**1NC**

**A. Interpretation: The aff must defend that one or more member nations of the WTO reduce IP protections for medicines. “Nations” in the resolution is a plural noun which implicates more than one nation.**

Daniel **Scocco, 2007** (English Grammar 101: Plural Form of Nouns. Online. Internet. Accessed May 13, 2014 at http://www.dailywritingtips.com/english-grammar-101-plural-form-of-nouns/)

**The English language has both regular and irregular plural forms of nouns. The most common case is when you need to add -s to the noun. For example one car and two cars.**

**Nations is definitely plural.**

**Collins Dictionary** https://www.collinsdictionary.com/dictionary/english/nation#:~:text=Word%20forms%3A%20plural%20nations

**Word forms: plural nations**

**B. Violation: The plan only applies to one nation**

**2. Limits – their interp allows them to specify any country which explodes neg prep burden since there’s no unifying ground versus the Jordan aff or Russia aff**

**4. TVA – defend Jordan and the uS – TRIPS plus is what causing the worse economic situation in Jordan**

**No RVIs—it’s your burden to be topical**

**1NC**

#### Interpretation – topical affs must defend a reduction of intellectual property protections.

#### IP is a specific, definable category which doesn’t include data exclusivity. WTO

“World Trade Organization.” WTO, https://www.wto.org/english/tratop\_e/trips\_e/intel1\_e.htm.

Intellectual property rights are the rights given to persons over the creations of their minds. They usually give the creator an exclusive right over the use of his/her creation for a certain period of time. Intellectual property rights are customarily divided into two main areas: (i) Copyright and rights related to copyright.[back to top](https://www.wto.org/english/tratop_e/trips_e/intel1_e.htm#top) The rights of authors of literary and artistic works (such as books and other writings, musical compositions, paintings, sculpture, computer programs and films) are protected by copyright, for a minimum period of 50 years after the death of the author. Also protected through copyright and related (sometimes referred to as “neighbouring”) rights are the rights of performers (e.g. actors, singers and musicians), producers of phonograms (sound recordings) and broadcasting organizations. The main social purpose of protection of copyright and related rights is to encourage and reward creative work. (ii) Industrial property.[back to top](https://www.wto.org/english/tratop_e/trips_e/intel1_e.htm#top) Industrial property can usefully be divided into two main areas: One area can be characterized as the protection of distinctive signs, in particular trademarks (which distinguish the goods or services of one undertaking from those of other undertakings) and geographical indications (which identify a good as originating in a place where a given characteristic of the good is essentially attributable to its geographical origin). The protection of such distinctive signs aims to stimulate and ensure fair competition and to protect consumers, by enabling them to make informed choices between various goods and services. The protection may last indefinitely, provided the sign in question continues to be distinctive. Other types of industrial property are protected primarily to stimulate innovation, design and the creation of technology. In this category fall inventions (protected by patents), industrial designs and trade secrets. The social purpose is to provide protection for the results of investment in the development of new technology, thus giving the incentive and means to finance research and development activities. A functioning intellectual property regime should also facilitate the transfer of technology in the form of foreign direct investment, joint ventures and licensing. The protection is usually given for a finite term (typically 20 years in the case of patents). While the basic social objectives of intellectual property protection are as outlined above, it should also be noted that the exclusive rights given are generally subject to a number of limitations and exceptions, aimed at fine-tuning the balance that has to be found between the legitimate interests of right holders and of users.

#### Prefer –

#### Limits – allowing non intellectual property explodes limits to include literally all possible plans out there – makes neg prep impossible because the case negs to the different affs would have no overlap

**1NC –ME War Good**

#### Limited Middle Eastern War is good

#### Oil prices are sliding – two days in a row, dollar strength, Ida, increased production, and tapering asset purchases

Paraskova 9/20/21 [Tsvetana is a writer for Oilprice.com with over a decade of experience writing for news outlets such as iNVEZZ and SeeNews. "Oil Prices Fall As Traders Anxiously Await Fed’s Decision." https://oilprice.com/Energy/Oil-Prices/Oil-Prices-Fall-As-Traders-Anxiously-Await-Feds-Decision.html]

Oil prices dropped early on Monday as the U.S. dollar continues to strengthen ahead of the Fed’s much-anticipated policy meeting this week, which could announce the beginning of stimulus easing.

As of 9:05 a.m. EDT, WTI Crude was losing 1.75% at $70.71 and Brent Crude prices were down 1.49% at $74.21.

The oil market is down for a second consecutive day after Friday’s session settled in the red, as broader markets are anxiously watching whether the Federal Reserve will announce the start of asset purchase tapering at its meetings on Tuesday and Wednesday. The U.S. dollar gains were depressing the oil market as a stronger greenback makes oil buying more expensive for holders of other currencies.

The risk to U.S. oil production in the Gulf of Mexico is now diminishing as more output is being restored in the wake of Hurricane Ida. The return of more production from the U.S. offshore also weighed on oil prices early on Monday.

“As this week starts, much of the US market tightening on account of Ida is already baked into prices, while outages in offshore oil production and Louisiana refining capacity are continuing to ease,” Vanda Insights said in a note early on Monday.

The U.S. dollar and the Fed meeting will be the key external factors that will determine oil’s direction this week, apart from the usual U.S. inventory reports by the API and EIA, ING strategists Warren Patterson and Wenyu Yao say.

“All eyes will be on the FOMC meeting on Wednesday, where some believe we could already see the Fed announce its intentions to start tapering asset purchases, though our US economist is of the view that an announcement is more likely in November. A tapering announcement this week would likely put some downward pressure on oil and the broader commodities complex,” they noted.

#### Oil prices will decline – OPEC will increase production – our ev is predictive

Julia Fanzeres 9-30-21, "Biden renews OPEC outreach as oil prices climb 10% in September," 9-30-2021 https://www.worldoil.com/news/2021/9/30/biden-renews-opec-outreach-as-oil-prices-climb-10-in-september

The rising price of oil “is of concern for the U.S.,” said White House press secretary Jennifer Psaki. The U.S. has been in touch with OPEC about oil prices, she said at a press briefing. Heading into next week’s meeting between OPEC and its partners, there is increased speculation that the organization will consider raising production more than the previously announced hike of 400,000 barrels a day.

“With oil prices at multi-year highs, we think that OPEC will come under increasingly intense pressure from Washington to increase production,” RBC analyst Helima Croft said in report.

#### Middle East war is good—it raises oil prices

Lynch 18 [Michael Lynch spent nearly 30 years at MIT as a student and then researcher at the Energy Laboratory and Center for International Studies. He then spent several years at what is now IHS Global Insight and was chief energy economist. Currently, Lynch serves as the president of Strategic Energy and Economic Research, Inc., and lectures MBA students at Vienna University. He’s been president of the US Association for Energy Economics and serves on the editorial boards of three publications. Will Oil Prices Blow Up With The Middle East? April 12, 2018. https://www.forbes.com/sites/michaellynch/2018/04/12/will-the-oil-price-blow-up-with-the-middle-east/#166754c23d19]

It's said that a woman once approached 19th century German Chancellor Bismarck and asked him to explain the controversy over Schleswig-Holstein, to which Bismarck responded, “Madam, only three people have ever understood Schleswig-Holstein. One is dead, the second has gone mad, and I’m the third and I’ve quite forgot.” This summarizes how I feel about the current Middle East situation. The public rhetoric (including tweets) suggests that the U.S. and Russia are both willing to attack each other’s forces -- the U.S. is planning an attack on Syrian forces that might affect Russian personnel and Russia is apparently threatening to shoot down U.S. planes. This is obviously concerning, and while incidental Russia casualties might not lead to a direct military response, if Russia shot down a U.S. plane (as opposed to an unmanned missile), the U.S. would almost certainly respond. Given that the Russians know this, they are unlikely to take such a step. An additional factor is the possibility that Iranian forces in Syria would be hit by any U.S. attack, which might invite retaliation. Iran is unlikely to be able to attack U.S. forces in the Mediterranean directly, but forces in Iraq and Syria might be subject to ‘asymmetrical warfare,’ i.e., small-scale attacks, possibly including suicide bombers. The threat to oil markets come if Iranian actions encourage President Trump to refuse to recertify the Iranian nuclear agreement in mid-May. While many of Iran’s customers in Asia would not be concerned, there might be some drop in sales from companies fearful of U.S. legal action. Sanctions on financial transfers would also deter the more conventional customers, but the Iranians should be able to work around that after a brief pause. Could this also mean an escalation in the conflict between Iran and Saudi Arabia (or more broadly but less accurately, Shia versus Sunni regimes)? Given that the Saudis have been attacking Iranian-supported Houthis in Yemen without direct response by Iran for some time now, any Saudi actions in Syria seem unlikely to be a provocation that would worsen the situation in the Gulf. FDR’s comment that ‘we have nothing to fear but fear itself’ seems appropriate for oil traders. Bombs and missiles flying in the greater Middle East always creates a bullish impetus on prices, even if the oil fields remain distant from the actual violence. The death of Russian personnel would worsen this, as it implies a greater probability of retaliation and continuation of the conflict which, again, would push up oil prices. And naturally, should Iranian personnel be affected, there would be very rational concerns that they might respond with some sort of attack that could affect Gulf oil trade. The worst case scenarios -- ongoing U.S.-Russian combat or direct Saudi-Iranian fighting -- seem very unlikely to happen. But as long as the possibility exists, oil prices will remain elevated, with WTI perhaps hitting $70 or higher, and only coming down when it has become clear that the violence is diminishing and will not spread. Until then, expect a bumpy ride.

#### Low prices destroy Chinese foreign investment

Tao ’16 (Wang Tao – PhD in Environmental Economics @ the University of York, Nonresident scholar in Carnegie’s Energy and Climate Program base at the Carnegie–Tsinghua Center for Global Policy. “WILL LOW OIL PRICES DESTABILIZE THE WORLD?” 20 January 2016, http://www.newsweek.com/will-low-oil-prices-destabilize-world-417885)

Counterintuitively, China, as the world’s largest oil importer, is not applauding the current low oil price. It is true that low oil prices could mean large savings for China in terms of oil imports, but Beijing’s non-transparent pricing of domestic oil products increased discontent among the public when China’s price adjustment of gasoline failed to follow international trends. Chinese citizens dismissed the government’s excuse of protecting the environment, despite three air pollution red alerts in Beijing in four weeks at the end of 2015. The low oil price has made many of China’s overseas oil investment projects uneconomical, like the oil and gas import contracts that China’s national oil companies signed recently. In the case of Venezuela, where China has invested billions of dollars and still holds dozens of billions of dollars in unpaid loans, the risk to the governing regime and to China’s assets is accumulating at a worrying rate.

#### That causes Chinese lash out and global war

Tweed ’15 (David Tweed – Hong Kong based report for Bloomberg, editor for Bloomberg Europe, “Five Million Reasons Why China Could Go to War.” 15 June 2015, http://www.bloomberg.com/news/articles/2015-06-15/five-million-reasons-china-may-be-drawn-into-foreign-conflicts)

With five million citizens to protect and billions of investment dollars at stake, China is rethinking its policy of keeping out of other countries’ affairs. China has long made loans conditional on contracts for its companies. In recent years it has sent an army of its nationals to work on pipelines, roads and dams in such hot spots as South Sudan, Yemen and Pakistan. Increasingly, it has to go across borders to protect or rescue them. That makes it harder to stick to the policy espoused by then-premier Zhou Enlai in 1955 of not interfering in “internal” matters, something that has seen China decline to back international sanctions against Russia over Ukraine or the regime of Syrian President Bashar al-Assad. As President Xi Jinping’s “Silk Road” program of trade routes gets under way, with infrastructure projects planned across Central Asia, the Indian Ocean and the Middle East to Europe, China’s footprint abroad will expand from the $108 billion that firms invested abroad in 2013, up from less than $3 billion a decade earlier. That is forcing China to take a more proactive approach to securing its interests and the safety of its people. With more engagement abroad there’s a risk that China, an emerging power with a military to match, is sucked into conflicts and runs up against the U.S. when tensions are already flaring over China’s disputed claims in the South China Sea.

#### Oil and gas key to Canadian economy – contributes both directly and indirectly to the rest of the economy

* 8 percent of Canadian GDP & tax revenue
* Direct contributor through employment
* Indirect contributor through links to other industries

Globerman and Emes 19, Steven Globerman is a Resident Scholar and Addington Chair in Measurement, Professor Emeritus, Western Washington University and Joel Emes is a Senior Fellow at Fraser Institute, 5-7-2019, "Investment in the Canadian and U.S. Oil and Gas Sectors: A Tale of Diverging Fortunes," Fraser Institute, https://www.fraserinstitute.org/studies/investment-in-the-canadian-and-us-oil-and-gas-sectors-a-tale-of-diverging-fortunes, HKR-AT

The **oil and gas industry is critically important to Canada’s economy.** **It accounts for almost 8 percent of Canada’s GDP,** as well as for a significant share of the tax revenue collected by governments. The oil and gas sector is particularly important to the provincial economies of Alberta and Saskatchewan. It accounts for almost 30 percent of Alberta’s GDP and slightly over 23 percent of Saskatchewan’s GDP. As such, the economic health of the oil and gas sector is a direct contributor to employment and economic activity in Western Canada and an indirect contributor to the rest of the domestic economy through links to industries that supply inputs to the sector, as well as use the outputs of the sector. The upstream segment of the oil and gas sector encompasses exploration and production of crude oil and natural gas. It is the single largest segment of the oil and gas sector, which also includes midstream gathering and pipeline facilities and downstream refineries. The oil sands account for almost two-thirds of Canada’s oil production. Since activity in the mid and downstream sectors will ultimately reflect the production of crude oil and natural gas in the upstream sector, the willingness of companies to explore for and produce oil and gas in Western Canada dictates the pace of economic activity throughout the industry’s total supply chain. A sharp drop in the world price of crude oil in 2015 and 2016 hurt the profitability of upstream oil and gas companies in both Canada and the US. However, while economic activity in the US upstream segment increased substantially with a modest recovery in crude oil prices in 2017 and 2018, investment in Canada’s upstream segment as a share of total capital expenditures in Canada declined consistently from 2014 through 2018. While total capital expenditures in Canada declined post-2014, the decline in capital expenditures for oil and gas extraction was even more pronounced. Thus, while capital expenditures for oil and gas extraction accounted for approximately 28 percent of total Canadian industrial capital expenditures in 2014, oil and gas extraction accounted for only 14 percent in 2018. Investment analysts and portfolio managers have recently warned that investment in the oil and gas sector is moving increasingly to the US and away from Canada, and that they are reluctant to invest their clients’ savings in Canadian oil and gas companies. An unfavourable business environment for oil and gas exploration and production in Canada is cited as the reason, particularly compared to the business environment in the US. A number of Canadian oil and gas companies have also reallocated their exploration budgets away from Western Canada to the more profitable shale oil producing regions of the United States. In the absence of changes to Canadian government policies affecting the sector, relatively low prices for Western Canada crude oil as well as depressed profitability of Canadian oil and gas companies are likely to continue. As a consequence, the ongoing shift in the location preferences of North American oil and gas companies towards the US might well intensify with drastic consequences for the fiscal health of the Alberta and Saskatchewan governments. While limited pipeline capacity is the major factor depressing the price of Canadian heavy crude oil, more favourable tax and regulatory environments in the US compared to Canada are also contributing to the diversion of upstream oil and gas investments from Canada to the US. By way of illustration, whereas capital expenditures in the upstream segment were around 41 percent higher for the US when comparing 2018 to 2016, they were only about 15 percent higher in Canada. An investment manager in the United Kingdom recently wrote a letter to Prime Minister Trudeau saying that it was hard for her to watch a vibrant Canadian oil and gas industry being strangled by regulation, carbon taxes, and the inability of producers to get their products to world markets. Recent investment patterns in the North American oil and gas sector support this sentiment.

#### Strong economy key to Canada’s global influence

Tilson 14 , MP, Ottawa Journal

(David, “Federal government promotes Canada’s global leadership,” 7-9-14, DOA: 12-29-14, <http://www.newspapers-online.com/caledon/?p=8477>, ava)

Canada is positioned to be a strong and credible voice on key issues in our global community. Our prominence and global influence on the world stage continues to grow under the leadership of Prime Minister Stephen Harper. In a time of global economic uncertainty, our government has prioritized Canada’s economic recovery and resulted in significant measures of economic success. With the creation of more than one million net new jobs since the depth of the global recession, we have the best job growth record among all G7 members. Our government’s investment in jobs, growth and long-term prosperity has enhanced the resilience of the Canadian economy, our economic credibility and in turn demonstrated to the international community that Canada is a great place to invest. Our government has remained focused on pursuing an ambitious and balanced trade agenda that will help Canada’s economic recovery and ensure long-term prosperity. In October, our government reached a free trade agreement with the European Union, a historic accomplishment for Canada’s trade relations. It will boost Canada’s economy by $12 billion annually — the equivalent of 80,000 jobs — and Canadian businesses will have preferential market access to the EU’s half a billion consumers. We also reached an agreement for free trade with South Korea, which is expected to help grow our economy by $1.7 billion per year. In addition to increased jobs and economic activity, expanding Canada’s free trade agreements also provides hard-working families more choice at a lower cost for everyday household goods. We are also working to maintain and build on all of Canada’s bilateral relationships. While in Malaysia, Prime Minister Harper signed a declaration of intent to conclude a new tax agreement between Canada and Malaysia to help promote trade and investment between the two countries. In an increasingly global community with shared concerns, our government is also committed to helping ensure the safety and security of Canadians and our interests abroad. While in Malaysia, Prime Minister Harper renewed our commitment to enhance security cooperation between the two countries for the safety of all our citizens. Prime Minister Harper also announced Canadian support for four projects that will strengthen Malaysia’s ability to counter international crime, human smuggling, and organized crimes. These projects build on what we’ve already done in the global community to help combat money laundering, terrorist financing, corruption, tax evasion and other crimes. Canada’s growing prominence on the world stage has also afforded us the opportunity to take a leadership role within the international community to address issues of human rights and equality, while promoting Canadian values of freedom, democracy, and rule of law. Our government introduced the Office of Religious Freedom to promote Canadian values of pluralism and tolerance in our global community. The Office is working with like-minded partners to raise awareness and develop policies and programs to protect religious minorities under threat, to oppose religious hatred and to promote tolerance. Prime Minister Harper has also demonstrated real leadership in addressing the health challenges and disadvantages faced by women, infants, and children in the poorest of countries, in launching the Muskoka Initiative on Maternal, Newborn and Child Health with G8 countries in 2010. Thanks to the Muskoka Initiative and subsequent global action, maternal and child mortality rates are declining. However, there is still more work to be done. Canada hosted the Summit on Maternal, Newborn and Child Health. Through this Summit, we are accelerating our health initiatives and continuing to push this issue into the forefront. Indeed, our government announced that Canada will be providing an additional $3.5 billion in funding for various projects to help children and mothers in the developing world. As we strengthen ties and promote economic prosperity, Canada is positioned to lead on the world stage and promote Canadian values. Our government is delivering on the priorities of Canadians.

#### Solves hotspot escalation and war

Towsend et al 13, Policy Research Initiative @ Canada@150

* Esp w/ US lack of credibility

(Thomas, “Canada’s Place in a Changing Geopolitical Landscape: Leveraging our Comparative Advantage,” Policy Horizons Canada,7-8-13, DOA: 12-28-14, <http://www.horizons.gc.ca/eng/content/canada%E2%80%99s-place-changing-geopolitical-landscape-leveraging-our-comparative-advantage>, ava)

As we look ahead to 2017, factors such as the rebalancing of powers on the international stage and the increasing influence of non-state actors are leading to a world that is, if nothing else, more complex and unpredictable. The confluence of known and unknown drivers of change may lead to unanticipated upheavals in the global order. Drivers such as climate change, resource scarcity, and demographics will challenge conventional geopolitical thinking in the coming decade. Similarly, poverty, pollution, and pockets of disaffected populations will fuel resentment and possibly extremism and violence. As diasporas find themselves increasingly co-localized, cultural, linguistic, religious, and socio-economic differences may stress established commons.1 There is a perception that Canada punches above its weight inter nationally.2 This will not necessarily be the case in the years to follow as the shifting geopolitical landscape may no longer support Canada’s privileged position. Looking ahead to 2017, Canada needs to be cognizant of the changing patterns of engagement, power, and security to assess implications for our country and its place in the world. Fine-tuning Canada’s relationship with the United States will continue to be a priority in 2017 in terms of inter alia trade, security and international engagement. The establishment of an Arctic balance of power will drive Canada’s involvement with circumpolar nations in light of climate change and sovereignty concerns. Canada will need to protect its position as a resource provider amidst competitors such as Russia, Brazil, and African countries, while ensuring the sustainability of its natural capital. Meanwhile, it will also need to deepen its economic and diplomatic ties with nations representing major future consumer demand, like China and India. Canada will need to contend with limited resources and its middle power status when addressing domestic and foreign challenges. These resource constraints affect not only the issues that Canada must address but also how the Public Service organizes itself to do so. This will mean making some difficult choices and acting strategically to leverage our comparative advantages where they exist. Canada should focus on areas where we are most likely to have an impact or in areas that are most important to our safety and prosperity by identifying the opportunities in global trends for Canada to strengthen its position internationally. Analytic Scope Our paper will focus on Canada’s place in a changing geopolitical landscape. We will examine Canada’s comparative advantage and how it can be levered in the years leading up to 2017. The Arctic, domestic security and international trade policy are being addressed by other papers in canada@150 and those issues will not be examined them here. We will target three thematic areas: international security, global governance, and relations between Canada and the United States. The approaches suggested in this paper are not mutually exclusive. Considering that Canada’s public service must evolve and organize itself to ensure that it can effectively represent Canadian interests on the world stage, we present two ideas for changes that will allow Canada to respond quickly and effectively to international events. These approaches will help to create a public service that is ready to address complex multi- stakeholder issues. Trends in violent conflict over the past 20 years warrant cautious optimism that traditional wars will continue to decrease in frequency and intensity as the international community maintains an active engagement in intervention and post-conflict peace-building activities.3 In 2017, however, the underlying causes of political and social instability and, as a result, of violence, will certainly remain. Factors such as climate change, poverty, and resource scarcity could lead to an increase in the prevalence of fragile states and the severity of conflicts. Fragile and conflict-affected situations pose a significant threat to Canada’s security and development interests.4 Canadian engagement in these states has traditionally involved modest interventions in peacekeeping and humanitarian aid.5 This focus has shifted with a more robust combat mission in Afghanistan. The decision to focus resources in Afghanistan has resulted in the mission being one of Canada’s main sources of geopolitical influence, increasing our standing among allies.6 Canada will face sustained pressure to contribute to the global security burden. NATO and the United Nations will look to Canada’s capacities to accept roles within larger strategic missions in conflict zones. Canada will also continue to be called upon by other domestic and international stakeholders to support humanitarian and peacekeeping interventions. Canada will be well placed for future interventions in fragile and conflict-affected states, having developed valuable expertise in Afghanistan, Sudan, Haiti, and a myriad of other countries over the course of the past 15 years, as well as an improved ability to work inter-departmentally towards security, diplomatic, and development efforts. Many lessons have also been learned, including the need for: improved planning capacity towards a long-term vision; interdepartmental agreement and buy-in on a single mandate; and focus to avoid spreading ourselves too thinly. Improved foreign intelligence capacity will also be vital to improve Canada’s planning capacity in this area.

#### ME war stops Saudi Arabia nuclear energy development

Green 17 [Dr Jim Green is the national nuclear campaigner with Friends of the Earth, Australia and editor of the Nuclear Monitor newsletter, published by the World Information Service on Energy. Is Saudi Arabia going nuclear? April 12, 2017. https://www.wiseinternational.org/nuclear-monitor/854/saudi-arabia-going-nuclear]

Military conflict Military conflict has been a recurring feature of Middle Eastern politics for decades and it isn't difficult to imagine military conflicts complicating and compromising nuclear power plants and associated facilities such as spent fuel stores. Since 2015, Saudi forces have intercepted missile attacks from Yemen on several occasions, including a missile attack on King Khalid International Airport in Riyadh in November 2017. "All airports, ports, border crossings and areas of any importance to Saudi Arabia and the UAE will be a direct target of our weapons, which is a legitimate right," the Houthi political office said in a statement on 7 November 2017.57 On 6 November 2017, the New York Times reported on the intercepted missile attack on the Riyadh airport: "Saudi Arabia charged Monday that a missile fired at its capital from Yemen over the weekend was an "act of war" by Iran, in the sharpest escalation in nearly three decades of mounting hostility between the two regional rivals. "We see this as an act of war," the Saudi foreign minister, Adel Jubair, said in an interview on CNN. "Iran cannot lob missiles at Saudi cities and towns and expect us not to take steps." ... The accusations raise the threat of a direct military clash between the two regional heavyweights at a time when they are already fighting proxy wars in Yemen and Syria, as well as battles for political power in Iraq and Lebanon. By the end of the day Monday, a Saudi minister was accusing Lebanon of declaring war against Saudi Arabia as well."58 Prince Turki al-Faisal said in 2016 that Saudi Arabia has "no illusions" about its limited nuclear security capabilities. "We know we have few capabilities in terms of human resources, so that's why we began a very extensive training and skills acquisition program," he said.15 A number of Middle Eastern countries (and the US) have developed their own response to the limitations of the IAEA safeguards system: bombing nuclear facilities suspected of being involved in covert weapons programs. Examples include the destruction of research reactors in Iraq by Israel and the US; Iran's attempts to strike nuclear facilities in Iraq during the 1980−88 war (and vice versa); Iraq's attempted strikes on Israel's nuclear facilities; and Israel's bombing of a suspected nuclear reactor site in Syria in 2007. Most of the above-mentioned attacks were directed at research reactors capable of producing plutonium for weapons, while Iraq attacked the partially-built Bushehr nuclear power plant in Iran in 1987. Israel has threatened to strike nuclear facilities in Iran in recent years. According to a cable released by Wikileaks, King Abdullah urged the US in 2008 to launch military strikes on Iran's nuclear program to "cut off the head of the snake".59 In time, nuclear power plants in Saudi Arabia might be the targets of military strikes, either to prevent their use in a weapons program or simply as an act of war or terrorism. Bennett Ramberg, a policy analyst in the US State Department’s Bureau of Politico-Military Affairs under President George H.W. Bush, wrote in 2014:60 "[W]arfare is rife with accidents and human error, and such an event involving a nuclear plant could cause a meltdown. A loss of off-site power, for example, could be an issue of serious concern. Although nuclear plants are copious producers of electricity, they also require electrical power from other sources to operate. Without incoming energy, cooling pumps will cease functioning and the flow of water that carries heat away from the reactor core ‒ required even when the reactor is in shutdown mode ‒ will stop. "To meet that risk, nuclear plants maintain large emergency diesel generators, which can operate for days ‒ until their fuel runs out. The reactor meltdowns at Japan’s Fukushima Daiichi power station in 2011 demonstrated what happens when primary and emergency operating power are cut. "Such vulnerabilities raise troubling questions in the event of a war. Fighting could disrupt off-site power plants or transmission lines servicing the reactor, and could also prevent diesel fuel from reaching the plant to replenish standby generators. Operators could abandon their posts should violence encroach.

#### Causes prolif – even if not, causes enrichment and reprocessing tech

Green 17 [Dr Jim Green is the national nuclear campaigner with Friends of the Earth, Australia and editor of the Nuclear Monitor newsletter, published by the World Information Service on Energy. Is Saudi Arabia going nuclear? April 12, 2017. https://www.wiseinternational.org/nuclear-monitor/854/saudi-arabia-going-nuclear]

Regardless of intent, a nuclear power program would bring Saudi Arabia far closer to a weapons capability. The reactor-grade plutonium produced in the normal course of operation of a reactor can be used in weapons, or reactors can be operated on a short irradiation cycle to produce weapon-grade plutonium. In addition, a nuclear power program would necessarily entail the development of significant nuclear science and engineering expertise which could be redeployed to a weapons program. A nuclear power program could justify the acquisition of other technologies − such as enrichment and reprocessing technology, and research reactors − which might be put to use in a weapons program. (Argentina's INVAP is building a very low power research reactor in Saudi Arabia37 and an October 2017 agreement between KACARE and Russia's Rosatom envisages construction of another research reactor in the Kingdom.

#### Prolif will be rapid and escalate – kills stability – multiple reasons

Horowitz 09[April, Michael, Department of Political Science, University of Pennsylvania, Philadelphia, “The Spread of Nuclear Weapons,” journal of conflict resolution, vol 53, no 2]

Learning as states gain experience with nuclear weapons is complicated. While to some extent, nuclear acquisition might provide information about resolve or capabil-  ities, it also generates uncertainty about the way an actual conflict would go—given  the new risk of nuclear escalation—and uncertainty about relative capabilities. Rapid proliferation may especially heighten uncertainty given the potential for reasonable  states to disagree at times about the quality of the capabilities each possesses.2 What  follows is an attempt to describe the implications of inexperience and incomplete  information on the behavior of nuclear states and their potential opponents over time.  Since it is impossible to detail all possible lines of argumentation and possible  responses, the following discussion is necessarily incomplete. This is a first step.  The acquisition of nuclear weapons increases the confidence of adopters in their  ability to impose costs in the case of a conflict and the expectations of likely costs if  war occurs by potential opponents. The key questions are whether nuclear states  learn over time about how to leverage nuclear weapons and the implications of that  learning, along with whether actions by nuclear states, over time, convey information  that leads to changes in the expectations of their behavior—shifts in uncertainty—  on the part of potential adversaries.  Learning to Leverage?  When a new state acquires nuclear weapons, how does it influence the way the  state behaves and how might that change over time? Although nuclear acquisition  might be orthogonal to a particular dispute, it might be related to a particular secu-  rity challenge, might signal revisionist aims with regard to an enduring dispute, or  might signal the desire to reinforce the status quo.  This section focuses on how acquiring nuclear weapons influences both the new  nuclear state and potential adversaries. In theory, system wide perceptions of nuclear  danger could allow new nuclear states to partially skip the early Cold War learning  process concerning the risks of nuclear war and enter a proliferated world more cog-  nizant of nuclear brinksmanship and bargaining than their predecessors. However,  each new nuclear state has to resolve its own particular civil–military issues surrounding operational control and plan its national strategy in light of its new capa-  bilities. Empirical research by Sagan (1993), Feaver (1992), and Blair (1993)  suggests that viewing the behavior of other states does not create the necessary tacit  knowledge; there is no substitute for experience when it comes to handling a nuclear  arsenal, even if experience itself cannot totally prevent accidents. Sagan contends  that civil–military instability in many likely new proliferators and pressures generated by the requirements to handle the responsibility of dealing with nuclear weapons  will skew decision making toward more offensive strategies (Sagan 1995). The ques-  tions surrounding Pakistan’s nuclear command and control suggest there is no magic  bullet when it comes to new nuclear powers’ making control and delegation decisions (Bowen and Wolvén 1999).  Sagan and others focus on inexperience on the part of new nuclear states as a key  behavioral driver. Inexperienced operators and the bureaucratic desire to “justify”  the costs spent developing nuclear weapons, combined with organizational biases  that may favor escalation to avoid decapitation—the “use it or lose it” mind-set—  may cause new nuclear states to adopt riskier launch postures, such as launch on  warning, or at least be perceived that way by other states (Blair 1993; Feaver 1992;  Sagan 1995).3  Acquiring nuclear weapons could alter state preferences and make states more  likely to escalate disputes once they start, given their new capabilities.4 But their  general lack of experience at leveraging their nuclear arsenal and effectively communicating nuclear threats could mean new nuclear states will be more likely to  select adversaries poorly and to find themselves in disputes with resolved adver-  saries that will reciprocate militarized challenges. The “nuclear experience” logic also suggests that more experienced nuclear states  should gain knowledge over time from nuclearized interactions that helps leaders  effectively identify the situations in which their nuclear arsenals are likely to make  a difference. Experienced nuclear states learn to select into cases in which their com-  parative advantage, nuclear weapons, is more likely to be effective, increasing the  probability that an adversary will not reciprocate.  Coming from a slightly different perspective, uncertainty about the consequences  of proliferation on the balance of power and the behavior of new nuclear states on  the part of their potential adversaries could also shape behavior in similar ways (Schelling 1966; Blainey 1988). While a stable and credible nuclear arsenal communicates clear information about the likely costs of conflict, in the short term,  nuclear proliferation is likely to increase uncertainty about the trajectory of a war,  the balance of power, and the preferences of the adopter.

#### Prolif causes nuclear war and terrorism – accidents, brinksmanship, adventurism, and preemptive strikes – all of that makes Middle East war more escalatory

Kroenig 15 [Matthew, Associate Professor and International Relations Field Chair in the Department of Government and School of Foreign Service at Georgetown University, 2015. “The History of Proliferation Optimism: Does It Have a Future?” Journal of Strategic Studies, Volume 38, Issue 1-2, 2015]

The spread of nuclear weapons poses at least six severe threats to international peace and security including: nuclear war, nuclear terrorism, global and regional instability, constrained US freedom of action, weakened alliances, and further nuclear proliferation. Each of these threats has received extensive treatment elsewhere and this review is not intended to replicate or even necessarily to improve upon these previous efforts. Rather the goals of this section are more modest: to usefully bring together and recap the many reasons why we should be pessimistic about the likely consequences of nuclear proliferation. Many of these threats will be illuminated with a discussion of a case of much contemporary concern: Iran’s advanced nuclear program. Nuclear War The greatest threat posed by the spread of nuclear weapons is nuclear war. The more states in possession of nuclear weapons, the greater the probability that somewhere, someday, there will be a catastrophic nuclear war. To date, nuclear weapons have only been used in warfare once. In 1945, the United States used nuclear weapons on Hiroshima and Nagasaki, bringing World War II to a close. Many analysts point to the 65-plus-year tradition of nuclear non-use as evidence that nuclear weapons are unusable, but it would be naïve to think that nuclear weapons will never be used again simply because they have not been used for some time. After all, analysts in the 1990s argued that worldwide economic downturns like the Great Depression were a thing of the past, only to be surprised by the dot-com bubble bursting later in the decade and the Great Recession of the late 2000s.48 This author, for one, would be surprised if nuclear weapons are not used again sometime in his lifetime. Before reaching a state of MAD, new nuclear states go through a transition period in which they lack a secure-second strike capability. In this context, one or both states might believe that it has an incentive to use nuclear weapons first. For example, if Iran acquires nuclear weapons, neither Iran, nor its nuclear-armed rival, Israel, will have a secure, second-strike capability. Even though it is believed to have a large arsenal, given its small size and lack of strategic depth, Israel might not be confident that it could absorb a nuclear strike and respond with a devastating counterstrike. Similarly, Iran might eventually be able to build a large and survivable nuclear arsenal, but, when it first crosses the nuclear threshold, Tehran will have a small and vulnerable nuclear force. In these pre-MAD situations, there are at least three ways that nuclear war could occur. First, the state with the nuclear advantage might believe it has a splendid first strike capability. In a crisis, Israel might, therefore, decide to launch a preventive nuclear strike to disarm Iran’s nuclear capabilities. Indeed, this incentive might be further increased by Israel’s aggressive strategic culture that emphasizes preemptive action. Second, the state with a small and vulnerable nuclear arsenal, in this case Iran, might feel use them or lose them pressures. That is, in a crisis, Iran might decide to strike first rather than risk having its entire nuclear arsenal destroyed. Third, as Thomas Schelling has argued, nuclear war could result due to the reciprocal fear of surprise attack.49 If there are advantages to striking first, one state might start a nuclear war in the belief that war is inevitable and that it would be better to go first than to go second. Fortunately, there is no historic evidence of this dynamic occurring in a nuclear context, but it is still possible. In an Israeli–Iranian crisis, for example, Israel and Iran might both prefer to avoid a nuclear war, but decide to strike first rather than suffer a devastating first attack from an opponent. Even in a world of MAD, however, when both sides have secure, second-strike capabilities, there is still a risk of nuclear war. Rational deterrence theory assumes nuclear-armed states are governed by rational leaders who would not intentionally launch a suicidal nuclear war. This assumption appears to have applied to past and current nuclear powers, but there is no guarantee that it will continue to hold in the future. Iran’s theocratic government, despite its inflammatory rhetoric, has followed a fairly pragmatic foreign policy since 1979, but it contains leaders who hold millenarian religious worldviews and could one day ascend to power. We cannot rule out the possibility that, as nuclear weapons continue to spread, some leader somewhere will choose to launch a nuclear war, knowing full well that it could result in self-destruction. One does not need to resort to irrationality, however, to imagine nuclear war under MAD. Nuclear weapons may deter leaders from intentionally launching full-scale wars, but they do not mean the end of international politics. As was discussed above, nuclear-armed states still have conflicts of interest and leaders still seek to coerce nuclear-armed adversaries. Leaders might, therefore, choose to launch a limited nuclear war.50 This strategy might be especially attractive to states in a position of conventional inferiority that might have an incentive to escalate a crisis quickly to the nuclear level. During the Cold War, the United States planned to use nuclear weapons first to stop a Soviet invasion of Western Europe given NATO’s conventional inferiority.51 As Russia’s conventional power has deteriorated since the end of the Cold War, Moscow has come to rely more heavily on nuclear weapons in its military doctrine. Indeed, Russian strategy calls for the use of nuclear weapons early in a conflict (something that most Western strategists would consider to be escalatory) as a way to de-escalate a crisis. Similarly, Pakistan’s military plans for nuclear use in the event of an invasion from conventionally stronger India. And finally, Chinese generals openly talk about the possibility of nuclear use against a US superpower in a possible East Asia contingency. Second, as was also discussed above, leaders can make a ‘threat that leaves something to chance’.52 They can initiate a nuclear crisis. By playing these risky games of nuclear brinkmanship, states can increase the risk of nuclear war in an attempt to force a less resolved adversary to back down. Historical crises have not resulted in nuclear war, but many of them, including the 1962 Cuban Missile Crisis, have come close. And scholars have documented historical incidents when accidents nearly led to war.53 When we think about future nuclear crisis dyads, such as Iran and Israel, with fewer sources of stability than existed during the Cold War, we can see that there is a real risk that a future crisis could result in a devastating nuclear exchange. Nuclear Terrorism The spread of nuclear weapons also increases the risk of nuclear terrorism.54 While September 11th was one of the greatest tragedies in American history, it would have been much worse had Osama Bin Laden possessed nuclear weapons. Bin Laden declared it a ‘religious duty’ for Al- Qa’eda to acquire nuclear weapons and radical clerics have issued fatwas declaring it permissible to use nuclear weapons in Jihad against the West.55 Unlike states, which can be more easily deterred, there is little doubt that if terrorists acquired nuclear weapons, they would use them.56 Indeed, in recent years, many US politicians and security analysts have argued that nuclear terrorism poses the greatest threat to US national security.57 Analysts have pointed out the tremendous hurdles that terrorists would have to overcome in order to acquire nuclear weapons.58 Nevertheless, as nuclear weapons spread, the possibility that they will eventually fall into terrorist hands increases. States could intentionally transfer nuclear weapons, or the fissile material required to build them, to terrorist groups. There are good reasons why a state might be reluctant to transfer nuclear weapons to terrorists, but, as nuclear weapons spread, the probability that a leader might someday purposely arm a terrorist group increases. Some fear, for example, that Iran, with its close ties to Hamas and Hizballah, might be at a heightened risk of transferring nuclear weapons to terrorists. Moreover, even if no state would ever intentionally transfer nuclear capabilities to terrorists, a new nuclear state, with underdeveloped security procedures, might be vulnerable to theft, allowing terrorist groups or corrupt or ideologically-motivated insiders to transfer dangerous material to terrorists. There is evidence, for example, that representatives from Pakistan’s atomic energy establishment met with Al-Qa’eda members to discuss a possible nuclear deal.59 Finally, a nuclear-armed state could collapse, resulting in a breakdown of law and order and a loose nukes problem. US officials are currently very concerned about what would happen to Pakistan’s nuclear weapons if the government were to fall. As nuclear weapons spread, this problem is only further amplified. Iran is a country with a history of revolutions and a government with a tenuous hold on power. The regime change that Washington has long dreamed about in Tehran could actually become a nightmare if a nuclear-armed Iran suffered a breakdown in authority, forcing us to worry about the fate of Iran’s nuclear arsenal. Regional Instability The spread of nuclear weapons also emboldens nuclear powers, contributing to regional instability. States that lack nuclear weapons need to fear direct military attack from other states, but states with nuclear weapons can be confident that they can deter an intentional military attack, giving them an incentive to be more aggressive in the conduct of their foreign policy. In this way, nuclear weapons provide a shield under which states can feel free to engage in lower-level aggression. Indeed, international relations theories about the ‘stability-instability paradox’ maintain that stability at the nuclear level contributes to conventional instability.60 Historically, we have seen that the spread of nuclear weapons has emboldened their possessors and contributed to regional instability. Recent scholarly analyses have demonstrated that, after controlling for other relevant factors, nuclear-weapon states are more likely to engage in conflict than nonnuclear-weapon states and that this aggressiveness is more pronounced in new nuclear states that have less experience with nuclear diplomacy.61 Similarly, research on internal decision-making in Pakistan reveals that Pakistani foreign policymakers may have been emboldened by the acquisition of nuclear weapons, which encouraged them to initiate militarized disputes against India.62 Currently, Iran restrains its foreign policy because it fears major military retaliation from the United States or Israel, but with nuclear weapons it could feel free to push harder. A nuclear-armed Iran would likely step up support to terrorist and proxy groups and engage in more aggressive coercive diplomacy. With a nuclear-armed Iran increasingly throwing its weight around in the region, we could witness an even more crisis prone Middle East. And in a poly-nuclear Middle East with Israel, Iran, and, in the future, possibly other states, armed with nuclear weapons, any one of those crises could result in a catastrophic nuclear exchange.

#### Rising oil prices fend off deflation which collapses European instutions

Pylas 1/4 (2017, Pan, Associated Press, citing Ben May, lead eurozone economist at Oxford Economics, “Eurozone inflation spikes to highest in over 3 years”, http://bigstory.ap.org/article/788e6d377e264b9790066e0dc3143814/eurozone-economy-growing-fastest-pace-may-2011)

Europe appears to have seen off the deflation bugbear that has stalked it for the past couple of years. Consumer prices across the 19 countries that use the euro grew in December at their fastest rate since Sept. 2013, official figures showed Wednesday. A surge in oil prices contributed most to the near-doubling in the annual inflation rate to 1.1 percent from the previous month's 0.6 percent. Though higher inflation can eat into consumer spending, it can also help push up wages and stimulate economic activity in a region that has largely stagnated. As such, the figures are likely to provide some relief to policymakers at the European Central Bank who have resorted to a raft of stimulus programs to get inflation back toward their target of just below 2 percent, considered most suitable for a healthy economy. With the inflation rate still short of that target, the central bank is unlikely to give up on stimulus anytime soon. Though the ECB can argue that its policies, which have included cutting interest rates and injecting billions into the financial system, have shored up the economy, the main contributor to the December spike in inflation was out of its control: energy prices. Eurostat, the European Union's statistics agency, said energy costs were up 2.5 percent in the year to December compared with a 1.1 percent drop in November. In December, the price of crude oil rose above $50 a barrel — from below $30 a year earlier — after the OPEC oil cartel and other nations agreed to cut output levels. When energy costs are excluded, inflation remains muted. The core rate, which strips out the volatile items of alcohol, energy, food and tobacco, rose to only 0.9 percent from the previous month's 0.8 percent. That suggests that high unemployment in many parts of the eurozone following the region's debt crisis continue to weigh on wage demands and consumption. "Despite headline inflation returning to an upward trend we expect that the ECB's preference will be to maintain the policy course ... and 'look through' energy-influenced price developments in coming months," said Cathal Kennedy, European economist at RBC Capital Markets. In the near-term, higher headline inflation could weigh on economic activity if wages don't keep up, as people's income won't go as far. However, a steady level of inflation is considered good for an economy as it can drive up wages and promote innovation and investment by firms. It can also reduce debt levels for firms and countries in real terms. That's certainly a better prospect than prices falling over a sustained period, a phenomenon known as deflation that has haunted Europe in the past few years. Lower prices may sound good and have in fact been a boon to European consumers recently as they were due to the slide in oil prices — money saved filling up a car or on home heating could be spent elsewhere. The problem arises when a fall in prices endures. That can choke the life out of an economy if consumers put off purchases in the hope of future bargains. It can erode profits and make governments' debts appear greater. Deflation has proven difficult to reverse, as evidenced by the case of Japan over the past couple of decades. Ben May, lead eurozone economist at Oxford Economics, conceded that higher inflation could weigh on eurozone economic activity in coming months, while noting that it may "trigger some positive developments" such as higher wages in economies like Germany where unemployment is low. "We think that the eurozone economy is now in a strong enough position to weather this shock," he said. "Indeed, the region may now be in a position where a period of moderate inflation is more desirable that a further sustained bout of 'noflation'." The view in the currency markets was broadly positive and the euro recouped some of its recent losses, which had seen it fall to 14-year lows against the dollar. Europe's single currency was up 0.7 percent at $1.0477. A separate survey Wednesday provided evidence that the eurozone economy gained momentum at the end of 2016. According to research firm IHS Markit, eurozone business activity grew in December at its fastest pace since May 2011. The company's composite purchasing managers' index — a broad gauge of business activity across the manufacturing and services sectors — rose to 54.4 points in December from 53.9 the previous month. Anything above 50 indicates growth. It said December's level points to quarterly economic growth of 0.4 percent — better than the eurozone performed for most of 2016 but modest compared with the United States.

#### European collapse causes extinction

Wright 12 Thomas, fellow with the Managing Global Order at the Brookings Institution, Summer 2012, “What if Europe Fails?” The Washington Quarterly, http://csis.org/files/publication/twq12SummerWright.pdf

Yet, verbal warnings from nervous leaders and economists aside, there has been remarkably little analysis of what the end of European integration might mean for Europe and the rest of the world. This article does not predict that failure will occur it only seeks to explain the geopolitical implications if it does. The severity and trajectory of the crisis since 2008 suggest that failure is a high-impact event with a non-trivial probability. It may not occur, but it certainly merits serious analysis. Failure is widely seen as an imminent danger.¶ Would the failure of the Euro really mean the beginning of the end of democracy in Europe? Could the global economy survive without a vibrant European economy? What would European architecture look like after the end of European integration? What are the implications for the United States, China, and the Middle East? Since the international order has been primarily a Western construction, with Europe as a key pillar, would the disintegration of the European Union or the Eurozone have lasting and deleterious effects on world politics in the coming decade?¶ Thinking through and prioritizing the consequences of a failed Europe yield five of the utmost importance. First, the most immediate casualty of the failure of the European project would be the global economy. A disorderly collapse (as opposed to an orderly failure, which will be explained shortly) would probably trigger a new depression and could lead to the unraveling of economic integration as countries introduce protectionist measures to limit the contagion effects of a collapse. Bare survival would drag down Europe’s economy and would generate increasing and dangerous levels of volatility in the international economic order.¶ Second, the geopolitical consequences of an economic crisis depend not just on the severity of the crisis but also the geopolitical climate in which it occurs. Europe’s geopolitical climate is as healthy as can be reasonably expected. This would prevent a simple repeat of the 1930s in Europe, which has been one of the more alarming predictions from some observers, although certain new and fragile democracies in Europe might come under pressure.¶ Third, failure would cement Germany’s rise as the leading country in Europe and as an indispensable hub in the European Union and Eurozone, if they continue to exist, but anti-Germanism would become a more potent force in politics on the European periphery.¶ Fourth, economic downturn as a result of disintegration would undermine political authority in those parts of the world where the legitimacy of governments is shallow, and it would exacerbate international tensions where the geopolitical climate is relatively malign. The places most at risk are the Middle East and China.¶ Fifth, disintegration would weaken Europe on the world stage–it would severely damage the transatlantic alliance, both by sapping its resources and by diverting Europe’s attention to its internal crisis–and would, finally, undermine the multilateral order.¶ Taking these five implications in their totality, one thing is clear. Failure will badly damage Europe and the international order, but some types of failure–most notably a disorderly collapse–are worse than others. Currently, the pain is concentrated on the so-called European periphery (Greece, Portugal, Spain, Italy, and Ireland). Disorderly collapse would affect all European countries, as well as North America and East Asia. If a solution to the Eurocrisis is perceived as beyond reach, leaders of the major powers will shift their priorities to managing failure in order to contain its effects. This will be strenuously resisted on the periphery, which is already experiencing extremely high levels of pain and does not want to accept the permanence of the status quo. Consequently, their electorates will become more risk-acceptant and will pressure Germany and other core member states to accommodate them through financial transfers and assistance in exchange for not deliberately triggering a break-up. This bitter split will divide and largely define a failing Europe. Absent movement toward a solution, EU politics is about to take an ugly turn.

#### Low oil causes renewable shocks and undermines clean tech

Krauss ’16 (Clifford Krauss – National Business Correspondent at the New York Times. Diane Cardwell – Business Day reporter for the New York Times covering energy with a focus on renewables. “Climate Deal’s First Big Hurdle: The Draw of Cheap Oil,” 25 January 2016, http://www.nytimes.com/2016/01/26/business/energy-environment/climate-deals-first-big-hurdle-the-draw-of-cheap-oil.html)

Barely a month after world leaders signed a sweeping agreement to reduce carbon emissions, the global commitment to renewable energy sources faces its first big test as the price of oil collapses. Buoyed by low gas prices, Americans are largely eschewing electric cars in favor of lower-mileage trucks and sport utility vehicles. Yet the Obama administration has shown no signs of backing off its requirement that automakers nearly double the fuel economy of their vehicles by 2025. In China, government officials are also taking steps to ensure that the recent plunge in oil prices to under $30 a barrel does not undermine its programs to improve energy efficiency. Earlier this month, the country’s top economic planning agency introduced a new regulation, effective immediately, aimed at deterring oil consumption. For the climate accord to work, governments must resist the lure of cheap fossil fuels in favor of policies that encourage and, in many cases, require the use of zero-carbon energy sources. But those policies can be expensive and politically unpopular, especially as traditional fuels become ever more affordable. “This will be a litmus test for the governments — whether or not they are serious about what they have done in Paris,” said Fatih Birol, executive director of the International Energy Agency. So far, there is no sign that the world’s two largest energy consumers — the United States and China — are wavering. With those two countries staying the course, albeit in the early days since the signing, there is optimism among backers of the accord that the momentum is too strong to stop. And despite the recent turmoil in energy markets, renewable industries are prospering. “The trend toward much greater penetration of low-carbon energy driven by policy and technological advancements is going to continue,” said Jason Bordoff, director of the Center on Global Energy Policy at Columbia University and a former top aide to President Obama. Despite the lower fuel costs, he added, “technological alternatives and policy drivers that are reducing demand for fossil fuels are already really starting to take a bite.” A few days ago, the Energy Department projected that total renewable power consumed in the United States this year will increase by 9.5 percent, and the longer-term outlook appears bright as costs continue to plummet and after congressional action last December extended federal tax credits for new wind and solar projects. Utility-scale solar power generation alone is expected to increase by 45 percent by 2017, according to the Energy Department. Administration officials express an ambition to make wind power the source of more than a third of the American electricity supply by 2050. In China, the world’s biggest greenhouse gas emitter, the government implemented a new rule that no matter how low world crude oil prices may fall, the price of gasoline and diesel will continue to be set as though the world price of oil were still $40 a barrel. The goal is to prevent gasoline and diesel from becoming so cheap that China’s citizens would start consuming it indiscriminately. China’s heavily state-owned refining industry will also not be allowed to keep the extra profits from buying crude oil cheaply and selling gasoline and diesel as though the crude oil still cost $40 a barrel. Instead, the Chinese government will take the extra refining profit margin and put the money into a special fund for energy conservation and pollution control. But across the globe, the picture is not entirely rosy for zero-emission technologies. Several nuclear power plants, which emit virtually no greenhouse gases, have closed in the United States in recent years, and few are under construction in part because of the competition of cheap natural gas. Low oil prices also jeopardize the development of alternative fuels to replace petroleum in transportation and industry, including the advanced biofuels that once looked so promising. Cheap oil also reduces the price of diesel, the primary competitor of renewables in spreading electricity generation to impoverished rural areas of Africa and Southeast Asia. And if governments’ support wanes, the alternative fuel industries could take a hit. In Spain, the development of renewables has slowed to a crawl since the government started weakening support in 2009 because of an economic downturn. In Britain, analysts warn that the wind and solar industries could collapse as the government s

hifts subsidies away from renewables; two global wind developers recently canceled projects there. And in the United States, when an important tax credit lapsed briefly in 2013, installations of new wind farms all but ceased, falling 92 percent for the year. “The challenge for governments is to continue appropriate clean energy subsidies even while the fossil fuel industry clamors over low prices,” said Paul Bledsoe, who was a staff member of the White House Climate Change Task Force under former President Bill Clinton. Many developing countries have taken advantage of the decline in oil prices to cut subsidies on fuel consumption. India, Indonesia and Angola, among others, have taken such action, a move that economists say could conserve millions of barrels of oil from being burned every year in the future. Saudi Arabia, one of the top energy-consuming nations, this month increased gasoline prices by 50 percent, and natural gas for industry and electrical generation by 67 percent. Ultimately, supporters of the climate accord say that low oil prices can cut both ways in the march to renewables. “It’s a double-edged sword,” said Amy Myers Jaffe, executive director for energy and sustainability at the University of California, Davis. She noted that low oil prices were cutting investments in drilling, which meant fewer emissions of methane, a powerful greenhouse gas, at well sites, and “it has clearly not slowed down the switch toward renewable energy.” But at the same time, Ms. Jaffe said, low gasoline prices make driving more attractive, and in larger vehicles as well. “It’s [extremely destructive] ~~crippling~~ for electric cars,” she said, “because the thing that made you think about buying an electric car was it was so painful for you to fill up your car with gasoline that was so expensive.”

#### Renewables solve warming

Deign 19 (Jason, 4/9/19, “IRENA: Renewables Plus Electrification Can Bear Brunt of Decarbonization Efforts”, [https://www.greentechmedia.com/articles/read/irena-renewables-plus-electrification-can-bear-brunt-of-decarbonization-eff#gs.m8k4cz/](https://www.greentechmedia.com/articles/read/irena-renewables-plus-electrification-can-bear-brunt-of-decarbonization-eff#gs.m8k4cz/AMG))

Three-quarters of global emissions-reduction goals could be achieved through renewables and electrification alone, according to a new report from the Abu Dhabi-based International Renewable Energy Agency (IRENA). The study, released this week at the Berlin Energy Transition Dialogue in Germany, predicts that with a scale-up of renewables it might be possible for electricity to cover 50 percent of the world’s final energy mix, up from 20 percent today. The primary drivers for this increased electricity demand would come from a billion electric vehicles, as well as an increase in the use of electrical heating and the emergence of renewable hydrogen. Overall, renewable energy would supply two-thirds of final energy, the research said. It was published in the latest edition of IRENA’s [Global Energy Transformation](https://www.irena.org/-/media/Files/IRENA/Agency/Publication/2019/Apr/IRENA_Global_Energy_Transformation_2019.pdf) report, which is now in its third year. The study looks at how society could move to a low-carbon future by 2050. Solar and wind in the starring role This year’s edition of the research predicts that the global power supply could more than double between now and 2050, with most of the new capacity coming from solar PV and wind. The report stated that there are already pathways to meeting 86 percent of global power demand through renewable energy. “The race to secure a climate-safe future has entered a decisive phase,” said IRENA Director-General Francesco La Camera in [a press note](https://www.irena.org/newsroom/pressreleases/2019/Apr/Deep-Electrification-Powered-by-Renewables-Key-for-a-Climate-Safe-Future). “Renewable energy is the most effective and readily available solution for reversing the trend of rising CO2 emissions.” Following IRENA’s roadmap would also save between $65 trillion and $160 trillion worldwide over the next 30 years, said the agency, with savings coming from the avoidance of negative health impacts, climate damages, and $10 trillion in energy subsidies. IRENA estimated the level of additional investments needed to achieve its low-carbon roadmap would be around $15 trillion by 2050. Investment multiplier effect This is “a significant sum,” IRENA acknowledged, but the level of investment had dropped 40 percent compared to last year’s analysis, mainly because of falling renewable energy costs. Total investment in the energy system would need to reach $110 trillion by 2050, or around 2 percent of average annual gross domestic product over the next three decades, the report said. Nevertheless, every dollar spent on energy transition would pay off up to seven times, helping the global economy to grow 2.5 percent in 2050. Global employment would also get a small boost, by 0.2 percent, the agency said. While pointing out the potential for emissions reductions and economic benefit, the Global Energy Transformation report also warned that carbon dioxide emissions had grown by 1 percent a year, on average, over the last half decade. The continued growth in emissions meant there is a need for a “significant increase” in renewable energy and climate targets, IRENA said. Emissions would need to drop 70 percent below current levels by 2050 in order to meet global climate targets, said the agency.

#### Climate change causes extinction

Sprat and Dunlop 19 (David Spratt and Ian Dunlop, \*Research Director for Breakthrough National Centre for Climate Restoration and co-author of *Climate Code Red: The case for emergency action*; \*\*member of the Club of Rome AND formerly an international oil, gas and coal industry executive, chairman of the Australian Coal Association, chief executive of the Australian Institute of Company Directors, and chair of the Australian Greenhouse Office Experts Group on Emissions Trading, "Existential climate-related security risk: A scenario approach," Breakthrough National Centre for Climate Restoration, 5-30-2019, https://docs.wixstatic.com/ugd/148cb0\_90dc2a2637f348edae45943a88da04d4.pdf, Date Accessed: 7-5-2019, SB)

2050: By 2050, there is broad scientific acceptance that system tipping-points for the West Antarctic Ice Sheet and a sea-ice-free Arctic summer were passed well before 1.5°C of warming, for the Greenland Ice Sheet well before 2°C, and for widespread permafrost loss and large-scale Amazon drought and dieback by 2.5°C. The “hothouse Earth” scenario has been realised, and Earth is headed for another degree or more of warming, especially since human greenhouse emissions are still significant. While sea levels have risen 0.5 metres by 2050, the increase may be 2–3 metres by 2100, and it is understood from historical analogues that seas may eventually rise by more than 25 metres. Thirty-five percent of the global land area, and 55 percent of the global population, are subject to more than 20 days a year of lethal heat conditions, beyond the threshold of human survivability. The destabilisation of the Jet Stream has very significantly affected the intensity and geographical distribution of the Asian and West African monsoons and, together with the further slowing of the Gulf Stream, is impinging on life support systems in Europe. North America suffers from devastating weather extremes including wildfires, heatwaves, drought and inundation. The summer monsoons in China have failed, and water flows into the great rivers of Asia are severely reduced by the loss of more than one-third of the Himalayan ice sheet. Glacial loss reaches 70 percent in the Andes, and rainfall in Mexico and central America falls by half. Semi-permanent El Nino conditions prevail. Aridification emerges over more than 30 percent of the world’s land surface. Desertification is severe in southern Africa, the southern Mediterranean, west Asia, the Middle East, inland Australia and across the south-western United States. Impacts: A number of ecosystems collapse, including coral reef systems, the Amazon rainforest and in the Arctic. Some poorer nations and regions, which lack capacity to provide artificially-cooled environments for their populations, become unviable. Deadly heat conditions persist for more than 100 days per year in West Africa, tropical South America, the Middle East and South-East Asia, which together with land degradation and rising sea levels contributes to 21 perhaps a billion people being displaced. Water availability decreases sharply in the most affected regions at lower latitudes (dry tropics and subtropics), affecting about two billion people worldwide. Agriculture becomes nonviable in the dry subtropics. Most regions in the world see a significant drop in food production and increasing numbers of extreme weather events, including heat waves, floods and storms. Food production is inadequate to feed the global population and food prices skyrocket, as a consequence of a one-fifth decline in crop yields, a decline in the nutrition content of food crops, a catastrophic decline in insect populations, desertification, monsoon failure and chronic water shortages, and conditions too hot for human habitation in significant food-growing regions. The lower reaches of the agriculturally-important river deltas such as the Mekong, Ganges and Nile are inundated, and significant sectors of some of the world’s most populous cities — including Chennai, Mumbai, Jakarta, Guangzhou, Tianjin, Hong Kong, Ho Chi Minh City, Shanghai, Lagos, Bangkok and Manila — are abandoned. Some small islands become uninhabitable. Ten percent of Bangladesh is inundated, displacing 15 million people. According to the Global Challenges Foundation’s Global Catastrophic Risks 2018 report, even for 2°C of warming, more than a billion people may need to be relocated due to sea-level rise, and In high-end scenarios “the scale of destruction is beyond our capacity to model, with a high likelihood of human civilisation coming to an end”. 22

**1NC –ME War Defense**

#### No great power draw in – stays regional, presumes Russia

Trofimov 2020 [Yaroslav Trofimov is an award-winning author and journalist who serves as Chief Foreign-Affairs Correspondent at The Wall Street Journal. Previously he wrote a weekly column on the Greater Middle East, Middle East Crossroads, in The Wall Street Journal. Iran Lacks Allies in Confronting the U.S. January 5, 2020. https://www.wsj.com/articles/iran-lacks-allies-in-confronting-the-u-s-11578253765]

Instead of leaving, President Trump now is sending thousands more American troops to the Middle East to confront Iran. As for Russia and China, they have shown little desire to get embroiled in an increasingly unpredictable conflict.

This means that despite the feverish talk of Gen. Soleimani’s death sparking a World War III, Iran nowadays can only count on itself—and on the network of irregular Shiite militias and proxies that the Quds Force commander had nurtured in Lebanon, Iraq, Syria, Yemen and beyond.

“Iran is one of the most strategically lonely countries in the world. It considers dozens of countries around the world its adversary, and its only reliable friend has been the Assad regime in Syria,” said Karim Sadjadpour, an Iran specialist at the Carnegie Endowment for International Peace in Washington.

As for Russia, Mr. Sadjadpour added, “it benefits from an isolated, anti-American Iran that can’t exploit its energy resources.”

While observers say Beijing and Moscow would be happy to watch the U.S. get bogged down even deeper in the Middle East—a diversion that would give them a freer hand in their own neighborhoods—they have no appetite for exposing themselves to the risks of a possible confrontation.

“Russia doesn’t have the slightest intention of getting involved in this squabble, and is trying to distance itself from it as far as possible—even though it will keep expressing support for Iran with very loud declarations,” said Ruslan Pukhov, director of the Center for Analysis of Strategies and Technologies, a Moscow think tank that advises Russia’s defense establishment.

“Short-term at least, this is all beneficial to Russia: oil prices are up, and the Iranians—a very difficult partner—are being forced to become much more cooperative,” he added.

Iran’s strategic isolation perhaps explains a tone of caution that has accompanied its denunciations of Gen. Soleimani’s death. Iranian Armed Forces spokesman Brig. Gen. Abolfazl Shekarchi on Saturday promised a revenge that will be “tough”—but “not hasty,” an indication that Tehran may seek to avoid an immediate escalation that could risk sparking an all-out war with the U.S.

“Iran is talking about a response, a revenge, and not about initiating a war,” said Abas Aslani, senior fellow at the Center for Middle East Strategic Studies in Tehran.

Should such a direct conflict erupt, he added, “I don’t think Iran expects Russia and China to start a war with the U.S. on its behalf. The help they may offer to Iran is different: political support, support in some international institutions. Whether that can also be applicable to providing Iran with some equipment, that is the question.”

Iran certainly craves military hardware to replace its obsolete warplanes, ships and tanks—but neither Russia nor China can legally supply such equipment until October at the earliest, the date when United Nations sanctions on most military sales to Tehran are set to expire.

Russia did deliver an S-300 air-defense system to Iran in 2016, but even that happened after six years of delays that ended only as a result of Moscow’s alienation from the West following its invasion of Ukraine.

In their official reactions, both Moscow and Beijing condemned the strike against Gen. Soleimani—but stopped short of pledging to do anything about it.

Russian Foreign Minister Sergei Lavrov said in a phone call Friday with Secretary of State Mike Pompeo that the killing “grossly violates the norms of international law” and urged Washington to “solve all problems at the negotiating table,” according to a Russian foreign ministry statement.

China’s foreign minister, Wang Yi, a day later told his Iranian counterpart that Beijing condemns “the military adventurist act by the U.S.” and that China will continue to “play a constructive role in safeguarding peace and security in the Gulf region.”

Though China has promised to invest hundreds of billions of dollars in Iran’s oil and gas infrastructure, so far U.S. economic sanctions on Iran have hobbled such plans.

Russia and Iran have teamed up in Syria—with Russian warplanes using Iranian airspace and even briefly operating out of an air base in Iran—but as the Syrian regime stabilized and Moscow found a new accommodation with Turkey in recent months, Moscow’s and Tehran’s interests there have begun to diverge.

Both Moscow and Beijing maintain friendly ties with Iran’s archenemies in the region: Saudi Arabia and Israel.

Russia’s and Iran’s mutual history is rife with hostility. Russians remember the murder of Russia’s ambassador and playwright Alexander Griboedov when the Russian embassy in Tehran was sacked in 1829, and the Islamic Republic’s support for anti-Soviet rebels in Afghanistan in the 1980s.

Looming in Iran’s national memory are lands that Russia annexed from the Persian Empire over the centuries, and the Soviet military invasions and occupations of Iran in 1920 and 1941.

“Nobody in Russia really cares about Iran, the society doesn’t see Iran as a partner, and certainly not as a friend worth dying for,” said Alexander Gabuev, chair of the Russia in the Asia-Pacific program at the Carnegie Moscow Center.

Both Russia and China, he added, are secretly delighted by the rise of tensions between the U.S. and Iran, hoping that a conflict in the Middle East would give them a few years of respite by distracting American attention away from their own core areas of interests in Eastern Europe and Asia, respectively.

Even though China is now the biggest buyer of Middle Eastern oil, experts in the country’s security and foreign-policy establishment have long argued that Beijing should resist the temptation of getting involved in the volatile region—in part because oil has continued to flow despite the political shocks of recent decades.

“The Middle East presents a falling significance in the grand strategy of China,” Niu Xinchun, director of the Institute of Middle East Studies at CICIR, a think tank affiliated with China’s Ministry of State Security, wrote in a 2017 policy paper. “As a matter of fact, since 2011, many Middle Eastern countries have descended into civil war at the same time, which failed to exert material impacts on China’s economy.”

China’s participation in the December naval exercises with Iran is “more symbolic than substantial,” added Zhu Feng, director of the Institute of International Studies at Nanjing University. “I don’t think China has any interest in getting involved in the escalation of tensions there.”

#### No great power draw in

McConnell 14 – Scott McConnell, Ph.D in history at Columbia University, founding editor of The American Conservative, 2014 (“The Middle East Doesn’t Matter,” *The American Conservative*, October 15th, <http://www.theamericanconservative.com/articles/the-middle-east-doesnt-matter/>)

What silver lining? It’s rooted in the fact that the Mideast may now actually matter much less than we think it does. We do have the option of pretty much ignoring it, if we choose. Its contribution to the world economy is negligible. Its oil will reach the market one way or another. The security and well-being of the American people is not linked to the survival of a Shi’ite regime in Baghdad, a medieval monarch in Riyadh, or, for that matter, a Jewish state in Jerusalem. Recognition of this fact is only beginning to seep into the discourse: Justin Logan argues persuasively here that virtually nothing that goes on in the Middle East can threaten us very much, that no country in the region is worth starting a war over, and that the amount of money we’ve spent combatting terrorism in the region is wildly disproportionate to the actual threat. (It goes without saying that American bombing, with its inevitable “collateral damage,” will create a growing class of Muslims who have concrete reason to want to harm Americans.) In an recent interview, Francis Fukuyama elaborates on this view. 9/11 didn’t “change everything” as many claimed, or shouldn’t have; it was essentially a lucky shot. “These are really marginal people who survive in countries where you don’t have strong states … Their ability to take over and run a serious country that can master technology and stay at the forefront of great-power politics is almost zero,” he says. Elsewhere he notes that the crisis over ISIS is really a subset of the Sunni-Shia civil war, and America’s ability to have any lasting impact on that is also almost zero. This perspective—that the Mideast isn’t actually all that important to American security and we should pay much less attention to it—should now become a critical part of the American conversation. The thinkers cited here—Logan and Fukuyama, and one should add the popular blogger Andrew Sullivan, also writing along these lines—are far from knee-jerk “isolationists.” Fukuyama posits particularly that we should use military offshore balancing to ensure that no single power controls the oil fields; and obviously Iran would not want or allow ISIS to shut off its ability to export oil. But beyond that, we can afford to take the region much less seriously.

#### Middle East war won’t go nuclear – balanced alliances, Chinese non-intervention, and cooperation prevent great power draw-in

Mead 14 – Walter Russell Mead, James Clarke Chace Professor of Foreign Affairs and Humanities at Bard College and Professor of American foreign policy at Yale University, Editor-at-Large of The American Interest magazine and a non-resident Scholar at the Hudson Institute, 2014 (“Have We Gone From a Post-War to a Pre-War World?” *Huffington Post*, July 7th, <http://www.huffingtonpost.com/walter-russell-mead/new-global-war_b_5562664.html>)

The Middle East today bears an ominous resemblance to the Balkans of that period. The contemporary Middle East has an unstable blend of ethnicities and religions uneasily coexisting within boundaries arbitrarily marked off by external empires. Ninety-five years after the French and the British first parceled out the lands of the fallen Ottoman caliphate, that arrangement is now coming to an end. Events in Iraq and Syria suggest that the Middle East could be in for carnage and upheaval as great as anything the Balkans saw. The great powers are losing the ability to hold their clients in check; the Middle East today is at least as explosive as the Balkan region was a century ago.

GERMANS THEN, CHINESE NOW

What blew the Archduke's murder up into a catastrophic world war, though, was not the tribal struggle in southeastern Europe. It took the hegemonic ambitions of the German Empire to turn a local conflict into a universal conflagration. Having eclipsed France as the dominant military power in Europe, Germany aimed to surpass Britain on the seas and to recast the emerging world order along lines that better suited it. Yet the rising power was also insecure, fearing that worried neighbors would gang up against it. In the crisis in the Balkans, Germany both felt a need to back its weak ally Austria and saw a chance to deal with its opponents on favorable terms.

Could something like that happen again? China today is both rising and turning to the sea in ways that Kaiser Wilhelm would understand. Like Germany in 1914, China has emerged in the last 30 years as a major economic power, and it has chosen to invest a growing share of its growing wealth in military spending.

But here the analogy begins to get complicated and even breaks down a bit. Neither China nor any Chinese ally is competing directly with the United States and its allies in the Middle East. China isn't (yet) taking a side in the Sunni-Shia dispute, and all it really wants in the Middle East is quiet; China wants that oil to flow as peacefully and cheaply as possible.

AMERICA HAS ALL THE ALLIES

And there's another difference: alliance systems. The Great Powers of 1914 were divided into two roughly equal military blocs: Austria, Germany, Italy and potentially the Ottoman Empire confronted Russia, France and potentially Britain.

Today the global U.S. alliance system has no rival or peer; while China, Russia and a handful of lesser powers are disengaged from, and in some cases even hostile to, the U.S. system, the military balance isn't even close.

While crises between China and U.S. allies on its periphery like the Philippines could escalate into US-China crises, we don't have anything comparable to the complex and finely balanced international system at the time of World War I. Austria-Hungary attacked Serbia and as a direct result of that Germany attacked Belgium. It's hard to see how, for example, a Turkish attack on Syria could cause China to attack Vietnam. Today's crises are simpler, more direct and more easily controlled by the top powers.

**1NC – Water Wars**

#### Can’t solve for water wars globally

#### Water wars stay regional

* Most water crises don’t cause conflict
* Often results in collaboration through water sharing agreement development
* Main causation for water wars is weak institutional capacity and political and economic dynamics

Gleick 18 [Peter Gleick, MacArthur “Genius” Fellowship and was elected to the U.S. National Academy of Sciences, world-renowned expert, innovator, and communicator on water and climate issues, cofounded the Pacific Institute, which he led as president until mid-2016, pHd from UC Berkeley, and Charles Iceland, s Director, Global and National Water Initiatives with WRI’s Food, Forests, and Water Programs, “Water, Security, & Conflict”, https://pacinst.org/wp-content/uploads/2018/08/Water-Security-and-Conflict\_Aug-2018-2.pdf]

3.2. The Role of Governance in Water Security

Most water crises do not end in conflict, migration, or acute food insecurity. Instead, people muddle through until the crises recede. Some crises even generate cooperation among local or regional parties. Understanding why water crises lead to adverse outcomes in some places and better outcomes in others will help inform strategies for reducing the risks of conflict. Why, for example, did Syria sink into civil war following a record-breaking five-year drought, while .Iordan and Lebanon avoided strife following that same drought (Adams et al. 2018)? This requires integrating analyses of meteorological and resource-related events with the diverse social, political, and economic dynamics at play.

We can postulate—based on research conducted by Wolf and his colleagues (2003) on transboundary basins— that when rapid change, either on the institutional side or in the physical system, outpaces the institutional capacity to absorb that change, the stage is set for possible water insecurity. Therefore, when we go looking for water insecurity, we need to be on the lookout for large-scale water-related change and low capacity to handle such change (this Is what the Water, Peace, and Security [WPS] consortium is attempting to do via the development of a near realtime global early warning system for potential water-related threats to human security—more on this further on in this brief).

#### Water wars good for coop

Bernauer 18 [Thomas Bernauer, Professor of Political Science at ETH Zurich and Director of ETH’s Institute of Science, Technology and Policy (ISTP), “Dispelling the Water War Myth”, 9/10/18, https://www.diplomaticourier.com/dispelling-the-water-war-myth/]

Humans need water. If it is in short supply, conflicts can arise. Contrary to popular belief; however, these types of conflicts almost never lead to war, but rather to cooperation.

Fresh water is one of the most precious of natural resources. Water is available in huge quantities throughout the world, but scarcities can arise on a local level, since rainfall, natural water reservoirs, and demand create an uneven distribution across the globe. A shortage of water can cause conflicting needs to emerge within and between countries.

Do water shortages cause violent conflict?

As early as 200 years ago, in the face of a growing population, the English political economist and demographer Thomas Malthus warned against resource scarcity and the potential for resulting social upheaval. Especially from the 1970s onwards, this gave rise to the argument that the ever-increasing overexploitation of natural resources, above all water, would ultimately lead to massive conflicts and even wars. This is why the term “water wars” has come into widespread use in books, popular science texts, and statements by policy makers. In recent years, there has been a boom in assertions like these, as part of the discourse around climate change.

Cooperation rather than violent conflict

Research on this subject has contributed significantly to bringing such assertions back to reality. Statistical analyses of international and civil wars show that water scarcity is not a relevant variable for predicting this extreme form of conflict.

Several research groups, including my own, have also examined the scale of conflict and cooperation over water resources on an international and national level. Studies such as these analyze a vast number of worldwide media reports. The single most important conclusion is that social and political interactions around water resources adhere to a kind of normal distribution. Water conflicts that are fought out violently are extremely rare. No international or domestic water wars were observed in the available data dating back to the 1940s.

On the other hand, water conflicts in the form of verbal disputes are relatively common. More common, however, are interactions of a cooperative nature. In other words, water scarcity more often leads to cooperation than to conflict.

What do these findings mean for the future?

The factors determining the risk of water-related conflicts have not yet been conclusively identified, though we know that the most important predictors are likely to include: political conflicts over problems that have nothing to do with water; large development gaps within and between countries; and missing or underdeveloped institutions in the water sector within and between countries.

Even if water conflicts have so far, almost never resulted in armed conflicts, could acute water shortages resulting from massive climatic changes not lead to violent disputes about water in the future? This is of course conceivable in principle, but I think it is rather unlikely. In the vast majority of cases, the cost of armed conflict will be considerably higher than the cost of solutions reached at the negotiating table.