### 2ac – at: adapation

**Warming leads to extinction – adaption can’t solve**

**Mazo 10** – PhD in Paleoclimatology from UCLA

(Jeffrey Mazo, Managing Editor, Survival and Research Fellow for Environmental Security and Science Policy at the International Institute for Strategic Studies in London, 3-2010, “Climate Conflict: How global warming threatens security and what to do about it,” pg. 122)//BB

The best estimates for global warming to the end of the century range from 2.5-4.~C above pre-industrial levels, depending on the scenario. Even in the best-case scenario, the low end of the likely range is 1.goC, and in the worst 'business as usual' projections, which actual emissions have been matching, the range of likely warming runs from 3.1--7.1°C. Even keeping emissions at constant 2000 levels (which have already been exceeded), global temperature would still be expected to reach 1.2°C (O'9""1.5°C)above pre-industrial levels by the end of the century." **Without early and severe reductions in emissions, the effects of climate change in the second half of the twenty-first century are likely to be catastrophic** for the stability and security of countries in the developing world - not to mention the associated human tragedy. **Climate change could even undermine the strength and stability of emerging and advanced economies, beyond the knock-on effects on security of widespread state failure and collapse in developing countries**.' And although they have been condemned as melodramatic and alarmist, many informed observers believe that **unmitigated climate change** beyond the end of the century **could pose an existential threat to civilisation." What is certain is that there is no precedent in human experience for such rapid change or such climatic conditions, and even in the best case adaptation to these extremes would mean profound social, cultural and political changes**.

## China tech leadership

### 2ac

#### US is leading S&T ahead of China and Japan – 2008 recession levelled the playing field

NSB 14 – The National Science Board's Science and Engineering Indicators report provides data on the US position in science and technology.

 (“US lead in science and technology shrinking,” Phys.org, February 6, 2014, http://phys.org/news/2014-02-science-technology.html)//ac

However, comprehensive data covering the post-economic downturn period reveal that the U.S. has rebounded from the Great Recession better than other developed countries. By 2011, with a resurgence of business R&D, overall R&D funding had returned to 2008 levels, when adjusted for inflation. Indicators data also show that S&T degree and job holders weathered the recession better than others in the U.S. workforce. (The report released today does not cover the period during which Federal R&D was cut sharply by sequestration. The National Science Foundation reports that Federal R&D funding has declined in each fiscal year since 2010, dropping by 7.1 percent in fiscal year 2013.) U.S. high-tech industries have generally fared better than those of other developed economies in the aftermath of the recession. In contrast to the European Union (E.U.) and Japan, the value-added output of U.S. high-tech industries grew in 2010-12, surpassing pre-recession levels. Similarly, commercial investment in clean energy technology declined sharply in the E.U. during the recession and has yet to return to pre-downturn levels. One of the most notable S&T trends of the last decade has been the increased innovation capacity of emerging economies as they narrowed many gaps with the West. However, the U.S. S&T enterprise remains the global leader. For example, the U.S. invests twice as much as any other single nation in R&D, despite slipping to tenth in world ranking of the percentage of its GDP it devotes to R&D. **In 2011, the U.S. spent $429 billion on R&D, compared to China's $208 billion and Japan's $146 billion.** Among other S&T metrics, the U.S. leads in high quality research publications, patents, and income from intellectual property exports. "**The United States remains the world's leader in science and technology**," said Ray Bowen, NSB member and chairman of its Committee on Science and Engineering Indicators, which oversees development of the report. "But there are numerous indicators showing how rapidly the world is changing and how other nations are challenging our predominance. As other countries focus on increasing their innovation capacities, we can ill afford to stand still. We now face a competitive environment undreamed of just a generation ago," said Bowen, visiting distinguished professor, Rice University and president emeritus of Texas A&M University.

#### China lacks the military, economy, and domestic stability to challenge the US—and it doesn’t want to lead anyways

Beauchamp 14

(Zack, B.A.s in Philosophy and Political Science from Brown University and M.Sc in International Relations from the London School of Economics; 2/13/14, The Week, “China has not replaced America — and it never will,” <http://theweek.com/article/index/256406/china-has-not-replaced-america-mdash-and-it-never-will>, Accessed 7/30/14, JC)

China faces too many internal problems and regional rivals to ever make a real play for global leadership. And even if Beijing could take the global leadership mantle soon, it wouldn't. China wants to play inside the existing global order's rules, not change them. Start with the obvious military point: The Chinese military has nothing like the global reach of its American rival's. China only has one aircraft carrier, a refitted Russian vessel. The U.S. has 10, plus nine marine mini-carriers. China's first homemade carrier is slated for completion in 2018, by which time the U.S. will have yet another modern carrier, and be well on its way to finishing another. The idea that China will be able to compete on a global scale in the short to medium term is absurd. Even in East Asia, it's not so easy for China. In 2012, Center for Strategic and International Studies experts Anthony Cordesman and Nicholas Yarosh looked at the data on Chinese and Taiwanese military strength. They found that while China's relative naval strength was growing, Taiwan had actually improved the balance of air power in its favor between 2005 and 2012 — just as China's economic growth rate, and hence influx of new resources to spend on its military, was peaking. China's equipment is often outdated, and its training regimes can be comically bad. A major part of its strategic missile force patrols on horseback because it doesn't have helicopters. This isn't to deny China's military is getting stronger. It is. And one day, this might require the United States to rethink its strategic posture in East Asia. But Chinese hard power is nowhere close to replacing, or even thinking about challenging, American military hegemony. And look at China's geopolitical neighborhood. As a result of historical enmity and massive power disparities, Beijing would have a tough time convincing Japan, South Korea, and Taiwan that its military buildup is anything but threatening. Consequently, the smaller East Asian states are likely to get over their mutual disagreements and stick it out together in the American-led alliance system for the foreseeable future. To the north and west, China is bordered by Russia and India. China fought each of them as recently as the 1960s, and both are likely to be threatened by any serious Chinese military buildup. Unlike the United States, bordered by oceans and two friendly states, China is surrounded by enemies and rivals. Projecting power globally is hard when you've got to worry about defending your own turf. But what happens when China's GDP passes America's? Well, for one thing, we're not really sure when that will be. Realizing that current growth rates were economically and ecologically unsustainable, the Chinese government cut off the investment spigot that fueled its extraordinary 10 percent average annual growth. Today, China's growth rate is about half of what it was in 2007. One analysis suggests China's GDP may not surpass America's until the 2100s. Moreover, China's GDP per capita is a long way off from matching Western standards. In 2012, the World Bank assessed China's at $6,009; the United States' was $57,749. The per-person measure of wealth matters in that it reflects the government's capacity to pay for things that make its citizens happy and healthy. That's where China's internal headaches begin. The Chinese government has staked its domestic political legitimacy on delivering rapid, massive improvements in quality of life for its citizens. As growth slows, domestic political dissent may rise. Moreover, growth's worst side effect to date — an unprecedented ecological crisis — is also a source of massive discontent. China has 20 of the world's 30 most polluted cities; environmental cleanup costs may hoover up 3 percent of China's GDP. That's throwing 30 percent of its yearly average growth (during the pre-2013 boom years!) down the drain. The mass death and poisoning that follow as severe pollution's handmaidens threaten the very foundations of the Communist Party's power. American University China scholar Judith Shapiro writes that environmental protests — which sometimes "shut down" huge cities — are "so severe and so central to the manner in which China will 'rise' that it is no exaggeration to say that they cannot be separated from its national identity and the government's ability to provide for the Chinese people." That's hardly the only threat to the Chinese economy. China's financial system bears a disturbing resemblance to pre-crisis Wall Street. Its much-vaunted attempt to move away from an unsustainable export-based economy, according to Minxin Pei, may break on the rocks of massive corruption and other economic problems. After listing a slew of related problems, Pei suggests we need to start envisioning a world of "declining Chinese strength and rising probability of an unexpected democratic transition in the coming two decades." But even if this economic gloom and doom is wrong, and China really is destined for a prosperous future, there's one simple reason China will never displace America as global leader: It doesn't want to. Chinese foreign policy, to date, has been characterized by a sort of realist incrementalism. China has displayed no interest in taking over America's role as protector of the global commons; that's altogether too altruistic a task. Instead, China is content to let the United States and its allies keep the sea lanes open and free ride off of their efforts. A powerful China, in other words, would most likely to be happy to pursue its own interests inside the existing global order rather than supplanting it. In 2003, Harvard's Iain Alastair Johnston analyzed data about Chinese hostility to the global status quo across five dimensions: participation in international institutions, compliance with international norms, twisting the rules that govern global institutions, making the transformation of global political power into a clear policy goal, and acting militarily on that objective. He found that China was "more integrated into and more cooperative within international institutions than ever before," and that there was "murky" evidence at best of intent to challenge the United States outside of them. Johnston reassessed parts of his argument in 2013 and concluded that not much had changed. It actually, then, wouldn't be bad for Americans if China bears like Pei were wrong, and China really did blossom economically in the 21st century. China probably won't have the military means to challenge the foundations of global stability and prosperity, and even if it didn't, its leaders don't seem to want to.

#### China rise doesn’t destroy hege – size of the economy is irrelevant and trade guarantees they don’t even challenge

Jones, 14 – Senior Fellow, Foreign Policy Director, Project on International Order and Strategy @ Brookings (Bruce, “American Leadership in a World in Flux,” March 10, 2014, http://www.brookings.edu/research/opinions/2014/03/10-american-leadership-flux-jones?rssid=LatestFromBrookings)//eek

Now, at some point in the next decade or two, China's economy will match that of the U.S. in size. But comparing the two on the basis of size is like comparing the Lakers to a middle-school basketball team - yes, both have 11 players, but the comparison ends there. Even when China's economy overtakes that of the U.S., Americans will be far richer per capita, the American economy will occupy a far more influential segment of the market, and the American dollar will still play a vastly larger role in global finance. America's GDP may have declined to roughly 22% of the world total (from a high of around 25%) but American firms still account for almost 50% of global profits, and American business still dominate sectors like finance and high technology. Oh and there's this: the more China's economy grows, the more ours grows, since China is an increasingly large trade partner.

#### No China rise – economics, alliances, and soft power

Dunn and McClelland, 13 – Professor of International Politics and Head of the Department of Political Science and International Studies at the University of Birmingham AND Associate Director for North America at the risk analytics consultancy Maplecroft in charge of energy policy (David and Mark, “Shale gas and the revival of American power: debunking decline?,” The Royal Institute of International Affairs, http://onlinelibrary.wiley.com/doi/10.1111/1468-2346.12081/abstract)//eek

There are arguments for the continued endurance of the Pax Americana other than the specific potential of US oil and gas reserves to revivify the material base of American power. According to Cox, there are three central grounds for reservations over whether a power shift from Washington to Beijing is actually occurring. First, economics has been too easily conflated with power. Second, the West still retains more structural advantages and assets than commonly acknowledged. Third, China’s rise is likely to prompt the United States to retain an enduring military presence in East Asia and lead other Asian powers to retain strong alliances with the United States to constrain China’s freedom of action in foreign affairs. Similar themes have also been highlighted by Nye, who argues that the link between economic growth and actual power in terms of the ability to attain desired outcomes has been overstated. The United States also retains an enormous military advantage over China, in addition to a significant reservoir of soft power on which it can draw. For Nye, the question is not so much whether America is in decline—he argues there is a ‘reasonable probability’ that the United States will remain the most powerful state for decades—as whether it can successfully wield ‘smart power’ to achieve its goals.14 With Cox and Nye as a useful introduction, arguments countering notions of American decline can broadly be grouped around three themes. The first, drawing on aspects of liberal internationalist thought, is that American power is not simply a crude reflection of its material strength. The second is that Chinese material strength, both economic and military, has been exaggerated and weaknesses all too frequently glossed over. The third is that American economic power has been underestimated, with temporary setbacks to economic growth in recent years presented as fundamental, masking the under lying robustness of the US economy. It is in the context of this theme that the revival of the energy landscape in the United States will be considered below.

#### No challengers—China seeks multilateral ventures, not hegemony

China Daily 13

(Zhang Yuwei China Daily, 9/29/13, China Daily, “China won't seek hegemony, FM tells UN,” <http://usa.chinadaily.com.cn/china/2013-09/29/content_17001750.htm>, Accessed 7/28/14, JC)

"Wang Yi's message was clear: China is not like past imperial powers." Zhu Zhiqun, a professor of political science and international relations at Bucknell University in Pennsylvania, said Wang's remarks reassure the international community that China will continue to focus on development and peace and will not seek hegemony. "China has been criticized by some for not being responsible as a great power," Zhu said. "Now the new leadership will demonstrate its confidence, maturity and sense of mission as a big power through more positive involvement in international affairs. "Its approach to territorial disputes with some neighbors is rational and pragmatic, finding a solution through negotiation and consultation. If no easy solution can be found, then shelve the disputes and focus on joint exploration of the resources near the disputed areas." Zhu said it is noteworthy that the foreign minister said China will "play a more proactive and constructive role in addressing international and regional hotspot issues". Wang also called for peaceful solutions through dialogue to nuclear issues in Iran and on the Korean Peninsula, adding that China has been working to promote a peaceful settlement of the Iranian nuclear issue through dialogue. He pointed out in his speech that this is the 10th year of the Six-Party Talks. "We hope that parties will create conditions, build consensus, work toward the same goal and resume the talks at an early date," he said. Wang said China "has played a constructive role in seeking a comprehensive, lasting and appropriate solution to the Iranian nuclear issue so as to uphold the international nonproliferation regime and peace and stability in the Middle East". "China calls for an immediate end to hostilities and violence in Syria so as to create necessary conditions for the verification and destruction of chemical weapons. We call for the early opening of the Geneva II conference and faster progress in a political resolution of the Syrian issue." Wang said Beijing does not seek national gains in Syria. It respects the Syrian people's aspirations and choices, and China will continue to assist them, including refugees who have fled the country. The foreign minister called for "an early launch of intergovernmental negotiations on the post-2015 agenda". "The post-2015 development agenda should continue to focus on development and poverty elimination; give due consideration to national conditions and stages of development in different countries; and respect their independent choices of development paths," Wang said. Barry Carin, a senior fellow with the Canada-based Center for International Governance Innovation, however, warned the debate will be very difficult. "We risk a fuzzy outcome rather than a cogent narrative, including vision and principles, together with a limited number of concrete and time-bound commitments," Carin said.