediment surrounding the nodules also harbors remarkably high biodiversity. The International Seabed Authority (ISA), the organization responsible for writing the rules for mining in seabed areas beyond national jurisdictions, has awarded 16 exploration contracts to state sponsors and contractors allowing them to assess mining opportunities within the CCZ. Mining the nodules would involve scraping off the top layer of the ocean floor, separating the nodules from the mud, using a giant tube to pump them to a surface ship, and returning the water and fine particles through another tube. Many marine scientists are concerned about the potential impacts of disturbing the seabed in this manner. Nodules form over millions of years and cannot be replaced in any meaningful way.1 And scientists are just beginning to study some of the array of species that live at these depths, from sponges and sea anemones to shrimps and octopods. Little is known about how far they range, how populations are connected, and what damage may be caused by the spread of sediment plumes and other effects of mining. Scientific monitoring of experimental dredge sites in deep-sea sediment has shown that decades after a site is disturbed, few if any communities of organisms have recovered.2

Lots of REMs near Hawaii

Jones 11 Nicola Jones, 7-3-2011, "Sea holds treasure trove of rare-earth elements : Nature News,"

Nature, https://www.nature.com/news/2011/110703/full/news.2011.393.html //DF

It has long been known that the ocean might provide a wealth of rare earths. Sea-floor hydrothermal vents pump out rare-earth elements dissolved in their hot fluids. And these elements and others accumulate in potato-sized lumps, called manganese nodules, on the sea floor. The elements also build up in sea-floor mud; but only a few spot measures of this source of rare-earth elements have previously been made. Kato and his colleagues set out to perform a widespread assessment of this possible resource. They looked at 2,000 samples of sediments taken from 78 sites around the Pacific, and found <u>rare-earth concentrations as high as 0.2% of the mud in the eastern South</u>

Pacific, and 0.1% near Hawaii. That might not sound like much, but <u>those concentrations are as high as or higher</u> than those at one clay mine currently in operation in China, they point out. And the deposits are particularly rich in heavy rare-earth elements — the rarer and more expensive metals. Some of the deposits are more than 70 metres thick. The authors estimate that an area of 1 square kilometre around a hotspot near Hawaii could hold 25,000 tonnes of rare earths. Overall, they say, the ocean floor might hold more than the 110 million tonnes of rare earths estimated to be buried on land.

Access to REM resources key to securing a renewable future

Moss 18 Jacques Moss, 8-1-2018, "Renewable Energy's Deep Sea Mining Conundrum," No Publication, <u>https://knect365.com/energy/article/9c1b0a6e-e73e-4360-9485-adf5cf141b33/renewable-energys-dee</u> <u>p-sea-mining-conundrum //DF</u>

One of the best ways to understand the nature of the energy transition is as a shift from a resource driven model of energy production to a manufacturing driven model. It's a useful description, because it demonstrates why - over the long haul - renewables are destined to win in the battle between competing energy sources. Manufactured products become progressively cheaper over time, and solar panels, wind turbines, and batteries are no different in this respect. Cost declines are partly due to greater economies of scale, and partly because the more of a product we produce, the better we get at doing so. And once a solar panel or a wind turbine has been manufactured, it continues to generate energy at very little additional cost for over two decades. An industry that relies solely on the extraction and consumption of a finite pool of resources, like the fossil fuels industry, simply won't be able to keep up. That's good news for the climate. Of course, manufacturing also needs a strong resource base to sustain it. This is particularly true of clean energy technologies, which rely on some of the world's rarest and most valuable raw materials to manufacture. As scientists discover new energy efficient semiconductors, new ultra-light composites for wind turbines, and new ways of improving battery performance, access to valuable resources is likely to become more, rather than less important for the renewable energy industry. Take into consideration this recent breakthrough made by researchers at the University of Surrey, which may make comparatively inexpensive perovskite solar cells competitive in performance terms with the crystalline silicon solar cells that currently dominate the market. Or this new supercapacitor polymer, which could cut electric car charging times down to a matter of minutes. They're neat ideas, and without access to valuable natural resources, they'll remain nothing but that. If we're going to bring off the transition to a low carbon future, we're going to need these materials, and we're going to need them in ever greater quantities. So where are they going to come from?

Reserves in the UK could help meet their demand for energy

Shukman 17 David Shukman, 4-1-2017, "Renewables' deep-sea mining conundrum," BBC News, <u>https://www.bbc.com/news/science-environment-39347620</u> //DF

Known as Tropic Seamount, the mountain stands about 3,000m tall – about the size of one of the middle-ranging Alpine summits – with a large plateau at its top, lying about 1,000m below the ocean surface. Using robotic submarines, researchers from the UK's National Oceanography Centre found that the crust is dark and fine-grained and stretches in a layer roughly 4cm thick over the entire surface of the mountain. Dr Bram Murton, the leader of the expedition, told the BBC that he had been expecting to find abundant minerals on the seamount but not in such concentrations. "These crusts are astonishingly rich and that's what makes these rocks so incredibly special and valuable from a resource perspective." He has calculated that the 2,670 tonnes of tellurium on this single seamount represents one-twelfth of the world's total supply. And Dr Murton has come up with a hypothetical estimate that if the entire deposit could be extracted and used to make solar panels, it could meet 65% of the UK's electricity demand.

Joining UNCLOS supplies a critical source of rare earth minerals when we need them now

Harvey 12 Fiona Harvey, 7-31-2012, "The rare earth riches buried beneath Greenland's vast ice sheet," Guardian, https://www.theguardian.com/environment/2012/jul/31/rare-earth-greenland //DF

Inside every wind turbine, inside computers, phones and other high-tech equipment from medical scanners to electric cars, are materials known as "rare earths". This small group of 17 elements are in extraordinary demand – but their supply is limited, and most of the existing sources have already been snapped up by China in its quest for ever more rapid economic growth. Last month <u>China – which controls</u>

more than 90% of the reserves of these essential elements - warned that its supplies were

diminishing, despite quotas to limit exports. Beijing's top officials said in a memo: "After more than 50 years of excessive mining, China's rare earth reserves have kept declining and the years of guaranteed rare earth supply have been reducing." This could spell disaster for the future of green technologies such as renewable energy and low-carbon vehicles. That is why Europe has been engaging in a strenuous bout of diplomacy with the home rule government of Greenland to allow access to the island's natural resources. According to geological estimates, below Greenland's vast ice sheet could lie enough rare earths to satisfy at least a quarter of global demand in the future. The vice-president of the European commission, Antonio Tajani, has led the push, forging an agreement with Greenland to look at joint development of some of the deposits. The agreement will extend beyond rare earths to metals such as gold and iron, and potentially to oil and gas, which are abundant in the waters around the island. "We need innovative partnerships with other countries over raw materials. Companies are pushing the commission for this - they need this to survive. Europe is not so wealthy in raw materials and needs to do better [at forming partnerships with other countries]." Tajani said rising commodity prices had created "an intrinsic incentive [to governments] to be more responsive, because companies have to pay more for their raw materials".

REMs are key to the development of renewable energy.

Than 18 Ker Than, 1-17-2018, "Critical minerals scarcity could threaten renewable energy future," Stanford Earth,

https://earth.stanford.edu/news/critical-minerals-scarcity-could-threaten-renewable-energy-future //DF

As population and standards of living rise in the coming decades, finding and developing sustainable sources of the critical and rare minerals crucial for modern electronics and renewable energy

technologies will be one of the "most important topics facing humanity." That was the consensus of experts from industry, government agencies, and academia speaking at a mineral resources conference held at Stanford University last month. "Due to the rapidly increasing need for mineral resources as Earth's human population continues to grow exponentially and the need to minimize the environmental and social impacts of mining, it's essential that Stanford be involved in the field of economic geology — the study of the formation, exploration, and utilization of mineral resources," said conference organizer Gordon Brown, the Dorrell William Kirby Professor of Geological Sciences at the university's School of Earth, Energy & Environmental Sciences (Stanford Earth). Critical and rare metals — which include lithium, copper, uranium, gold, and so-called rare earth elements (REEs) — are prized for their electronic and magnetic properties and play a crucial role in the production of modern electronics. They are important for everything from smartphones and batteries to advanced weapons systems. Ravenous consumption of metals <u>Rare metals are especially vital for</u> renewable energy technologies, such as electric cars and solar panels. For example, a single Tesla vehicle requires

about 15 pounds, or a bowling ball's worth, of lithium, and thin, cheap solar panels need tellurium, one of the rarest

<u>elements on Earth</u>. Lawrence Meinert, the acting deputy associate director of the Energy and Minerals Division of the United States Geological Survey (USGS), called humanity's consumption of metals over the last century "truly mind-boggling." People now use six times more iron per person than 100 years ago, which has required iron ore production to ramp up by a factor of 26.

The development of green tech is the best way to fight climate change.

Lomberg, (Abc News), 9-29-2013, "Renewable energy technology the key to climate change," ABC Rural, http://www.abc.net.au/news/rural/2013-09-30/renewable-energy-technology-not-emission-target/4988946 //DF

Sinking money into high-tech renewable energy technologies is the best way to reduce carbon

emissions, according to a prominent environmental economist. Bjorn Lomborg, a climate policy sceptic from the global think-tank The Copenhagen Consensus Centre, says carbon taxes and emissions targets haven't worked. Mr Lomborg says the latest report from the Intergovernmental Panel on Climate Change (IPCC) should set the stage for a new approach. "We tried (emissions reduction) with the Kyto Protocol, we tried to get a big global agreement in Copenhagen in 2009 and it's just really hard to get people to cut their carbon emissions.

"Remember we don't burn fossil fuels to annoy Al Gore, we burn them because they really power everything we like about society. "What

we have to do is find a way to make green energy so cheap that eventually everyone, including China and India,

will want to buy it. "So instead of these treaties where we say 'would you please burn a little less fossil fuels' we should focus on ramping up innovation so that green energy becomes so cheap that everybody wants to buy it." UN Secretary General Ban Ki Moon has called for countries to "bring strong pledges to cut emissions" to a UN Climate Summit next year which Mr Lomborg says ignores the reality of the situation. "This has been the UN's preferred solution for at least ten, maybe 20 years and I can understand they've decided they're not going to leave that (strategy). "Obviously it would be great if we could get everyone (around the world) but it's just not going to happen. "It has a significant cost for individual countries for only a tiny benefit for 100 years from now. "That's really why it's so hard to get countries to agree on this. "So why keep repeating the same pattern and make pledges that we don't keep, why not pledge to invest in renewables. "Our research shows that **for every dollar you invest in green technology development, you save \$11 in climate**

damage." Bjorn Lomborg says the emphasis needs to be on new, not existing technologies

Rogers 12 Will Rogers [Research Associate at the Center for a New American Security], 4-2012, "Security at Sea

The Case for Ratifying the Law of the Sea Convention," Center for a New American Security, https://s3.amazonaws.com/files.cnas.org/documents/CNAS_SecurityAtSea_Rogers_0.pdf?mtime=20160 go6081931 //DF

Seabed mining, in the Arctic and elsewhere, is also becoming an important strategic interest for the United States. <u>U.S. companies</u> increasingly seek to engage in seabed mining for minerals such as rare earth elements and cobalt that are critical to the broad U.S. economy and used in producing defense assets. <u>However, as long as the United States remains</u> outside the international legal protections afforded by LOSC, the private sector remains hesitant to

<u>invest in seabed mining</u> – investments that would reduce U.S. vulnerabilities to external pressure and supply disruption. Indeed, since few suppliers provide such minerals and they are prone to intentional or unintentional disruptions and price spikes, increasing U.S. production will help prevent suppliers from exerting political and economic leverage over the United States and its allies.2

R/T: Royalties

The Department of the Interior just held the biggest offshore oil and gas auction in U.S. history. Like all things Trumpian, the bluster beforehand didn't quite match the results.

Of the 78.1 million acres in the Gulf of Mexico offered up to oil and gas companies, 801,289, or just about one percent, were snapped up, according to statistics released by the Department of the Interior. The auction raised \$178 million, the biggest haul of planet-destroying money to-date for the administration from an oil and gas lease sale, but the total fell below some of the more lucrative oil and gas auctions held in the recent past. Companies took out a few bids on more out-there drilling sites, but for the moment, the level of interest in new offshore leasing appears to fall somewhere between "meh" and "sure, I guess." Energy dominance!

All told, 29 companies put in 171 bids at the auction held on Wednesday in New Orleans. That's more bids than were placed in a similar auction held in March for Gulf of Mexico oil and gas leases, which at the time the administration hyped as the biggest in U.S. history and which also failed to garner a ton of interest. The lackluster March auction is perhaps why they tamped down expectations for this one, despite it being an even bigger tract of ocean up for lease.

The auction also brought in more money this time around, and included a few bids on parcels of ocean further afield from where oil and gas drilling is currently happening. That reflects companies hedging their bets that oil and gas will be around for a while, but it hardly shows there's a drilling renaissance afoot, especially with a glut of cheap fracked gas still available on land.

The ISA has never collected royalties, and even if they were to, the united states would be the only country with the ability to stop these royalties from going to corrupt countries.

James W. Houck, 2013, The Opportunity Costs of Ignoring the Law of Sea Convention in the Arctic, PennState Law, https://elibrary.law.psu.edu/cgi/viewcontent.cgi?article=1240&context=fac_works // EH

Opponents argue that U.S. royalty payments will go to an inefficient and corrupt "UN-style bureaucracy"135 and that the United States will lose control over the money upon transfer to the ISA.136 As former Senator Jim DeMint asked, "how is it in the interests of the United States to turn the royalties over to an unaccountable international bureaucracy [when the royalties] will be distributed to countries that may be our enemies, like Sudan."137 These arguments have proven a successful rallying point for UNCLOS opponents and a potential political millstone for senators who might otherwise be inclined to support the convention. The arguments have retained force despite the fact that the United The Opportunity Costs of Ignoring the Law of Sea Convention in the Arctic 12 Hoover Institution • Stanford University States itself originally conceived the royalty plan under the Nixon Administration, with the full support of U.S. industry—support that has

remained consistent across nearly four decades. Royalties were proposed as a modest concession in return for

agreement on the U.S.-sponsored extended continental shelf regime.138 Indeed, most of the oil and gas that may be recovered would be in the first six years and thus would not ever be subject to royalty payments. The "UN-style bureaucracy" argument has also endured despite the fact that opponents have presented no evidence that the ISA is either inefficient, overstaffed, or corrupt at any time throughout the nearly 19 years since its founding in

1994. The argument that the ISA could transfer U.S. contributions to terrorists and other anti-U.S.

<u>interests</u> also has great emotional appeal. However, the assertion <u>is not based on fact</u> 139 and has been rebutted repeatedly.140 UNCLOS opponents have suggested in direct contradiction of the convention's express terms that the assembly might somehow be able to circumvent the express provisions preserving U.S. influence in the council. The argument is spurious but remains a pillar of opposition strategy. Fortunately, <u>to date the ISA has not yet</u>

taken up implementation of Article 82. But only if the United States is a party can it ensure that

payments would not go to terrorists or other anti-U.S. interests. The Argument that UNCLOS IS Unnecessary In addition to arguing that UNCLOS membership would hurt the United States, UNCLOS opponents argue that the convention is unnecessary in the first place. As Alaskan Senator Lisa Murkowski has noted:

OD Landlocked states

UN, UNCLOS and Landlocked Developing Countries: Practical Implications", 2012,

http://unohrlls.org/UserFiles/File/LLDC%20Documents/UNCLOS%20June%202012/UNCLOS%20Panel%20Summary%20Report%20FINAL.pdf //DF

In concluding, Mr. Baez touched upon Part XI of the Convention to highlight its relevance to the LLDCs. He stressed that activities in the Area, i.e. the seabed beyond national jurisdiction, were to be carried out for the benefit of mankind as a whole, exclusively for peaceful purposes irrespective of the geographical location of States, whether coastal or landlocked. The Convention promoted the effective participation of landlocked developing States (Article 148). In his presentation, Mr.

Lodge recalled that the Group of Landlocked and Geographically Disadvantaged States (LGDS), which then

comprised 55 States – both developed and developing – was one of the most active groups during the Third UN Conference on the Law of the Sea. Their

objective at the time was to forestall a partition of oceanic resources through widespread extensions of coastal State jurisdiction and to ensure that their legitimate rights and interests- including access to the sea, access to resources and to representation in the bodies created by the Convention – would be reflected in the Convention. However, Mr. Lodge noted that over the years of UNCLOS implementation, the landlocked States had not been doing as much as they could have been doing in order to take advantage of the benefits available to them under Part XI of the Convention, which also established the International Seabed Authority (ISA). He observed that even though the LLDCs made up about 10 per cent of the ISA membership, over the past 5 years, only three of them had participated in its meetings.

Geographically disadvantaged states do receive royalties

GANJALIYEV 11 ELCHIN GANJALIYEV, 2011, "BUILDING AZERBAIJAN'S LEGAL FRAMEWORK FOR MARINE OPERATIONS ON THE BASIS OF UNCLOS," UNIVERSITY OF SOUTHAMPTON,

http://www.un.org/depts/los/nippon/unnff_programme_home/fellows_pages/fellows_papers/ganjalye v 1112 azerbaijan.pdf //DF

The land-locked countries won recognition of their rights of access to and from sea at UNCLOS III, although the conditions under which these rights are maintained may have fallen somewhat short of the land-locked States' expectations. They also won certain privileges, particularly with respect to activities in the Area, and on the continental margin beyond the 200-miles limit. The Geographically Disadvantaged States also shared with the land-locked compensations with

<u>respect to the Area</u>, and 'least developed' among the GDS joined the LLS in sharing revenues from resource exploitation on the continental margin beyond the 200 mile limit. Moreover, States with 'special geographical characteristics' are, like the land-locked States, entitled to participate on an equitable basis in exploiting an appropriate part of the surplus of the living resources of the exclusive economic zones nearby States.

1. Article 82 is vague and full of issues that need to be resolved before it can be implemented. Other arguments could ought weigh on timeframe

Harrison 17 Rowland J. Harrison [Energy Regulation Consultant, Calgary], 2017 "Article 82 of UNCLOS: The day of reckoning approaches," Journal of World Energy Law and Business, doi: 10.1093/jwelb/jwx022 //DF

Apart from the question of who should bear the cost of complying with Article 82, several other practical issues arise. While the general requirements of Article 82 are reasonably clear, on closer examination the Article is replete with ambiguities that will have to be addressed before the Article can be applied in relation to any particular project.47 The answers to these ambiguities could have significant consequences for all po- tentially affected parties—from coastal states on which the obligation is imposed, to other coastal states that could become subject to Article 82 in the future, to producers of resources on the ECS worldwide, to poten- tial States Parties to UNCLOS that may lay claim to payments under paragraph 4 and to the ISA.48 It is beyond the scope of this article to undertake a detailed legal analysis and to offer specific views on these ambiguities. The more modest goal here is to identify those issues. It will be submitted in a later section that the first coastal state to become subject to Article 82 (likely Canada) will have to adopt specific positions and incorporate them into whatever instruments it employs to meet its obligations 82. It will be submitted further that the relevant coastal state will have considerable lati- tude to determine the specific positions that it adopts in resolving ambiguities, constrained only by an obliga- tion to act in good faith.

Type of payments: in what currency would the payments be? Is a "contribution in kind" a share of the actual oil, or some other good or service? Would recipients have a say in the form of payment?

Harrison 17 Rowland J. Harrison [Energy Regulation Consultant, Calgary], 2017 "Article 82 of UNCLOS: The day of reckoning approaches," Journal of World Energy Law and Business, doi:

10.1093/jwelb/jwx022 //DF

The core obligation imposed by Article 82 is to make 'payments or contributions in kind . . .'. It must be emphasized at the outset that this language does not, nor does it appear that it was intended to, create a 'royalty' interest, notwithstanding that it is sometimes referred to as such.49 In the context of re- source exploitation, a 'royalty' generally means a share of the relevant resource and may carry with it in rem rights with respect to the resource itself. Were the payment obligation under Article 82 to be characterized as a royalty, recipient states might argue

that they have rights of direct access to a share of production from the ECS. It seems clear that this was not the intention of Article 82. The obligation is to make a payment or con-tribution in kind 'in respect of' the exploitation of these resources, rather than as a share of those resources. The language itself is insufficient to create an in rem royalty interest. Several issues nevertheless arise from the phrase 'payments or contributions in kind...'. Paragraph 1 of Article 82 provides no guidance on the form of payment or, assuming payment in a recognized currency was intended, in which currency? Petroleum is traded internationally in US dollars. Paragraph 2 of Article 82, however, refers to 'value at a production site', and could be argued to allow for value to be calculated in the local currency of the relevant coastal state. If so, prevailing foreign exchange rates could result in significant differences in payments to recipient States Parties under paragraph 4. Similarly, the phrase 'contributions in kind' is not free from ambiguity. On its own, the phrase could be argued to include contributions in a form other than a share of the relevant resource. The reference in paragraph 2 to a percentage of the 'volume of production at the site', however, suggests that 'contributions in kind' contemplates a share of the resource itself⁵⁰-a contribution of any other kind is not something that could reasonably be described as a share of production at a site. Potential recipient states, however, might be more interested in 'contributions in kind' in some form (e.g. goods or services) other than either money pay- ment or a share of the produced resource. In any event, paragraph 1 of Article 82 begs the question: Who is to decide whether the coastal state's ob- ligation is to be fulfilled by 'payments' or by 'contributions in kind'? Could a coastal state decide unilaterally to meet its obligation by making a contribution of the resource in kind at a production site, thereby imposing on a third party responsibility for (and the costs of) taking delivery at the site?

Foreign aid good

REBEKAH KATES LEMKE, May 2, 2017 "5 Reasons We Need Foreign Aid," Catholic releif services,

https://www.crs.org/stories/5-reasons-we-need-foreign-aid

Foreign aid saves lives. The administration has proposed steep cuts—as much as 31%—to poverty-focused international assistance. This assistance is only 1% o, f our nation's budget, yet it does a world of good. Foreign aid helps fight AIDS and other diseases like Ebola. It is used to respond to disasters in some of the world's poorest countries. Refugee assistance gives hope to the world's displaced. Food aid is reaching the vulnerable in South Sudan and other countries affected by a hu66nger crisis. International assistance feeds, educates and keeps children healthy. More than 120,000 Sudanese have received food assistance since the start of the Resilience and Food Security Program in 2011

A one-percentage-point increase in aid to a recipient country reduces the proportion of people living below the poverty line by 1.8 per cent (Alvi - University of Western Michigan)

Alvi, University of Western Michigan, 2011, "DOES FOREIGN AID REDUCE POVERTY",

https://sci-hub.se/https://www.researchgate.net/publication/264618911 Does Foreign Aid Reduce Poverty (NK)

For all measures of poverty, in both specifications, the variable of interest—foreign aid— enters negatively and significantly. This indicates that aid plays a positive role in reducing poverty. The finding that aid has poverty-reducing effects even after controlling for average income is noteworthy and has important policy implications. It means that despite the controversy surrounding the aid–growth relation, the direct effect

of aid indeed helps reduce poverty even though its effects on growth remain uncertain. When we use the headcount index, **a**

one-percentage-point increase in aid to a recipient country reduces the proportion of people living

below the poverty line by 1.8 per cent. This result is consistent with the findings of Mosley and Suleiman (2007) who find that aid reduces headcount poverty by a similar magnitude a cross-country analysis of 49 countries. Interestingly, if this direct effect of aid on poverty is taken into account, poverty-efficient allocation of aid calculated by Collier and Dollar (2002) would have an even stronger poverty-reducing effect.

A ten percent increase in GDP per capita reduces poverty rate and poverty depth by around 2.6% and 4.2% respectively (Mahembe - University of South Africa)

Mahembe, 2018, University of South Africa, "Does Foreign Aid Reduce Poverty In Sub-Saharan Africa? A Dynamic PanelData Analysis", http://uir.unisa.ac.za/bitstream/handle/10500/23614/Mahembe%20%26%20Odhiambo.%202018.%20Does%20Foreign%20Aid%20Reduce%20 Poverty%20In%20Sub-Saharan%20Africa %20A%20Dynamic%20Panel-Data%20Analysis.docx.pdf (NK)

The SGMM results (Table 4 and 5) posit that foreign aid is significant in reducing poverty in the SSA region. A ten percent increase in the level of ODA as a share of gross national income (GNI) will lead to a 0.1% decline in the proportion of people living on less than US\$1.90 per person per day (poverty rate or headcount index). Though the coefficients for poverty-gap and squared poverty-gap index are have a negative sign, they are not statistically significant at 10% level. The two tables also show that on average, <u>a ten percent increase in GDP per capita</u> reduces poverty rate and poverty depth by around 2.6% and 4.2% respectively. In generally, income per capita

has relatively larger coefficients than ODA, indicating that economic growth explains a significant part of the decrease in poverty levels. Inequality (Gini coefficient) coefficient is largely positively and insignificant14 (at 10% level). The positive coefficient is largely in line with economic theory: an increase in income disparity may lead to higher levels of poverty. Ravallion (1997) finds that if initial inequality is high, it can result in rising poverty irresspective of impressive economic growth.

R/T Heritage

The Heritage Foundation is an insanely biased and unreliable source. Taliesin at PRA writes in 2018 that The Heritage Foundation continues to work against issues such as the Violence Against Women Act, climate change mitigation and environmental education, access to welfare benefits, and community development grants through influencing federal policy and publishing misleading research. Take everything they say with a grain of salt.

Julia **Taliesin**, 6-22-**2018**, "Profile on the Right: The Heritage Foundation," **P**olitical **R**easearch **A**ssociates, https://www.politicalresearch.org/2018/06/22/profile-on-the-right-the-heritage-foundation///AM

The influence of the Heritage Foundation continues to grow under the Trump administration. Heritage founder and former president Ed Feulner served on Trump's transition team, and the CEO of Heritage Action has remarked he is pleased with the access they've had to Trump and with the administration's appointments. In January 2018, Heritage released a statement claiming that President Trump had adopted nearly two-thirds of the policies recommended by the Heritage Foundation, including leaving the Paris Climate Accord and repealing Net Neutrality. The Heritage Foundation continues to work against economic, reproductive, and LGBTQ justice through influencing federal policy and publishing misleading research. It also seeks to sway public opinion through their news outlets, the Daily Signal and the Morning Bell. They have targeted LGBTQ rights (especially the rights of transgender people), Planned Parenthood, the Violence Against Women Act, climate change mitigation and environmental education, access to welfare benefits, and community development grants.

R/T Groves

1. Groves' vendetta against UNCLOS isn't really about UNCLOS itself. Gallo at VOA writes in 2017 that Groves is among the camp of conservatives who are

generally skeptical about U.S. participation in international treaties and systems, viewing them as undermining U.S. sovereignty. He also is concerned that UNCLOS will subject the U.S. to stricter and, in his view, unnecessary environmental standards.

William Gallo, 6-6-2016, "Why Hasn't the US Signed the Law of the Sea Treaty?," VOA, https://www.voanews.com/a/united-states-sign-law-sea-treaty/3364342.html //AM

"If we're truly concerned about China's actions in the South China Sea ... the Senate should help strengthen our case by approving the Law of the Sea convention, as our military leaders have urged," Obama said in a commencement speech to the U.S. Air Force Academy. Steven <u>Groves</u>, a senior research fellow <u>at the conservative Heritage Foundation</u> who has written extensively on the Law of the Sea treaty, says that argument is "completely ridiculous." "There's no evidence to support it," Groves told VOA. "China is going to disregard any negative outcome from the arbitration whether or not the U.S. is party to the treaty or not." Groves <u>is among the camp of conservatives</u> who are generally skeptical about U.S. participation in international treaties and systems, viewing them as undermining U.S. sovereignty. He also is concerned that UNCLOS will subject the U.S. to

stricter and, in his view, unnecessary environmental standards. "All indications are that if we joined the Law of the Sea treaty, that all kinds of meritless environmental lawsuits would be brought against us," Groves said. Other analysts argue that ratifying UNCLOS would give the U.S. more leverage on the international scene, especially in relation to China. The U.S. "could say a lot more, and probably much more convincingly" if it were a party to the treaty, says Andrew Chubb, a China expert at the University of Western Australia. "As it stands, they have to talk about more abstract terms like 'accepted rules' of international law and 'rules-based order,'" he said.

R/T FONOPS

FONOPS increase Navy flexibility and efficacy (Allen - New York Times)

Thad W. Allen, Richard L. Armitage and John J. Hamre, 4-24-2011, "Opinion," New York Times,

https://www.nytimes.com/2011/04/25/opinion/25allen.html (NK)

With nearly 12,500 miles of coastline, 360 major commercial ports and the world's largest exclusive economic zone, the United States has a lot to gain from signing the convention. It is the only legal framework that exists for managing international waters; joining it would allow us to secure international recognition of a claim to the continental shelf as far as 600 miles beyond our exclusive economic zone in order to explore and conserve the resource-rich Arctic as the polar ice cap recedes. It would also provide American companies with a fair and stable legal framework to invest in mining projects in the deep seabed. Ratification makes sense militarily as well. According to the Joint Chiefs of Staff, the convention "codifies navigation and overflight rights and high seas freedoms that are essential for the global mobility of our armed forces." In other words, it enhances national security by giving our Navy additional flexibility to operate on the high seas and in foreign exclusive economic zones and territorial seas. This is particularly important in the Asia Pacific region and the South China Sea, where tensions among China, Japan and Southeast Asian nations have increased because of conflicting interpretations of what constitutes territorial and international waters. Perhaps most important of all ratification proves to be a dialomatic triumph. American proves is defined and simply by according and military might by wideals.

all, ratification would prove to be a diplomatic triumph. American power is defined not simply by economic and military might, but by ideals, leadership, strategic vision and international credibility.

FONOPS aren't working to rein in China

Rauhala 18 Emily Rauhala, 1-3-2018, "The calm over South China Sea dispute may be short-lived," Straits Times,

https://www.straitstimes.com/opinion/the-calm-over-south-china-sea-dispute-may-be-short-lived //DF The President's approach so far has been to regularise the type of Freedom of Navigation Operations, or Fonops, that the Obama administration authorised in 2015. May saw the first Fonop of the Trump era, when a destroyer, the USS Dewey, sailed within 12 nautical miles of Mischief Reef in the disputed Spratly Islands. There have been several since. A spokesman for the National Security Council said the Fonops programme challenges excessive maritime claims by various states in order to preserve free movement on the sea and in the air. <u>The</u> problem, experts said, is that Fonops have thus far failed to stop Chinese building - and are therefore unlikely to stop whatever comes next. "Fonops are not a full strategy," said Ms Bonnie Glaser, a senior adviser for Asia at the Centre for Strategic and International Studies, in Washington. "<u>It was not enough in the Obama era and it's not</u> <u>enough under Trump</u>." Though Mr Trump has given no clear signs that he plans to make the South China Sea a priority this year, his hand may be forced. The President's push to get China to rein in North Korea is not going to plan. He has said as much on Twitter.

FONOPS aren't working because we still haven't shown our allies commitment

Poling 18 Gregory Poling, 1-25-2018, "Why a South China Sea Diplomatic Breakthrough Is Unlikely," Foreign Affairs,

https://www.foreignaffairs.com/articles/china/2018-01-25/why-south-china-sea-diplomatic-breakthrou gh-unlikely //DF

For its part, the Trump administration's narrow focus on the current crisis in North Korea has left little time or energy for tackling a future crisis in the South China Sea. The State Department has reduced the issue to a secondary concern in diplomatic engagements with regional partners, and the White House has made no effort to formulate a whole-of-government strategy on the disputes. The Department of Defense has regularized freedom of navigation operations, but that has little effect in isolation. The U.S. military is returning to a regular tempo of training and joint exercises with the Armed Forces of the Philippines and continues to provide funds for capacity building. But the Enhanced Defense Cooperation Agreement, which was signed in 2014 to give U.S. forces limited access to Philippine bases, is being only partially implemented and is unlikely to enable a credible U.S. response to Chinese deployments in the Spratlys. The evidence suggests that China is poised for new escalations in the South China Sea, which should serve as a wake-up call for governments in the Philippines and across the region. That will present both a challenge and an opportunity for the United States, but so far Washington is doing too little to prepare for either. To credibly deter China from using force, or even the threat of force as a coercive measure, against the Philippines, the United States will need to have combat aircraft and other assets forward deployed in the country. That means getting EDCA back on track, especially by convincing the Duterte government to follow through on plans to allow upgrades at all five previously agreed-upon bases, reverse its decision to ban the storage of ammunition at them, and permit a regular schedule of U.S. combat aircraft rotations. It is also time for the U.S. government to publicly state that its commitment to defend Philippine troops, ships, and planes from attack under Article V of the two countries' Mutual Defense Treaty applies to contested waters and islands in the South China Sea. That clarification would not only reassure the Duterte government that the United States would actually back the Philippines when needed but would act as a strong deterrent to Chinese aggression. A credible U.S. deterrent in the Philippines combined with regular U.S. operations in the South China Sea and sustained funding for capacity building and joint training for all the Southeast Asian claimants is necessary to prevent Chinese dominance by coercion in the short term. There is no military solution to the disputes, however, and any long-term U.S. strategy needs to be driven by the White House and the State Department, not the Pentagon. That means a multi-year, interagency effort to support Southeast Asian claimants, rally international support, and name and shame China. But first, the United States will need to reassure the region that it has not lost sight of the issue's importance, and will not in the future. For starters, U.S. officials should begin giving the South China Sea as much

attention as North Korea during diplomatic engagements with ASEAN states and other regional partners. They should also make clear during public statements that U.S. interests in the dispute are not limited to its ability to "fly, sail, and operate" in those waters—which by itself means little to regional states—but, just as important, include the security of partners and allies and the defense of rules-based order in the face of Chinese revisionism.

Delink: France and Britain do FONOPS in Chinese waters, and they are in UNCLOS. They are also not being sued (Luc - Diplomat)

Tuan Anh Luc, The Diplomat, 9-14-2018, "Are France and the UK Here to Stay in the South China Sea?," Diplomat, https://thediplomat.com/2018/09/are-france-and-the-uk-here-to-stay-in-the-south-china-sea/ (NK)

China warned that additional operations would be detrimental to bilateral relations, regional peace and stability. Noticeably, China reactions were restrained both verbally and its actions at sea avoided any direct confrontation with the British warship thus preventing any escalation. However, China demonstrated its resolve by cancelling the important post-Brexit trade deal that London has been pursuing with Beijing because of the HMS Albion challenge. The HMS Albion indeed added up to the external powers' endeavor to uphold the right of free access to the waterways [and airway] in the South China Sea. In a relevant move, **France and the U.K. conducted a joint freedom of navigation patrol through Mischief, Subi and Fiery Cross Reefs in the Spratly islands last June as announced at the 17th Asia Security Summit, or Shangri-La Dialogue 2018**. Both London and Paris considered themselves Indo-Pacific powers and committed to protecting the free passage through the strategic sea line of communications in Southeast Asia pursuant to international maritime law. Beside the two publicized patrols, <u>both [and together with Australia] have</u>

maintained their naval operations in the area. France, for instance, sailed at least five ships in the

South China Sea in 2017. The U.S. has conducted eleven publicized FONOPs to challenge China's excessive maritime claims in the South China Sea since October 2015. Five FONOPs in the Paracels were carried out by the USS Curtis Wilbur (January 2016), the USS Decatur (October 2016), the USS Stethem (July 2017), the USS Chafee (October 2017) and the first-ever joint operation by the USS Higgins and USS Antietam (May 2018). The USS Lassen (October 2015), the USS William P. Lawrence (May 2016), the USS Dewey (May 2017), the USS John S. McCain (August 2017), and the USS Mustin (March 2018) conducted the five FONOPs in the Spratlys.

R/T Military Intelligence

UNCLOS is definitely good for the military

Patrick 12 Stewart M. Patrick, 6-10-2012, "(Almost) Everyone Agrees: The U.S. Should Ratify the Law of the Sea Treaty," Atlantic,

https://www.theatlantic.com/international/archive/2012/06/-almost-everyone-agrees-the-us-should-ra tify-the-law-of-the-sea-treaty/258301/ //DF

All of the uniformed services--and especially the U.S. Navy--are solidly behind UNCLOS. American military leaders have always been discriminating when it comes to treaties, traditionally resisting those (like the Rome Statute of the ICC) that might put U.S. servicemen and women at risk. But they support UNCLOS because it will enable, rather than complicate, their mission. Because the United States was the principal force behind the negotiation of UNCLOS, it contains everything the U.S. military wants, and nothing that it fears. The treaty's primary value to the U.S. military is that it establishes clear rights, duties, and jurisdictions of maritime states. The treaty defines the limits of a country's "territorial sea,"

establishes rules for transit through "international straits," and defines "exclusive economic zones" (EEZs) in a way compatible with freedom of navigation and over-flight. It further establishes the "sovereign inviolability" of naval ships calling on foreign ports, providing critical protection for U.S. vessels. More generally, the treaty allows states party to exempt their militaries from its mandatory dispute resolution provisions--allowing the United States to retain complete military freedom of action. At the same time, the treaty does nothing at all to interfere with critical U.S.-led programs like the Proliferation Security Initiative (PSI). Nor does it subject any U.S. military personnel to the jurisdiction of any international court. Some have argued that UNCLOS has already become "customary international law," and thus the United States has little to gain from formal accession. But custom and practice are far more malleable and subject to interpretation. Other states may soon push the Law of the Sea into new, antithetical directions if the United States does not ratify the treaty. China, a party to UNCLOS, rejects U.S. interpretations of the treaty's freedom of navigation provisions, and continues to assert outlandish claims to control over virtually the entire South China Sea. But it is hardly alone. Countries as diverse as Brazil, Malaysia, Peru, and India have resisted freedom of navigation within their EEZs, in contravention of their obligations. As it has for years, the United States Navy regularly conducts Freedom of Navigation Operations (so-called FONOPS) to challenge excessive claims of territorial exclusivity. But as non-party to the treaty, the United States lacks any legal standing to bring its complaints to an international dispute resolution body. More broadly, U.S. Navy and Coast Guard officials complain, non-membership complicates everyday bilateral and multilateral cooperation with scores of international partners.

No harm to intelligence gathering

Panetta 12 Leon Panetta [Former Secretary of Defense], 5-23-2012, "SECRETARY OF DEFENSE LEON E. PANETTA LAW OF THE SEA CONVENTION," SENATE FOREIGN RELATIONS COMMITTEE, https://www.foreign.senate.gov/imo/media/doc/SecDef Leon Panetta Testimonydocx.pdf //DF Second, there are some who claim that accession to the Convention will restrict our military's operations and activities, or limit our ability to collect intelligence in territorial seas. Quite simply, they are wrong. The Convention in no way harms our intelligence collection activities or constrains our military operations. On the contrary, U.S. accession to the Convention secures our freedom of navigation and over-flight rights as bedrock treaty law. Third, some allege that in joining, our military would be subject to the jurisdiction of international courts - and that this represents a surrendering of U.S. sovereignty. But once again, this is not the case. The Convention provides that a party may declare it does not accept any dispute resolution procedures for disputes concerning military activities. This election has been made by 20 other nations that have joined the Convention, and the United States would do the same. The bottom line is that neither U.S. military activities nor a U.S. decision as to what constitutes a U.S. military activity would be subject to review by any international court or tribunal. Fourth, some argue that certain military activities specifically, our ability to conduct maritime interdiction operations - will be constrained because the Convention only recognizes the right of warships to board ships suspected of engaging in piracy, the slave trade or being stateless. Again, this is simply not the case. The U.S. and our partners routinely conduct a range of interdiction operations at sea based on UN Security Council Resolutions, treaties, port state control measures and the inherent right of self-defense. Further, the Convention expands the range of interdiction authorities found in the 1958 Law of the Sea Conventions we've already joined. In short, the U.S. would be able to continue conducting the full range of maritime interdiction operations.

Myth #3. Our intelligence activities will be constrained because the Conventions' provisions on innocent passage prohibit intelligence collection in the territorial sea and require submarines to surface in the territorial sea.

2015, "21st Century Complete Guide to the Law of the Sea Treaty (LOST)," Progressive Management, (book)

US. intelligence collection activities at sea are not constrained by the Convention. This matter was fully reviewed at closed hearings before the SSCI and SASC in 2004. At the unclassified level we can comment that those Committees concluded, after receiving testimony from DoD, CIA, and DoS, that the Convention does not affect US intelligence collection activities. Those agencies confirmed that testimony in recent correspondence to the SFRC. With regard to innocent passage, the United States already obligates itself to abide by articles 19 and 20 of the Convention, and we are already formally bound to the same obligations in the 1958 Territorial Sea Convention.

R/T Submarines

The US already follows these rules

Moore 04 John Norton Moore [Walter L. Brown Professor of Law at the University of Virginia School of Law and Director of the Center for Oceans Law and Policy], 5-12-2004, "UNITED STATES ADHERENCE TO THE LAW OF THE SEA CONVENTION A COMPELLING NATIONAL INTEREST," House Committee on International Relations, http://www.virginia.edu/colp/pdf/house-testimony.pdf //DF Criticisms that the United States will be required to turn over security information without noting Article 302 of the Convention negating any obligation "to supply information the disclosure of which is contrary to the essential interests of its security;" ! Criticisms that under Article 20 of the 1982 Convention submarines are required to navigate on the surface and to show their flag, without noting that this obligation is already binding on the United States under Article 14 of the 1958 Territorial Sea Convention. Nor does this criticism ever bother to mention the critical difference between the 1958 and 1982 Conventions, that under the 1982 Convention, this obligation no longer applies in straits used for international navigation. In such straits there is a right under the 1982 Convention of "transit passage," permitting transit in the normal mode; which includes submerged transit and overflight. ! Criticisms that the United States should not commit to provisions in the 1982 Convention to the effect that the high seas are "reserved" for peaceful purposes and that parties to the treaty shall refrain from "any threat or use of force against the territorial integrity or political independence of any state," without noting that these obligations simply parallel the obligation in the United Nations Charter, already binding on the United States and every other nation in the world banning the aggressive use of force. These obligations, as those in the United Nations Charter, do not in any way inhibit either the right of individual or collective defense or otherwise lawful military activities. If these provisions did in any way inhibit such activities in the world's oceans there would have been no agreement on the Convention. This is abundantly evident in the robust naval activity of nations for which the Convention has been in force;

No impact: the US already complies

Oliver 10 John T. Oliver [Senior Ocean Policy Advisor, at Headquarters, U.S. Coast Guard], 2010, "National Security and the U.N. Convention on the Law of the Sea: U.S. Coast Guard Perspectives," ILSA Journal of International and Comparative Law,

https://nsuworks.nova.edu/cgi/viewcontent.cgi?article=1662&context=ilsajournal/ //DF The specific argument that the Convention would prevent the United States from using its submarines to collect intelligence is fallacious. Several sources, including the Minority Views in the Senate Committee on Foreign Relations, note that Article 20 of the Convention requires submarines and other underwater vehicles to navigate on the surface and show their flag when engaged in innocent passage. This is correct, so far as it goes. But the minority report then concludes that this would "fail to protect the significant role submarines have played, especially during the Cold War, in gathering intelligence very close to foreign shorelines." What the

minority report fails to mention is that the 1958 Convention on the Territorial Sea and the Contiguous Zone, to

which the United States has long been party, contains exactly the same restriction.39 Moreover, the collection

of intelligence in any guise within the territorial sea is not "innocent passage."40 Such operations are called espionage, not innocent passage. The United States would never accept foreign submarines or foreign warships engaging in intelligence-gathering operations in the territorial sea off of San Diego or Norfolk. Indeed, when President Reagan signed a proclamation extending the U.S. territorial sea to twelve nm on December 27, 1988, consistent with the Convention, one of the first things that the Coast Guard did was to advise a Soviet military vessel gathering

intelligence just a few miles off of Pearl Harbor to leave the area immediately.42 The U.S. military and intelligence

communities are well aware that the Convention would have a positive impact on our national security.

Moreover, as Senator Richard Lugar, ranking minority member of the Foreign Relations Committee, has argued, it would be unprecedented for the Senate to deny to our nation's military and national security leadership a tool that they have unanimously claimed that they need, especially during a time of war.43

R/T Military Tribunals

Accession would not force the military into tribunals; this argument is baseless

Panetta 12 Leon Panetta [Former Secretary of Defense], 5-23-2012, "SECRETARY OF DEFENSE LEON E. PANETTA LAW OF THE SEA CONVENTION," SENATE FOREIGN RELATIONS COMMITTEE,

https://www.foreign.senate.gov/imo/media/doc/SecDef Leon Panetta Testimonydocx.pdf //DF Second, there are some who claim that accession to the Convention will restrict our military's operations and activities, or limit our ability to collect intelligence in territorial seas. Quite simply, they are wrong. The Convention in no way harms our intelligence collection activities or constrains our military operations. On the contrary, U.S. accession to the Convention secures our freedom of navigation and over-flight rights as bedrock treaty law. Third, some allege that in joining, our military would be subject to the jurisdiction of international courts - and that this represents a surrendering of U.S. sovereignty. But once again, this is not the case. The Convention provides that a party may declare it does not accept any dispute resolution procedures for disputes concerning military activities. This election has been made by 20 other nations that have joined the Convention, and the United States would do the same. The bottom line is that neither U.S. military activities nor a U.S. decision as to what constitutes a U.S. military activity would be subject to review by any international court or tribunal. Fourth, some argue that certain military activities - specifically, our ability to conduct maritime interdiction operations - will be constrained because the Convention only recognizes the right of warships to board ships suspected of engaging in piracy, the slave trade or being stateless. Again, this is simply not the case. The U.S. and our partners routinely conduct a range of interdiction operations at sea based on UN Security Council Resolutions, treaties, port state control measures and the inherent right of self-defense. Further, the Convention expands the range of interdiction authorities found in the 1958 Law of the Sea Conventions we've already joined. In short, the U.S. would be able to continue conducting the full range of maritime interdiction operations.

Myth #2: Joining the Convention will surrender U. S. sovereignty by submitting the US. Navy to the jurisdiction of international courts or tribunals.

2015, "21st Century Complete Guide to the Law of the Sea Treaty (LOST)," Progressive Management, (book)

<u>Military officers serving as members</u> on the United States delegation that negotiated the Convention ensured that it contained a military activities exemption from dispute resolution, which is ironclad. The

Convention they helped craft permits a maritime nation, like the United States, to use compulsory dispute resolution as a sword against foreign coastal state encroachment while simultaneously shielding military activities from review. Given the central importance of this issue, it is important to review the compulsory dispute resolution procedures contained in Part XV, Section 2 of the Convention, and explain, in detail, how <u>Article 298 of the Law of the Sea Convention, under its express terms, will pennit the United States</u> to completely exempt its military activities from dispute resolution, and prevent any opposing State or court or

tribunal from reviewing our determination that an activity is an exempted military activity. Part W, Section 2 of the Convention is titled, "Compulsory Procedures Entailing Binding Decisions." Section 2 is comprised of eleven Articles (286 - 296), which contain the compulsory dispute resolution procedures that some are concerned could be used to effect a review of our military activities. Section 2 begins with Article 286, which provides that, except as provided in Section 3 of the Part XV, "any dispute concerning the interpretation or application of this Convention shall, where no settlement has been reached by recourse to Section 1, be submitted at the request of any party to the dispute to the court or tribunal having jurisdiction under this section." Article 287 then provides the choice of procedure election. The President has asked the Senate to reject the first two choices available, the International Court of Justice and the International Tribunal for the Law of the Sea, and instead choose arbitration (what are referred to formally as arbitral tribunals). Now, let's move on to Section 3, which is titled, "Section 3. Limitations and Exceptions to Applicability of Section 2." In Section 3 we find Article 298; and in Article 298, subparagraph, it states in pertinent part 1. When signing, ratifying, or acceding to this Convention or at any time thereafter, a State may.. .declare in writing that it does not accept any one or more of the procedures provided for in section 2 with respect to one or more of the following categories of disputes..." There then follows three categories of disputes: Maritime boundary disputes, disputes involving military activities, and disputes involving matters before the United Nations Security Council. The president has asked the Senate to exempt all three categories. The key language from Article 298.1 is: "A State may declare that it does not accept any one or more of the procedures provided for in section 2." It is the fight of the State, and solely the State, to completely and preemptively reject all of the dispute resolution procedures provided for in Section 2. It is those very procedures that the opposing State or international court or tribunal would have to rely upon to try to assert authority over us. It simply does not get any better than that--not in private contract law nor in treaty law. What this Convention makes clear is that a State party can completely reject all the dispute resolution procedures—on its own terms—for disputes involving maritime boundaries, military activities, and matters before the Security Council. There is simply no process or procedure whereby our determination can be subject to review, because we have already preemptively rejected all the procedures provided for in Section 2, including

article 287 (choice of forum), article 288 (the night of a court or tribunal to determine its own jurisdiction), article 290 (provisional measures) and article 292 (prompt release). All permanent members of the United Nations Security Council (except the United States) and numerous other countries have taken the military activities exemption. They, like us, would never accept a court or tribunal acting ultra vires—beyond the limits of the Convention itself.

2. The idea that international tribunals hate the US and often rule against them is patently false. In an analysis of 18 different multilateral treaties with mandatory dispute settlement clauses, serious cases were brought against the US in only 3. (Brower - Yale)

Julia Brower, 2012 ", Yale, https://law.yale.edu/system/files/documents/pdf/cglc/yale law school - unclos and arbitration.pdf (NK) The United Nations Convention for the Law of the Sea (UNCLOS) establishes a compulsory dispute settlement regime for resolving disagreements between member states. Critics of the Convention have argued that the mandatory dispute resolution provisions force member states to cede too much control over the dispute resolution process to an international body. They have also [Critics of UNCLOS] argued that the dispute resolution process is biased against the United States, and that the United States tends to fare poorly in international arbitration proceedings. This report addresses the first criticism by examining possible exceptions to mandatory dispute resolution provisions. At least one Annex VII tribunal has interpreted Article 281(1) of UNCLOS to permit states to contract around the mandatory dispute resolution provision through regional agreements. However, a subsequent tribunal applied a much more constrained interpretation of the Article 281 exception. Ultimately, the impact of this exception will depend upon which interpretation is applied. The report also examines the scope of the Article 298(1)(c) exception, which exempts from binding resolution "disputes in respect of which the Security Council . . . is exercising the functions assigned to it by the [U.N.] Charter." This exception is not confined to specific subject matters, but it is limited by the procedural difficulties of adding or removing an item from the Security Council's agenda, as well as by the political costs that such an effort entails. Finally, the report notes that UNCLOS's compulsory dispute settlement regime is not accompanied by similarly robust enforcement provisions. The report addresses the second criticism by examining the United States' record in arbitration proceedings under eighteen multilateral treaties containing mandatory dispute resolution provisions, as well as a series of bilateral aviation agreements that provide for mandatory dispute resolution. Fifteen of those agreements have yielded very few readily identifiable arbitration proceedings involving the United States. The record of the United States under the three agreements through which there have been arbitral proceedings of note is as follows: • The World Trade Organization (WTO): The United States has been highly successful in the cases it has initiated (winning 90%), but less successful in those in which it has

served as the respondent (winning 19%). However, many of the losses were in cases where only relatively minor economic or political concerns

were at stake. • The North American Free Trade Agreement (NAFTA): Three disputes have been brought to arbitration. The arbitral panels have ruled against the United States in all.

<u>R/T PSI</u>

Lol

Matthew Ivey, Dartmouth Law Journal, 2009, "National Security Implications in the Global War on Terrorism of the United States Accession to the United Nations Convention on the Law of the Sea"

.https://www.unclosdebate.org/citation/128/national-security-implications-global-war-terrorism-united-states-accession-united (NK) The Proliferation Security Initiative (PSI), announced by President Bush on May 31, 2003, is an international effort promoting the global interdiction of shipments of weapons of mass destruction (WMD) and their delivery systems worldwide.²⁵ On September 4, 2003, the eleven participating nations released a statement in Paris outlining PSI's initiatives.²⁶ The aim of PSI is to create an enhanced approach to preventing proliferation of WMD.²⁷ In order to ensure congruence with other bodies of law, PSI specifically states that it will be implemented as is

consistent with national law and international law.²⁸ <u>All of the PSI partners, with the exception of the United States,</u> are already parties to UNCLOS. This fact demonstrates that state national security interests under the <u>PSI are not put in jeopardy by becoming a party to UNCLOS.</u> Indeed, John Bolton, former United States ambassador to the United Nations, argued that UNCLOS will not impede the goals of the PSI in testimony before the Senate Armed Services Committee, stating: "If the Senate were to ratify the Law of the Sea Treaty and the president were to make the treaty [...] it would not have any negative impact whatsoever on PSI."³⁰

Link Turn

TURN: Aff increases PSI Efficacy (Ayres - CFR)

Alyssa Ayres, May 2009, "The National Interest and the Law of the Sea," Council on Foreign Relations, <u>https://www.cfr.org/report/national-interest-and-law-sea</u> (NK) The United States also puts its sailors in unneeded jeopardy when carrying out the Freedom of Navigation program to contest Law of the Sea abuses. – T<u>he United States cannot today expand the Proliferation Security Initiative with several</u> <u>critically important Pacific countries. Although supportive of U.S. counter proliferation efforts, these</u> <u>countries indicate that U.S. refusal to join the convention has eroded their confidence that the United</u> <u>States will abide by international law when conducting PSI interdiction activities</u>. – U.S. firms and citizens cannot take advantage of the arbitration processes established within the convention to defend their rights against foreign encroachment or abuse

Myth #6: If the US Navy seizes a terrorist vessel on the high seas or captures a vessel carrying weapons of mass destruction, it will be subject to "prompt release" under Article 292 of the Convention.

2015, "21st Century Complete Guide to the Law of the Sea Treaty (LOST)," Progressive Management, (book)

There are two things wrong with that argument. <u>First, under Article 298 of the Convention, the United States will</u> reject all the dispute resolution procedures for disputes concerning US military activities, and those procedures include Article 292. (See Myth #2 above.) Second, <u>Article 292, itself, is quite clear that it only</u> applies to the prompt release of vessels seized for violating fishing or marine pollution regulations in

Exclusive Economic Zones. Specifically, in the very first sentence in Article 292, it states that a tribunal or court may only order the prompt release of vessels when, "it is alleged that the detaining State has not complied with the provisions of this Convention for the prompt release of the vessel or its crew upon the posting of a reasonable bond or other financial surety..." **There are only three**

provisions in the Convention for prompt release of vessels upon the posting of a reasonable bond or other financial surety: Articles 73, 220, and 226, and those expressly involve fishing cases and marine pollution cases. In fact, the International Tribunal for the Law of the Sea has ordered the prompt release of vessels seven times in it's entire history—all involved the release of fishing vessels in accordance with Articles 292 and 73. The negotiating history of the treaty is crystal clear on this point. (See pages 67-71 of Volume V of the University of Virginia Commentary, which is widely recognized as the definitive commentary on the Convention.)

Myth #7: Article 23 of the Convention, which recognizes the right of innocent passage for nuclear powered ships and ships carrying nuclear or other inherently dangerous substances, will prevent the United States from interdicting a North Korean vessel in US. territorial seas (or another Nation's territorial seas) even if the vessel is carrying a nuclear bomb for delivery to Iran.

2015, "21st Century Complete Guide to the Law of the Sea Treaty (LOST)," Progressive Management, (book)

As noted earlier, the US. already is bound to and abides by the provisions on innocent passage; thus, foreign flag ships already have the right to exercise innocent passage through the territorial sea of the United States (and other nations' territorial seas). Article 23 of the Convention was adopted at the insistence of the US. delegation to protect the innocent passage of US. warships and to prevent U.S. ships from having to declare their cargo as a condition of entering foreign territorial seas. Article 23 does not constrain U.S. interdiction activities in any manner whatsoever. As noted earlier, the United States relies on all of its interdiction authorities (and those of its friends and allies) to combat the transport of weapons of mass destruction. Indeed, the founding principles of the Proliferation Security Initiative (PSI) are based on PSI participants using their respective national legal authorities and international law (including the Convention) to interdict weapons of mass destruction and related material. If a North Korean ship were carrying a nuclear weapon to Iran, it would be interdicted. In fact, vessels carrying North Korean and Libyan material have been interdicted under PSI in accordance With the Law of the Sea Convention.

R/T Nuclear Terrorism Generic

1. Tons of operational hurdles, like making sure the group isn't big enough, moving the weapon around without detection or loss, and if they should transport the weapons themselves and risk capture

Melley 17 Brendan G. Melley is a senior research fellow at the National Defense University Center for the Study of Weapons of Mass Destruction. He received a master's in WMD Studies as a National Defense University Countering WMD graduate fellow, 2017, "Nuclear Terrorism –Imminent Threat?," The Simon Center, http://thesimonscenter.org/wp-content/uploads/2017/08/IAJ-8-3-2017-pg52-61.pdf //DF

In addition to the actual manufacturing of a device, operational security would be one of the terrorist groups' major challenges. <u>The more people involved in what most likely would be a terrorist</u> <u>organization's most sensitive operation, the more the risk of detection and disruption by law</u> <u>enforcement or intelligence personnel.</u> If the group is not adequately walled off or quarantined (for what likely would be an extended period of time), some might brag or even just hint at the importance of the project, and this might be detected. Another operational consideration that terrorists would have to contend with is the physical movement of the device to its intended target, from the safe haven in which it was manufactured. <u>Dozens of national and international programs have been created</u> after the attacks on September 11, 2001, <u>to monitor the trade routes that supply goods to markets around the world.</u> Terrorists would have to conduct "complex international operations involving training, travel,

visas, finances and secure communications" to be able to accomplish such an operation.21 Even if mechanisms can be thwarted or bypassed, the mere perception of a concerted international effort to find nuclear weapons in the global commons might be expected give a terrorist group pause as they consider how best to move their weapon. Finding a pathway to move a nuclear device potentially around the world is not without significant risk of losing physical control of the cargo, or having it detected and stopped. Using black market smuggling routes and facilitators could be one possible option, but terrorists would face the attendant risks of losing the shipment to criminal interlopers who might not know anything about the cargo other than it had high value to the shipper, and thus could be stolen from the terrorists. A related logistics question is whether the terrorist group would choose to accompany their cargo throughout the path to its destination. This would inevitably raise the profile of the shipment for the necessity of it being monitored. Accompanying the shipment will create risks for the terrorists themselves, as they could be identified in transit by law enforcement or intelligence agencies. Throughout the journey, anyone whom the terrorists might consider as "trusted" accomplices would create more vulnerabilities, as more people become aware of the importance of the cargo. Knowing these risks, if the terrorists decided to send the cargo without physical accompaniment, they would thus be putting their most valuable cargo into the international shipping system and hope that the system delivers the weapon to their designated far-end, witting, recipient for final preparations and movement to the intended target.

2. Terrorists groups would almost certainly lack the ability to test the weapons before use, which runs the very high and dangerous risk that they don't work

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For the first question, without a testing program, the production of even a crude gun-type device may not produce a functioning device.22 Terrorists want to be seen by their audience as being successful in executing a nuclear attack. Their sponsors' confidence would be eroded, and the confidence of the intended audience could be enhanced, by the production of a device that did not work. Without the involvement of skilled engineers and scientists throughout the process, a terrorist group could not be sure that whatever instructions they received were accurate, or even adequate to create a working nuclear device. Regarding the second question, it is useful to consider that if terrorists only acquired the material for one bomb, "they would still lack an arsenal—and a single mistake in design could wreck the whole project."23 Moreover, a terrorist group should certainly recognize that after exploding a nuclear weapon, the combined efforts of the world's law enforcement, intelligence, diplomatic and military resources would be deployed to find them and bring them to justice. If the terrorists claimed to have additional nuclear weapons, the hunt would be even more urgent and unrelenting until the terrorists and their weapons were found. While terrorists may employ suicide bombers, the terrorist leadership itself surely would want to live to guide the organization and likely would see the need to develop a good plan for staying hidden and alive for a lengthy period of time. The security of terrorists' operations from

leaks or the disruptive effect of counterterrorism missions, combined with the challenges of coordinating and executing secure shipment, add extra elements of risk and uncertainty to the major challenges terrorists face in trying to acquire the nuclear material itself.

3. There would also be the risk that only one bomb wouldn't be enough since anything could go wrong, but also that multiple bombs would only enhance the already massive effort to find the terrorists that would inevitably form

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leaks or the disruptive effect of counterterrorism missions, combined with the challenges of coordinating and executing secure shipment, add extra elements of risk and uncertainty to the major challenges terrorists face in trying to acquire the nuclear material itself.

Deterrence DOES work for terrorists when it comes to the extremely high-risks of nuclear attacks

Melley 17 Brendan G. Melley is a senior research fellow at the National Defense University Center for the Study of Weapons of Mass Destruction. He received a master's in WMD Studies as a National Defense University Countering WMD graduate fellow, 2017, "Nuclear Terrorism –Imminent Threat?," The Simon Center, http://thesimonscenter.org/wp-content/uploads/2017/08/IAJ-8-3-2017-pg52-61.pdf //DF

While there have been very few nuclear terrorist attacks from which conclusions can be drawn, it also is not possible to rule out the extent to which terrorists are being deterred or disrupted from conducting a nuclear attack. Although deterrence has historically been associated with nation states, the

organizations and aims that present themselves as factors in a comprehensive deterrence calculus are fundamentally the same for states and nonstate actors.32 Indeed, <u>despite the popular belief</u> (although not one held by many terrorism analysts 33) <u>that terrorist organizations and leaders are irrational and even suicidal, it may be that the United States and partner nations fighting terrorism are successfully deterring nuclear terrorism even now. Key to this proposition is the decision making framework, i.e., what influences them to make the decisions they take, within which terrorist organizations tend to operate. For example, the leadership itself, or the support structure components, might be capable of being influenced, while the operatives themselves may not be dissuaded from attacking a target. It is generally agreed by analysts that suicidal terrorists are difficult to deter, based on their beliefs in the rewards they will attain upon being "martyred." Yet Jenkins notes that "[n]ot all terrorists welcome <u>death,"34 and even the</u></u>

most committed might be dissuaded by the idea of their "reward" being long-term confinement in a prison cell.35 Similarly, it may be possible to influence a terrorist leader's ability, or his perception of his ability, to achieve his political goals. In addition to the active international cooperative efforts to prevent access to nuclear materials, noted above, the disruptive effects of steady counterterrorist attacks on known terrorist bases and safe havens serve to highlight the risk of operational failure for terrorists. A failure to accomplish its mission of a devastating nuclear attack, either because of technical difficulties or the active measures to disrupt terrorist operations, would in turn undercut the stature or prestige of the group.36 This need to successfully accomplish what would be the ultimate terrorist mission could drive terrorist leaders to not take some of the risks that may be acceptable at lower levels of violence. The anticipated overwhelming retaliation for conducting an attack—a prime example of deterrence by punishment—could give some terrorists pause. As Jenkins notes, "An effective deterrent can reinforce existing self-imposed constraints by suggesting that any terrorist attack involving nuclear weapons will not only provoke retaliation but will leave the terrorist group isolated from its constituents, its hosts—those upon whom it depends for sanctuary and support".37

R/T Terrorists Make Nukes

1. No threat because the technology required to refine the uranium would be impossible to acquire

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The "supply" side of nuclear weapons production likewise poses significant technical and operational challenges for terrorists pursuing a nuclear weapon from raw fissile materials. <u>The simplest nuclear</u> <u>device to assemble would be a crude "gun-type" weapon with a quantity of highly enriched uranium</u>

(HEU).8 The concept is simple enough: by means of high explosives, drive one mass of HEU into another one, causing the now super-critical mass of HEU to release its energy in a nuclear explosion.9 Even so, substantial technical hurdles exist to getting the HEU into the right physical state, size, shape, and with the necessary chemical properties to be useful in a gun-type device.10 A possessor of uranium would have to refine the ore to metallic form, understand any impurities within its composition, cast it, and then machine it to precise specifications of size and shape.11 Terrorists would need access to highly specialized machinery and equipment in order to manufacture the necessary HEU for a nuclear device. Much of the equipment necessary is specifically designed for the particular purpose of nuclear weapons production (such as numerous sensitive high-speed gas centrifuges configurable into cascades) and not generally available on the open market. Indeed, the infamous nuclear program supplier Abdul Qadeer Khan needed years to assemble the equipment necessary to manufacture centrifuge parts for the state nuclear programs to which he sold. A terrorist group that chooses to pursue a large centrifuge plant for enriching uranium as its path to acquire fissile material for a nuclear weapon would be taking on a very long timetable to achieve its aims. Even committed states spend years acquiring, manufacturing and testing centrifuge cascades. "The equipment is so specialized, and the suppliers so few, that a forest of red flags would go up."12 Customs and export licensing officials in most countries would take notice of the equipment and materials being transferred, ask questions, and possibly prevent the shipment from being sent or received. Plutonium, a by-product of uranium in nuclear power plant operations, is available in hundreds of reactors around the world.13 Here again, however, the weaponization process is not a simple one. Weapons-ready plutonium must be chemically reprocessed in order to be suitable for an implosion-type device, in which exactly shaped high explosives rapidly compress a mass of plutonium into itself and create a nuclear explosion.14 To accomplish this, terrorists would need "precision machine tools to build the parts, special furnaces to melt and cast the plutonium in a vacuum ... and high-precision switches and capacitors for the firing circuit."15 Plutonium is harder to handle than HEU due to its high heat and radioactivity and requires more restrictive physical protective measures to

prevent radioactive sickness or death. Terrorists would have to observe the "absolute need of foreseeing, preparing for, and observing all the necessary precautions" of working with plutonium.16 If terrorists had access to a nuclear reactor that produced plutonium, they would need a "special, shielded chemical plant to chop up its radioactive fuel, dissolve it in acid, and then extract the plutonium from the acid."17

2. Incredibly difficult to assemble the needed production team of highly-skilled scientists without raising eyebrows

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Unless a state that was a nuclear power provided terrorists with an already manufactured warhead, <u>terrorists would need time</u>, a secure space, and a talented team of engineers, chemists, metallurgists, <u>and physicists</u>. Highly trained personnel such as these, ideally with experience in a state's nuclear
weapons program, <u>might be able to be identified as potential recruits to the terrorist organization</u>, <u>either for money or ideology</u>. It is even quite possible that a few former weapons designers and engineers would be susceptible to being recruited by a terrorist group. However, <u>it is far from certain</u> <u>that an entire weapons design and manufacturing team could be assembled securely by a terrorist</u> <u>group at one time</u>. In addition to the actual manufacturing of a device, operational security would be one of the terrorist groups' major challenges. The more people involved in what most likely would be a terrorist organization's most sensitive operation, the more the risk of detection and disruption by law enforcement or intelligence personnel. If the group is not adequately walled off or quarantined (for what likely would be an extended period of time), some might brag or even just hint at the importance of the project, and this might be detected.

R/T States Give Terrorists Nukes

This will never happen; giving a terrorist a nuke would be suicidal

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The Commission on the Prevention of WMD Proliferation and Terrorism noted that as proliferation of WMD programs continues, the risk grows that some state, friendly to terrorist groups, will permit or enable the transfer of WMD material to terrorists.24 On the other hand, states that possess nuclear material are not likely to transfer a weapon or weapons-usable material to a terrorist or non-state actor without a great deal of confidence that the transfer would go undetected, and attribution would remain undetermined. This would mean that "a state seeking to orchestrate a nuclear attack by proxy would be limited to collaboration with well established terrorist organizations with which it had existing relationships, simplifying the task of connecting terrorist perpetrators to their state sponsors."25 Moreover, "no state would be likely to give its nuclear weapons or materials to a terrorist organization with which it did not have a long record of cooperation and trust."26 "Few states trust their proxies," comment one analyst, "and indeed they often gravely weaken movements they support in order to control them."27 A terrorist group "might use the weapons or materials in ways the state never intended, provoking retaliation that would destroy the regime."28 For example, "Iran lacks deniability for the groups to which it might transfer more-advanced systems, but lacks the trust that would make it more likely to transfer advanced systems."29 Terrorists should expect intense retribution, whether they had a "return address" or not. A nuclear terrorist attack would prompt an immense, "unprecedented," 30 international effort to determine the source of the material, and attribution efforts

likely would continue for as long as it took for responsibility for the attack to be judged. Simply, the risk of being held responsible would seem very high for a state that provides nuclear material to a terrorist group. Brian Jenkins notes, "It would require a government to take enormous risks. ... [E]ven state sponsors of terrorism have become more cautious when engaging in larger-scale, higher-risk operations."31

R/T Terrorists Steal Nukes

No chance because states guard them to closely

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Nuclear terrorism threats could take shape in three general pathways: the deliberate transfer of nuclear material from a state to a terrorist group or non-state actor; the sale of nuclear materials to a non-state actor on the black market, which may end up in the hands of a terrorist group; and, the theft or "leakage," or unintentional diversion of nuclear material from a state program.5 The question of whether terrorists would be able to steal an actual nuclear weapon from a nuclear-armed state, while conceivable, is highly problematic due to the extraordinary security afforded nuclear weapons. Attention usually is drawn to those nuclear states with perceived less than-optimal security over their stockpiles and weapons; and many analysts point out that the spread of nuclear weapons to North Korea, and potentially Iran, increases the risk of terrorists getting access to nuclear material or weapons through collusion with regime officials, or lack of effective oversight or security. Allied to this is the fear that presently non-nuclear states will pursue a nuclear weapons program in Asia or the Middle East to counter North Korea's and Iran's (apparently suspended) nuclear weapons programs. This possibility would, of course, offer terrorists potentially more opportunities to acquire a weapon or the necessary material. However, the same reasons why existing nuclear states feel dis-incentivized to share nuclear weapons with terrorist would apply to these nuclear aspirants as well.