# 1NC

### Off

#### Interpretation: Economic engagement requires the promotion of trade

Celik, 11 **–** master’s student at Uppsala University (Department of Peace and Conflict Research) (Arda, Economic Sanctions and Engagement Policies <http://www.grin.com/en/e-book/175204/economic-sanctions-and-engagement-policies>)

Economic engagement policies are strategic integration behaviour which involves with the target state. Engagement policies differ from other tools in Economic Diplomacy. They target to deepen the economic relations to create economic intersection, interconnectness, and mutual dependence and finally seeks economic interdependence. This interdependence serves the sender state to change the political behaviour of target state. However they cannot be counted as carrots or inducement tools, they focus on long term strategic goals and they are not restricted with short term policy changes.(Kahler&Kastner,2006) They can be unconditional and focus on creating greater economic benefits for both parties. Economic engagement targets to seek deeper economic linkages via promoting institutionalized mutual trade thus mentioned interdependence creates two major concepts. Firstly it builds strong trade partnership to avoid possible militarized and non militarized conflicts. Secondly it gives a leeway to perceive the international political atmosphere from the same and harmonized perspective. Kahler and Kastner define the engagement policies as follows, “It is a policy of deliberate expanding economic ties with and adversary in order to change the behaviour of target state and improve bilateral relations”.(p523-abstact).It is an intentional economic strategy that expects bigger benefits such as long term economic gains and more importantly; political gains. The main idea behind the engagement motivation is stated by Rosecrance (1977) in a way that “the direct and positive linkage of interests of states where a change in the position of one state affects the position of others in the same direction.”

#### Violation: The plan is a non-trade promoting form of engagement that results in trade and an economic outcome. This only indirectly engages the country.

#### Voters-

#### Fairness: trade promotion is key to fair debates and neg strategy- affs that aren’t in the context of trade are unfair

#### Education: our interp is best for education- ensures debates that are about economic engagement. Our interpretation is grounded in lit.

#### Effects: even if they win the effect of the plan is increased trade that’s bad- it unlimits the resolution, undercuts neg ground, and makes topicality and solvency unnecessary

### Off

#### Climate science presupposes a metaphysical divide between humanity and nature that distorts its epistemic validity and political efficacy

Head and Gibson ’12 Lesley Head, University of Wollongong, Australia, and Chris Gibson, University of Wollongong, Australia, “Becoming differently modern: Geographic contributions to a generative climate politics,” Progress in Human Geography, December 2012 vol. 36 no. 6 699-714

There are a number of interconnected implications here for how we might think differently about climate change. First, emphasis on the moment of collision between two separate entities (the ‘impact’ of ‘humans’ on ‘climate’) has favoured historical explanations that depend on correlation in time and space, to the detriment of the search for mechanisms of connection rather than simple correlation (Head, 2008). This is particularly important to how we think about the future, since removal of the ‘human’ is presumably not our solution of first resort. As Hulme (2010a: 270) argues, ‘it is as irrelevant as it is impossible to find the invisible fault line between natural and artificial climate’. Second, putting the significant explanatory divide between humans and nature requires the conflation of bundles of variable processes under the headings ‘human’, ‘climate’ and ‘nature’. For example ‘climatic processes’ can include everything from astronomical forcing at 100,000-year timescales to ENSO cycles of a decade or so, and trends that can be warming, cooling, wetting or drying. In practical terms, taking apart the climate monolith allows us to consider how mooted anthropogenic changes leading to future scenarios will take expression in and through existing patterns of weather and climatic variability (Hulme, 2008). Taking apart the human monolith forces us to consider exactly what the constituent practices of solutions might be. For the most part the deconstructive effort is yet to pervade physical geography and archaeology, where ‘human impacts’ – a conceptualisation that positions humans as outside the system under analysis, as outside nature – remains the dominant, if implicit, conceptualisation of the human-nature engagement over timescales of hundreds and thousands of years (Head, 2008). Nevertheless, this long-term perspective has provided a crucial underpinning to the identification of anthropogenic climate change in the palaeoclimatic record. So, a key contradiction persists: we maintain dualistic ways of talking about things (human impacts, human interaction with environment, anthropogenic climate change, cultural landscapes, social-ecological systems), while the empirical evidence increasingly demonstrates how inextricably humans have become embedded in earth surface and atmospheric processes.

#### The ethical irresponsibility of speciesism produces constant, unspeakable violence

Kochi and Ordan ‘8 Tarik Kochi & Noam Ordan, “An Argument for the Global Suicide of Humanity,” borderlands, vol. 7 no. 3, 2008, http://www.borderlands.net.au/vol7no3\_2008/kochiordan\_argument.pdf

Within the picture many paint of humanity, events such as the Holocaust are considered as an exception, an aberration. The Holocaust is often portrayed as an example of ‘evil’, a moment of hatred, madness and cruelty (cf. the differing accounts of ‘evil’ given in Neiman, 2004). The event is also treated as one through which humanity might comprehend its own weakness and draw strength, via the resolve that such actions will never happen again. However, if we take seriously the differing ways in which the Holocaust was ‘evil’, then one must surely include along side it the almost uncountable numbers of genocides that have occurred throughout human history. Hence, if we are to think of the content of the ‘human heritage’, then this must include the annihilation of indigenous peoples and their cultures across the globe and the manner in which their beliefs, behaviours and social practices have been erased from what the people of the ‘West’ generally consider to be the content of a human heritage. Again the history of colonialism is telling here. It reminds us exactly how normal, regular and mundane acts of annihilation of different forms of human life and culture have been throughout human history. Indeed the history of colonialism, in its various guises, points to the fact that so many of our legal institutions and forms of ethical life (i.e. nation-states which pride themselves on protecting human rights through the rule of law) have been founded upon colonial violence, war and the appropriation of other peoples’ land (Schmitt, 2003; Benjamin, 1986). Further, the history of colonialism highlights the central function of ‘race war’ that often underlies human social organisation and many of its legal and ethical systems of thought (Foucault, 2003). This history of modern colonialism thus presents a key to understanding that events such as the Holocaust are not an aberration and exception but are closer to the norm, and sadly, lie at the heart of any heritage of humanity. After all, all too often the European colonisation of the globe was justified by arguments that indigenous inhabitants were racially ‘inferior’ and in some instances that they were closer to ‘apes’ than to humans (Diamond, 2006). Such violence justified by an erroneous view of ‘race’ is in many ways merely an extension of an underlying attitude of speciesism involving a long history of killing and enslavement of non-human species by humans. Such a connection between the two histories of inter-human violence (via the mythical notion of differing human ‘races’) and interspecies violence, is well expressed in Isaac Bashevis Singer’s comment that whereas humans consider themselves “the crown of creation”, for animals “all people are Nazis” and animal life is “an eternal Treblinka” (Singer, 1968, p.750). Certainly many organisms use ‘force’ to survive and thrive at the expense of their others. Humans are not special in this regard. However humans, due a particular form of self-awareness and ability to plan for the future, have the capacity to carry out highly organised forms of violence and destruction (i.e. the Holocaust; the massacre and enslavement of indigenous peoples by Europeans) and the capacity to develop forms of social organisation and communal life in which harm and violence are organised and regulated. It is perhaps this capacity for reflection upon the merits of harm and violence (the moral reflection upon the good and bad of violence) which gives humans a ‘special’ place within the food chain. Nonetheless, with these capacities come responsibility and our proposal of global suicide is directed at bringing into full view the issue of human moral responsibility. When taking a wider view of history, one which focuses on the relationship of humans towards other species, it becomes clear that the human heritage – and the propagation of itself as a thing of value – has occurred on the back of seemingly endless acts of violence, destruction, killing and genocide. While this cannot be verified, perhaps ‘human’ history and progress begins with the genocide of the Neanderthals and never loses a step thereafter. It only takes a short glimpse at the list of all the sufferings caused by humanity for one to begin to question whether this species deserves to continue into the future. The list of human-made disasters is ever-growing after all: suffering caused to animals in the name of science or human health, not to mention the cosmetic, food and textile industries; damage to the environment by polluting the earth and its stratosphere; deforesting and overuse of natural resources; and of course, inflicting suffering on fellow human beings all over the globe, from killing to economic exploitation to abusing minorities, individually and collectively. In light of such a list it becomes difficult to hold onto any assumption that the human species possesses any special or higher value over other species. Indeed, if humans at any point did possess such a value, because of higher cognitive powers, or even because of a special status granted by God, then humanity has surely devalued itself through its actions and has forfeited its claim to any special place within the cosmos. In our development from higher predator to semi-conscious destroyer we have perhaps undermined all that is good in ourselves and have left behind a heritage best exemplified by the images of the gas chamber and the incinerator. We draw attention to this darker and pessimistic view of the human heritage not for dramatic reasons but to throw into question the stability of a modern humanism which sees itself as inherently ‘good’ and which presents the action of cosmic colonisation as a solution to environmental catastrophe. Rather than presenting a solution it would seem that an ideology of modern humanism is itself a greater part of the problem, and as part of the problem it cannot overcome itself purely with itself. If this is so, what perhaps needs to occur is the attempt to let go of any one-sided and privileged value of the ‘human’ as it relates to moral activity. That is, perhaps it is modern humanism itself that must be negated and supplemented by a utopian anti-humanism and moral action re-conceived through this relational or dialectical standpoint in thought.

#### Text: Vote negative to refuse the speciesist ethic of the 1AC.

#### The aff’s ethical insufficiency is prior to its consequential benefits. Rejecting speciesism is essential to opening better ways of relating to other beings

Smith ’11 Mick Smith, Against Ecological Sovereignty, University of Minnesota Press: Minneapolis, 2011, p. 44-45

Leaving aside for the moment the question of how far Murdoch’s and Levinas’s understandings might be compatible, or at odds, with claims about the ethicopolitical stewardship of nature (questions that, as the next section illustrates, are closely connected with the manner in which their metaphysics is thought of as providing a "guide for mor- als”), it is still necessary to ask what it means to “join the world as it really is" and how this might relate to a potential ecological ethics. In other words, how far might such approaches be capable of recognizing the ethical import of nonhuman others given that both Murdoch and Levinas speak of the other as a human being? In Levinas’s terms, the Other (Autrui often, but not always consistently, capitalized) is exclu- sively and explicitly so, as, for example, with regard to the face-to-face encounter. Certainly, if such an ethics can be understood as being relevant to the more—than-human world, it offers the possibility of paying concerned attention to patterns of difference in nature without reducing these differences to representational codes (taxonomies) and systems (axiologies) that might claim to, but cannot, capture essential moral distinctions between categories of beings (Smith 2001a). Such an ethics would be a much more suitable response to a natural world that is alien, purposeless, and independent of human interests. Animals, birds, stones, trees really are alien in the sense that they are other than human, that they exhibit radically different and sometimes extraor- dinarily strange ways of being-in-the-world. Humanistic approaches, indebted to the anthropological machine, tend to emphasize and use these differences as reasons for excluding such things from moral con- sideration. They are not like our-human-selves, and so, they argue, in their anthropocentric self-obsessed ways, can consequently be of no ethical (as opposed to instrumental) interest to us. The unfortunate response of environmental ethics to such claims has often been to try to minimize differences and find essential similarities or common purpose or to establish mutual dependencies by extending these same self-centered patterns (Taylor 1986; Attfield 1991). Certain aspects of the environment are deemed morally considerable because they share some supposedly key aspect of human selfhood that makes them as "intrinsically" valuable as ourselves, for example, as subjects- of-a-life. Our self-concern becomes the basis for a (supposedly) ethical concern for those others deemed sufficiently like us. An alternative, more expansive strategy, which still retains this same self-centered form, is to suggest that the whole of nature might be deemed valuable insofar as it is reconceptualized (via, for example, ecology, quantum physics, or non-Western metaphysics) as part of our extended selves (see, for example, Callicott’s [1985] early work). Some even combine both strategies, for example, by espousing a form of “contemporary panpsychism” whereby the universe is reenvisaged as a "self-realizing system," which “possesses reflexivity and to this extent . . . is imbued with a subjectival dimension" (Mathews 2003, 74).14 However, in adopting these strategies, these purportedly biocentric approaches change the content but retain the form, the same anthro- pocentrically self-obsessed locus, of the dominant ethical held (Smith 2001a). These forms of axiological extensionism, while often well in- tentioned, are not only philosophically artificial (constructed largely in order to justify certain already predetermined ends) and ecologically impractical but also tend to replicate, rather than fundamentally challenge, the presuppositions of the anthropological machine. For all their egalitarian rhetoric, they tend to ethically favor those things most like, or closest to, that defined as properly human. The real differences that an alien nature presents are overlooked and human alienation fantasized away.15 By contrast, Murdoch and Levinas can be understood as arguing that ethics exists as a non-self-centered response to the recog- nition of such alienation from the world and from others. Indeed, there is no real ethics without recognizing such differences, An ecological difference ethics thus potentially offers a radical alternative to all attempts to enclose the nonhuman in an economy of the Same.

### Off

#### Text: The United State federal government should substantially increase market-fixed production cost incentives for electricity from Small Modular Liquid Fluoride Thorium Reactors. The United States federal government should engage the United Mexican States to encourage Small Modular Liquid Fluoride Thorium Reactor construction and grid integration. The United States Federal Government should not increase renewable energy integration with the United Mexican States.

#### This causes a thorium renaissance

Rosner and Goldberg ‘11 (Robert (William E. Wrather Distinguished Service Professor in the Departments of Astronomy and Astrophysics and Physics) and Stephen (Special Assistant to the Director at the Argonne National Laboratory) , *Energy Policy Institute at Chicago*, “Small Modular Reactors – Key to Future Nuclear Power Generation in the U.S.”, Technical Paper, Revision 1, November 2011)

Production Cost Incentive: A production cost incentive is a performance-based incentive. With a production cost incentive, the government incentive would be triggered only when the project successfully operates. The project sponsors would assume full responsibility for the upfront capital cost and would assume the full risk for project construction. The production cost incentive would establish a target price, a so-called “market-based benchmark.” Any savings in energy generation costs over the target price would accrue to the generator. Thus, a production cost incentive would provide a strong motivation for cost control and learning improvements, since any gains greater than target levels would enhance project net cash flow. Initial SMR deployments, without the benefits of learning, will have significantly higher costs than fully commercialized SMR plants and thus would benefit from production cost incentives. Because any production cost differential would decline rapidly due to the combined effect of module manufacturing rates and learning experience, the financial incentive could be set at a declining rate, and the level would be determined on a plant-by-plant basis, based on the achievement of cost reduction targets.43 The key design parameters for the incentive include the following: 1. The magnitude of the deployment incentive should decline with the number of SMR modules and should phase out after the fleet of LEAD and FOAK plants has been deployed. 2. The incentive should be market-based rather than cost-based; the incentive should take into account not only the cost of SMRs but also the cost of competing technologies and be set accordingly. 3. The deployment incentive could take several forms, including a direct payment to offset a portion of production costs or a production tax credit. The Energy Policy Act of 2005 authorized a production tax credit of $18/MWh (1.8¢/kWh) for up to 6,000 MW of new nuclear power plant capacity. To qualify, a project must commence operations by 2021. Treasury Department guidelines further required that a qualifying project initiate construction, defined as the pouring of safety- related concrete, by 2014. Currently, two GW-scale projects totaling 4,600 MW are in early construction; consequently, as much as 1,400 MW in credits is available for other nuclear projects, including SMRs. The budgetary cost of providing the production cost incentive depends on the learning rate and the market price of electricity generated from the SMR project. Higher learning rates and higher market prices would decrease the magnitude of the incentive; lower rates and lower market prices would increase the need for production incentives. Using two scenarios (with market prices based on the cost of natural gas combined-cycle generation) yields the following range of estimates of the size of production incentives required for the FOAK plants described earlier. For a 10% learning rate, 􏰂 Based on a market price of $60/MWh44 (6¢/kWh), the LEAD plant and the subsequent eight FOAK plants would need, on average, a production credit of $13.60/MWh (1.4¢/kWh), 24% less than the $18 credit currently available to renewable and GW-scale nuclear technologies. (The actual credit would be on a sliding scale, with the credit for the LEAD plant at approximately $31/MWh, or 3.1¢/kWh, declining to a credit of about $6/MWh, or 0.6¢/kWh, by the time of deployment of FOAK-8). The total cost of the credit would be about $600 million per year (once all plants were built and operating). If the market price were about $70/MWh (7¢/kWh), the LEAD and only four subsequent FOAK plants would require a production incentive. In this case, the average incentive would be $8.40/MWh (0.8¢/kWh), with a total cost of about $200 million per year. Higher learning rates would drive down the size of the production incentive. For example, at a 12% learning rate, 􏰂 At a market price of $60/MWh (6¢/kWh), the LEAD and the subsequent five FOAK plants would require a production incentive, with an average incentive level of about $15/MWh (1.5¢/kWh). Total annual cost (after all plants are in full operation) would be about $450 million per year. 􏰂 At a market price of $70/MWh (7¢/kWh), the LEAD and three FOAK plants would require a production incentive averaging $9.00/MWh (0.9¢/kWh, half of the current statutory incentive), with a total annual cost of about $170 million per year. The range of costs for the production incentive illustrates the sensitivity of the incentive level to the learning rate and the market price of electricity. Thus, efforts to achieve higher learning rates, including fully optimized engineering designs for the SMRs and the manufacturing plant, as well as specially targeted market introduction opportunities that enable SMRs to sell electricity for higher priced and higher value applications, can have a critical impact on the requirements for production incentives. The potential size of the incentive should be subject to further analysis as higher quality cost estimates become available.

#### Solves warming

Shellenberger et al ‘12 (Michael, founder of the Breakthrough Institute and MA in anthropology from UC Santa Cruz, Ted Nordhaus, Chairman of the Breakthrough Institute, and Jessica Lovering, Policy analyst in the Energy and Climate Program at the Breakthrough Institute with MA’s in Astrophysics and Environmental Studies from CU-Boulder. “New Nukes: Why We Need Radical Innovation to Make New Nuclear Energy Cheap” The Breakthrough Institute, <http://thebreakthrough.org/index.php/programs/energy-and-climate/new-nukes/>)

Arguably, the biggest impact of Fukushima on the nuclear debate, ironically, has been to force a growing number of pro-nuclear environmentalists out of the closet, including us. The reaction to the accident by anti-nuclear campaigners and many Western publics put a fine point on the gross misperception of risk that informs so much anti-nuclear fear. Nuclear remains the only proven technology capable of reliably generating zero-carbon energy at a scale that can have any impact on global warming. Climate change -- and, for that matter, the enormous present-day health risks associated with burning coal, oil, and gas -- simply dwarf any legitimate risk associated with the operation of nuclear power plants. About 100,000 people die every year due to exposure to air pollutants from the burning of coal. By contrast, about 4,000 people have died from nuclear energy -- ever -- almost entirely due to Chernobyl. But rather than simply lecturing our fellow environmentalists about their misplaced priorities, and how profoundly inadequate present-day renewables are as substitutes for fossil energy, we would do better to take seriously the real obstacles standing in the way of a serious nuclear renaissance. Many of these obstacles have nothing to do with the fear-mongering of the anti-nuclear movement or, for that matter, the regulatory hurdles imposed by the U.S. Nuclear Regulatory Commission and similar agencies around the world. As long as nuclear technology is characterized by enormous upfront capital costs, it is likely to remain just a hedge against overdependence on lower-cost coal and gas, not the wholesale replacement it needs to be to make a serious dent in climate change. Developing countries need large plants capable of bringing large amounts of new power to their fast-growing economies. But they also need power to be cheap. So long as coal remains the cheapest source of electricity in the developing world, it is likely to remain king. The most worrying threat to the future of nuclear isn't the political fallout from Fukushima -- it's economic reality. Even as new nuclear plants are built in the developing world, old plants are being retired in the developed world. For example, Germany's plan to phase-out nuclear simply relies on allowing existing plants to be shut down when they reach the ends of their lifetime. Given the size and cost of new conventional plants today, those plants are unlikely to be replaced with new ones. As such, the combined political and economic constraints associated with current nuclear energy technologies mean that nuclear energy's share of global energy generation is unlikely to grow in the coming decades, as global energy demand is likely to increase faster than new plants can be deployed. To move the needle on nuclear energy to the point that it might actually be capable of displacing fossil fuels, we'll need new nuclear technologies that are cheaper and smaller. Today, there are a range of nascent, smaller nuclear power plant designs, some of them modifications of the current light-water reactor technologies used on submarines, and others, like thorium fuel and fast breeder reactors, which are based on entirely different nuclear fission technologies. Smaller, modular reactors can be built much faster and cheaper than traditional large-scale nuclear power plants. Next-generation nuclear reactors are designed to be incapable of melting down, produce drastically less radioactive waste, make it very difficult or impossible to produce weapons grade material, useless water, and require less maintenance. Most of these designs still face substantial technical hurdles before they will be ready for commercial demonstration. That means a great deal of research and innovation will be necessary to make these next generation plants viable and capable of displacing coal and gas. The United States could be a leader on developing these technologies, but unfortunately U.S. nuclear policy remains mostly stuck in the past. Rather than creating new solutions, efforts to restart the U.S. nuclear industry have mostly focused on encouraging utilities to build the next generation of large, light-water reactors with loan guarantees and various other subsidies and regulatory fixes. With a few exceptions, this is largely true elsewhere around the world as well. Nuclear has enjoyed bipartisan support in Congress for more than 60 years, but the enthusiasm is running out. The Obama administration deserves credit for authorizing funding for two small modular reactors, which will be built at the Savannah River site in South Carolina. But a much more sweeping reform of U.S. nuclear energy policy is required. At present, the Nuclear Regulatory Commission has little institutional knowledge of anything other than light-water reactors and virtually no capability to review or regulate alternative designs. This affects nuclear innovation in other countries as well, since the NRC remains, despite its many critics, the global gold standard for thorough regulation of nuclear energy. Most other countries follow the NRC's lead when it comes to establishing new technical and operational standards for the design, construction, and operation of nuclear plants. What's needed now is a new national commitment to the development, testing, demonstration, and early stage commercialization of a broad range of new nuclear technologies -- from much smaller light-water reactors to next generation ones -- in search of a few designs that can be mass produced and deployed at a significantly lower cost than current designs. This will require both greater public support for nuclear innovation and an entirely different regulatory framework to review and approve new commercial designs. In the meantime, developing countries will continue to build traditional, large nuclear power plants. But time is of the essence. With the lion's share of future carbon emissions coming from those emerging economic powerhouses, the need to develop smaller and cheaper designs that can scale faster is all the more important. A true nuclear renaissance can't happen overnight. And it won't happen so long as large and expensive light-water reactors remain our only option. But in the end, there is no credible path to mitigating climate change without a massive global expansion of nuclear energy. If you care about climate change, nothing is more important than developing the nuclear technologies we will need to get that job done.

### Off

#### Immigration reform passage is most likely now, Boehner has high credibility, and 2014 passage is a key goal for the GOP

Vinik 2-6 (DANNY VINIK, graduated from Duke in 2013 with degrees in economics and public policy. political reporter at Business Insider. If Immigration Reform Is Going To Happen, Now Is The Time¶ FEB. 6, 2014, <http://www.businessinsider.com/if-immigration-reform-is-going-to-happen-now-is-the-time-2014-2#ixzz2schq3fXV>)

Given that midterm elections are often determined by a party's ability to get out its base to vote, many conservatives are concerned that pursuing immigration reform will divide the party and hurt them in November.¶ Among the people who have voiced this opinion are Reihan Salam, Ramesh Ponnuru, Sean Trende and Chris Cillizza. It's a reasonable opinion, but these arguments are both too cynical and mistake the optimal political timetable for immigration reform.\*¶ First, you have to remember that the Republican Party is intent on passing immigration reform before the 2016 election to try to win back some of the Hispanic vote. Trende has written repeatedly that immigration reform is not necessary for Republicans to win the White House and that agreeing to immigration reform won't necessarily win back a large share of the Hispanic vote. He's right, but the establishment is still convinced that immigration reform is vital for the party's success in 2016.¶ So, given that Republicans are determined to pass immigration reform back the 2016 election, then you next have to think about when is the best time to make it happen. Not in 2016, when the election will be in full swing. But 2015 is very problematic as well because it will be right around when primaries pick up. As Greg Sargent points out, Sen. Ted Cruz (R-Texas) would love for immigration reform to be a major issue in the Republican primary. It could easily pull the entire Republican field to the right and damage their chances in the general election.¶ At that point, you're left with this year.¶ There are a few more reasons this makes sense. For the first time in years, House Speaker John Boehner (R-Ohio) has tenuous control in his party. The tea party is on the defensive after losing credibility with the government shutdown and failing to block both the budget agreement and the farm bill. Even on the debt ceiling, few conservatives are making crazy demands. (Rep. Michele Bachmann has even given in.)¶ In addition, the Senate has already passed an immigration bill. Of course, the House is planning on doing things its own way, but at least we have a bipartisan piece of legislation that the Senate has passed. And as Seung Min Kim notes in Politico, that bill includes a carefully crafted deal between the Chamber of Commerce and the AFL-CIO over guest workers, something that was not easy to accomplish. Trying to redo that in a few years won't be easy.¶ The electoral consequences are also not that dire for Republicans. They are already assured of keeping the House this year. The Senate is still a toss-up at best for the GOP, so pursuing immigration reform could cost them there. But the potential electoral consequences of pursuing immigration reform in 2015 could mean losing the presidency. Possibly losing the Senate when a Democrat is already in the White House is not that bad in comparison.¶ Finally, immigration reform is something that we need to get done. There are nearly 12 million undocumented immigrants in this country. Pushing this off until 2017 or further will only exacerbate the problem. Boehner may also be looking to cement his legacy, with rumors that he may consider retiring soon. Those are two less cynical reasons that the House may take it up in the next few months.¶ None of this means immigration reform will happen. The odds are heavily stacked against it. Even among establishment Republicans, their acceptable policy ideas may not overlap at all with what the White House deems acceptable. ¶ In all likelihood, their ranges of acceptable policy solutions are mutually exclusive and immigration reform will die in the next few months. But if that happens, then reform isn't happening until after President Obama leaves office, which means Republicans will have to give up on their goal of passing immigration reform before the 2016 election.¶ Right now, they're not quite ready to give up. That means they must choose the best time and political environment to push legislation. That time is now.

#### Obama’s leverage is key to pushing CIR and getting Republicans on board

Pace and Espo 2-1 (Julie Pace, David Espo, Associated Press writers, Ahead of elections, GOP wary of immigration issue, <http://bostonherald.com/news_opinion/us_politics/2014/02/ahead_of_elections_gop_wary_of_immigration_issue>, 2-1-14) aln

President Barack Obama's new declaration that he's open to legal status for many immigrants short of citizenship sounds a lot like House Speaker John Boehner and other GOP leaders, an election-year compromise that numerous Republicans as well as Democrats crave. But the drive for the first overhaul in three decades still faces major resistance from many Republicans who are wary that the divisive issue could derail what they see as a smooth glide path to winning November's congressional elections. And they deeply distrust the Democratic president to enforce the law. Just hours after Boehner pitched immigration to the GOP at a Maryland retreat, Obama suddenly indicated he would be open to legal status for many of the 11 million living here illegally, dropping his once-ironclad insistence on a special path to citizenship. Democrats, including Obama, and other immigration proponents have warned repeatedly about the creation of a two-tier class system. "If the speaker proposes something that says right away, folks aren't being deported, families aren't being separated, we're able to attract top young students to provide the skills or start businesses here, and then there's a regular process of citizenship, I'm not sure how wide the divide ends up being," Obama said in a CNN interview that was recorded Thursday and aired Friday. Obama's flexibility is a clear indication of the president's desire to secure an elusive legislative achievement before voters decide whether to hand him even more opposition in Congress. Republicans are expected to maintain their grip on the House and have a legitimate shot at grabbing the majority in the Senate. "I'm going to do everything I can in the coming months to see if we can get this over the finish line," Obama said Friday of an immigration overhaul in a Google Plus Hangout talk.

#### Renewable energy investment causes backlash

Leone 12 (Steve, Associate Editor of Renewable Energy World, "Part 2: Political Reality and the Way Forward for Renewable Energy," 4/3/12, http://www.renewableenergyworld.com/rea/news/article/2012/04/part-2-political-reality-and-the-way-forward-for-renewable-energy)

New Hampshire, U.S.A. -- Political heavyweights know this about their rough-and-tumble game – you project victory long before the results are in. And when you think you've won, you never give your opponent an opening. In Washington, it’s hard enough to craft legislation even in relatively amicable times. In the tense atmosphere on the Hill today, meaningful legislation takes a ringside seat, and the game becomes theater. That’s where we are now. In one corner is the House budget, essentially the Republican Party’s line in the sand that’s been drawn over the size of the federal government. A key component of this is the federal government’s more limited role in supporting a clean energy future. In the other corner is the White House and the Democrat-controlled Senate, which has vowed to stonewall any legislation that it says caters to the super-wealthy and the entrenched fossil fuels industry. Like two tired boxers in the ring, they’re content to leave it in the hands of the judges — in this case the voters, who will in many ways determine the force with which our federal government pursues a national policy built on clean energy. But the real prospects for any meaningful legislation is likely to come after the election, when the rhetoric cools and when political capital comes due. Until then, most industry observers don’t expect much chance of any real federal renewable energy legislation passing through a divided Congress. That means no Clean Energy Standard, no revival of the 1603 Treasury grant program, no extension of the Production Tax Credit until the end of the year at the earliest. There are just too few vehicles that can be used to pass any of the measures, and too little trust between key negotiators to find find common ground. One of the last best hopes — the transportation bill — included an amendment that addressed some of these concerns. Ultimately, the amendment went nowhere, and the renewable industry was left looking months down the road to when something could get resolved. The question now is will it be too late. For 1603 to be brought back to life, it would require a major shift in thinking, especially in the House. The PTC has a better shot, but international players in the wind industry are already indicating that they’ll get out of the market if the credit tied to energy produced expires. Will they wait around until the end of the year to see if it can be revived? It’s increasingly looking like the answer may be no.

#### Immigration is key to cyber security

McLarty ‘9 Thomas F. McLarty III, President Of McLarty Associates, Former White House Chief of Staff and Task Force Co-Chair, question asked by Frank Finelli, the Carlyle Group, “U.S. Immigration Policy: Report of a CFR-Sponsored Independent Task Force,” Council on Foreign Relations, 7/8/2009, http://www.cfr.org/immigration/us-immigration-policy-report-cfr-sponsored-independent-task-force/p19759

We have seen, when you look at the table of the top 20 firms that are H1-B visa requestors, at least 15 of those are IT firms. And as we're seeing across industry, much of the hardware and software that's used in this country is not only manufactured now overseas, but it's developed overseas by scientists and engineers who were educated here in the United States. We're seeing a lot more activity around cyber-security, certainly noteworthy attacks here very recently. It's becoming an increasingly dominant set of requirements across not only to the Department of Defense, but the Department of Homeland Security and the critical infrastructure that's held in private hands. Was there any discussion or any interest from DOD or DHS as you undertook this review on the security things about what can be done to try to generate a more effective group of IT experts here in the United States, many of which are coming to the U.S. institutions, academic institutions from overseas and often returning back? This potentially puts us at a competitive disadvantage going forward. MCLARTY: Yes. And I think your question largely is the answer as well. I mean, clearly we have less talented students here studying -- or put another way, more talented students studying in other countries that are gifted, talented, really have a tremendous ability to develop these kind of technology and scientific advances, we're going to be put at an increasingly disadvantage. Where if they come here -- and I kind of like Dr. Land's approach of the green card being handed to them or carefully put in their billfold or purse as they graduate -- then, obviously, that's going to strengthen, I think, our system, our security needs.

#### Cyber-strike escalates to nuclear war

Lawson 9 (Sean - assistant professor in the Department of Communication at the University of Utah, Cross-Domain Response to Cyber Attacks and the Threat of Conflict, 5/13, http://www.seanlawson.net/?p=477)

At a time when it seems impossible to avoid the seemingly growing hysteria over the threat of cyber war,[1] network security expert Marcus Ranum delivered a refreshing talk recently, “The Problem with Cyber War,” that took a critical look at a number of the assumptions underlying contemporary cybersecurity discourse in the United States. He addressed one issue in partiuclar that I would like to riff on here, the issue of conflict escalation–i.e. the possibility that offensive use of cyber attacks could escalate to the use of physical force. As I will show, his concerns are entirely legitimate as current U.S. military cyber doctrine assumes the possibility of what I call “cross-domain responses” to cyberattacks. Backing Your Adversary (Mentally) into a Corner Based on the premise that completely blinding a potential adversary is a good indicator to that adversary that an attack is iminent, Ranum has argued that “The best thing that you could possibly do if you want to start World War III is launch a cyber attack. [...] When people talk about cyber war like it’s a practical thing, what they’re really doing is messing with the OK button for starting World War III. We need to get them to sit the f-k down and shut the f-k up.” [2] He is making a point similar to one that I have made in the past: Taking away an adversary’s ability to make rational decisions could backfire. [3] For example, Gregory Witol cautions that “attacking the decision maker’s ability to perform rational calculations may cause more problems than it hopes to resolveÃ¢â‚Â¦ Removing the capacity for rational action may result in completely unforeseen consequences, including longer and bloodier battles than may otherwise have been.” [4] Ã¯Â»Â¿Cross-Domain Response So, from a theoretical standpoint, I think his concerns are well founded. But the current state of U.S. policy may be cause for even greater concern. It’s not just worrisome that a hypothetical blinding attack via cyberspace could send a signal of imminent attack and therefore trigger an irrational response from the adversary. What is also cause for concern is that current U.S. policy indicates that “kinetic attacks” (i.e. physical use of force) are seen as potentially legitimate responses to cyber attacks. Most worrisome is that current U.S. policy implies that a nuclear response is possible, something that policy makers have not denied in recent press reports. The reason, in part, is that the U.S. defense community has increasingly come to see cyberspace as a “domain of warfare” equivalent to air, land, sea, and space. The definition of cyberspace as its own domain of warfare helps in its own right to blur the online/offline, physical-space/cyberspace boundary. But thinking logically about the potential consequences of this framing leads to some disconcerting conclusions. If cyberspace is a domain of warfare, then it becomes possible to define “cyber attacks” (whatever those may be said to entail) as acts of war. But what happens if the U.S. is attacked in any of the other domains? It retaliates. But it usually does not respond only within the domain in which it was attacked. Rather, responses are typically “cross-domain responses”–i.e. a massive bombing on U.S. soil or vital U.S. interests abroad (e.g. think 9/11 or Pearl Harbor) might lead to air strikes against the attacker. Even more likely given a U.S. military “way of warfare” that emphasizes multidimensional, “joint” operations is a massive conventional (i.e. non-nuclear) response against the attacker in all domains (air, land, sea, space), simultaneously. The possibility of “kinetic action” in response to cyber attack, or as part of offensive U.S. cyber operations, is part of the current (2006) National Military Strategy for Cyberspace Operations [5]: (U) Kinetic Actions. DOD will conduct kinetic missions to preserve freedom of action and strategic advantage in cyberspace. Kinetic actions can be either offensive or defensive and used in conjunction with other mission areas to achieve optimal military effects. Of course, the possibility that a cyber attack on the U.S. could lead to a U.S. nuclear reply constitutes possibly the ultimate in “cross-domain response.” And while this may seem far fetched, it has not been ruled out by U.S. defense policy makers and is, in fact, implied in current U.S. defense policy documents. From the National Military Strategy of the United States (2004): “The term WMD/E relates to a broad range of adversary capabilities that pose potentially devastating impacts. WMD/E includes chemical, biological, radiological, nuclear, and enhanced high explosive weapons as well as other, more asymmetrical ‘weapons’. They may rely more on disruptive impact than destructive kinetic effects. For example, cyber attacks on US commercial information systems or attacks against transportation networks may have a greater economic or psychological effect than a relatively small release of a lethal agent.” [6] The authors of a 2009 National Academies of Science report on cyberwarfare respond to this by saying, “Coupled with the declaratory policy on nuclear weapons described earlier, this statement implies that the United States will regard certain kinds of cyberattacks against the United States as being in the same category as nuclear, biological, and chemical weapons, and thus that a nuclear response to certain kinds of cyberattacks (namely, cyberattacks with devastating impacts) may be possible. It also sets a relevant scale–a cyberattack that has an impact larger than that associated with a relatively small release of a lethal agent is regarded with the same or greater seriousness.” [7]

### Warming

#### Can’t solve warming—emission patterns are locked in

Dye 12 Lee Dye, “It May Be Too Late to Stop Global Warming,” ABC News, 10/26/2012, http://abcnews.go.com/Technology/late-stop-global-warming/story?id=17557814&singlePage=true#.UI58icXR5DA

Here's a dark secret about the earth's changing climate that many scientists believe, but few seem eager to discuss: It's too late to stop global warming. Greenhouse gasses pumped into the planet's atmosphere will continue to grow even if the industrialized nations cut their emissions down to the bone. Furthermore, the severe measures that would have to be taken to make those reductions stand about the same chance as that proverbial snowball in hell. Two scientists who believe we are on the wrong track argue in the current issue of the journal Nature Climate Change that global warming is inevitable and it's time to switch our focus from trying to stop it to figuring out how we are going to deal with its consequences. "At present, governments' attempts to limit greenhouse-gas emissions through carbon cap-and-trade schemes and to promote renewable and sustainable energy sources are probably too late to arrest the inevitable trend of global warming," Jasper Knight of Wits University in Johannesburg, South Africa, and Stephan Harrison of the University of Exeter in England argue in their study. Those efforts, they continue, "have little relationship to the real world." What is clear, they contend, is a profound lack of understanding about how we are going to deal with the loss of huge land areas, including some entire island nations, and massive migrations as humans flee areas no longer suitable for sustaining life, the inundation of coastal properties around the world, and so on ... and on ... and on. That doesn't mean nations should stop trying to reduce their carbon emissions, because any reduction could lessen the consequences. But the cold fact is no matter what Europe and the United States and other "developed" nations do, it's not going to curb global climate change, according to one scientist who was once highly skeptical of the entire issue of global warming. "Call me a converted skeptic," physicist Richard A. Muller says in an op-ed piece published in the New York Times last July. Muller's latest book, "Energy for Future Presidents," attempts to poke holes in nearly everything we've been told about energy and climate change, except the fact that "humans are almost entirely the cause" of global warming. Those of us who live in the "developed" world initiated it. Those who live in the "developing" world will sustain it as they strive for a standard of living equal to ours. "As far as global warming is concerned, the developed world is becoming irrelevant," Muller insists in his book. We could set an example by curbing our emissions, and thus claim in the future that "it wasn't our fault," but about the only thing that could stop it would be a complete economic collapse in China and the rest of the world's developing countries. As they race forward, their industrial growth -- and their greenhouse gas emissions -- will outpace any efforts by the West to reduce their carbon footprints, Muller contends. "China has been installing a new gigawatt of coal power each week," he says in his Times piece, and each plant pumps an additional ton of gases into the atmosphere "every second." "By the time you read this, China's yearly greenhouse gas emissions will be double those of the United States, perhaps higher," he contends. And that's not likely to change. "China is fighting poverty, malnutrition, hunger, poor health, inadequate education and limited opportunity. If you were the president of China, would you endanger progress to avoid a few degrees of temperature change?" he asks.

#### No modeling and signal is non-unique

Loris ‘13 Nicolas Loris, Herbert and Joyce Morgan Fellow at Heritage, master's degree in economics from George Mason University, “No 'Following the Leader' on Climate Change,” Heritage Foundation, 1/30/2013, http://www.heritage.org/research/commentary/2013/1/no-following-the-leader-on-climate-change

In his second inaugural address, President Obama pledged that the United States “will respond to the threat of climate change” and will take the lead for other countries to follow suit. This commitment is a willful rejection of reality. Congress has been unwilling to address climate change unilaterally through legislation. Multilateral attempts become more futile each year as major players, especially developing nations such as China and India, refuse to play ball. And why should they? Developing nations are not going to curb economic growth to solve a theoretical problem when their citizens face far more pressing environmental problems — especially when so many are trapped in grinding poverty and lack access to reliable electricity. This leaves the president with only one option for making good on his pledge: impose costly regulatory actions. This approach would be as pointless as unilateral legislative action. Why? Even accepting as fact the theory that Earth is warming and that carbon dioxide and other greenhouse gas emissions are a warming agent does not make any of the following true: &bull; Man-made emissions are driving climate change and are a negative externality that needs to be internalized. Greenhouse gas emissions are a warming agent. But that fact doesn’t begin to settle the scientific debate about climate change and climate sensitivity — the amount of warming projected from increased greenhouse gas emissions. Moreover, viewing man-made carbon dioxide as a strictly negative externality ignores a lot of peer-reviewed literature that identifies many positive effects (e.g., plant growth, human longevity, seed enrichment and less soil erosion as a result of more robust tree root growth) associated with higher levels of CO2 in the atmosphere. &bull; Earth is cooking at a catastrophic rate. The media breathlessly reported that a recent National Oceanic and Atmospheric Administration’s study found 2012 to be the warmest on record for the continental United States. What they largely failed to report was that, globally, 2012 was only the ninth-warmest in the past 34 years. In fact, average global temperatures have leveled off over the past decade and a half. &bull; Sea levels will rise dramatically, threatening America’s coastlines. The Intergovernmental Panel on Climate Change report, the bible of CO2-reduction proponents, projects sea levels rising 7 inches to 23 inches over the next century. That’s not as alarming as it sounds. Sea level has risen at the lower end of that projection over the past two centuries. &bull; There will be more extreme droughts, heat waves, hurricanes and other natural disasters. Natural disasters (they’re called “natural” for a reason, right?) will occur with or without increased man-made emissions. Having failed repeatedly to win legislation limiting greenhouse gas emissions, the Obama administration appears bent on taking the regulatory route. The Environmental Protection Agency is promulgating stringent emission standards for new power plants that would effectively prohibit construction of coal-fired generators and prematurely shut down existing plants. The EPA also has introduced costly new air-quality standards for hydraulically fractured wells and new fuel-efficiency standards that will make cars and light-duty trucks more expensive, smaller and less safe. Restricting greenhouse gas emissions, whether unilaterally or multilaterally, will impose huge costs on consumers and the U.S. economy as a whole. Congress should exercise its seldom-used muscles as regulatory watchdog to keep regulatory proposals that are not cost-effective from full implementation and reverse the administration’s course on regulating CO2. As for the president’s suggestion that unilateral action by the U.S. will somehow inspire other countries to emulate our example — the repeated failure of U.N. negotiations to produce multilateral climate action demonstrates a near universal disinclination to sacrifice economic growth on the altar of global warming.

#### No risk of acidification—prefer newest studies

Ridley ’12 Matt Ridley, “Taking Fears of Acid Oceans With a Grain of Salt,” Wall Street Journal, 1/7/2012, http://online.wsj.com/article/SB10001424052970203550304577138561444464028.html

Coral reefs around the world are suffering badly from overfishing and various forms of pollution. Yet many experts argue that the greatest threat to them is the acidification of the oceans from the dissolving of man-made carbon dioxide emissions. The effect of acidification, according to J.E.N. Veron, an Australian coral scientist, will be "nothing less than catastrophic.... What were once thriving coral gardens that supported the greatest biodiversity of the marine realm will become red-black bacterial slime, and they will stay that way." This is a common view. The Natural Resources Defense Council has called ocean acidification "the scariest environmental problem you've never heard of." Sigourney Weaver, who narrated a film about the issue, said that "the scientists are freaked out." The head of the National Oceanic and Atmospheric Administration calls it global warming's "equally evil twin." But do the scientific data support such alarm? Last month scientists at San Diego's Scripps Institution of Oceanography and other authors published a study showing how much the pH level (measuring alkalinity versus acidity) varies naturally between parts of the ocean and at different times of the day, month and year. "On both a monthly and annual scale, even the most stable open ocean sites see pH changes many times larger than the annual rate of acidification," say the authors of the study, adding that because good instruments to measure ocean pH have only recently been deployed, "this variation has been under-appreciated." Over coral reefs, the pH decline between dusk and dawn is almost half as much as the decrease in average pH expected over the next 100 years. The noise is greater than the signal. Another recent study, by scientists from the U.K., Hawaii and Massachusetts, concluded that "marine and freshwater assemblages have always experienced variable pH conditions," and that "in many freshwater lakes, pH changes that are orders of magnitude greater than those projected for the 22nd-century oceans can occur over periods of hours." This adds to other hints that the ocean-acidification problem may have been exaggerated. For a start, the ocean is alkaline and in no danger of becoming acid (despite headlines like that from Reuters in 2009: "Climate Change Turning Seas Acid"). If the average pH of the ocean drops to 7.8 from 8.1 by 2100 as predicted, it will still be well above seven, the neutral point where alkalinity becomes acidity. The central concern is that lower pH will make it harder for corals, clams and other "calcifier" creatures to make calcium carbonate skeletons and shells. Yet this concern also may be overstated. Off Papua New Guinea and the Italian island of Ischia, where natural carbon-dioxide bubbles from volcanic vents make the sea less alkaline, and off the Yucatan, where underwater springs make seawater actually acidic, studies have shown that at least some kinds of calcifiers still thrive—at least as far down as pH 7.8. In a recent experiment in the Mediterranean, reported in Nature Climate Change, corals and mollusks were transplanted to lower pH sites, where they proved "able to calcify and grow at even faster than normal rates when exposed to the high [carbon-dioxide] levels projected for the next 300 years." In any case, freshwater mussels thrive in Scottish rivers, where the pH is as low as five. Laboratory experiments find that more marine creatures thrive than suffer when carbon dioxide lowers the pH level to 7.8. This is because the carbon dioxide dissolves mainly as bicarbonate, which many calcifiers use as raw material for carbonate. Human beings have indeed placed marine ecosystems under terrible pressure, but the chief culprits are overfishing and pollution. By comparison, a very slow reduction in the alkalinity of the oceans, well within the range of natural variation, is a modest threat, and it certainly does not merit apocalyptic headlines.

#### No warming impact—lack of evidence, no harm in CO2, their authors are biased

Allegre et al. ’12 Claude Allegre, former director of the Institute for the Study of the Earth, University of Paris; J. Scott Armstrong, cofounder of the Journal of Forecasting and the International Journal of Forecasting; Jan Breslow, head of the Laboratory of Biochemical Genetics and Metabolism, Rockefeller University; Roger Cohen, fellow, American Physical Society; Edward David, member, National Academy of Engineering and National Academy of Sciences; William Happer, professor of physics, Princeton; Michael Kelly, professor of technology, University of Cambridge, U.K.; William Kininmonth, former head of climate research at the Australian Bureau of Meteorology; Richard Lindzen, professor of atmospheric sciences, MIT; James McGrath, professor of chemistry, Virginia Technical University; Rodney Nichols, former president and CEO of the New York Academy of Sciences; Burt Rutan, aerospace engineer, designer of Voyager and SpaceShipOne; Harrison H. Schmitt, Apollo 17 astronaut and former U.S. senator; Nir Shaviv, professor of astrophysics, Hebrew University, Jerusalem; Henk Tennekes, former director, Royal Dutch Meteorological Service; Antonio Zichichi, president of the World Federation of Scientists, Geneva, “No Need to Panic About Global Warming,” Wall Street Journal, 1/27/2012, http://online.wsj.com/article/SB10001424052970204301404577171531838421366.html#articleTabs%3Darticle

Perhaps the most inconvenient fact is the lack of global warming for well over 10 years now. This is known to the warming establishment, as one can see from the 2009 "Climategate" email of climate scientist Kevin Trenberth: "The fact is that we can't account for the lack of warming at the moment and it is a travesty that we can't." But the warming is only missing if one believes computer models where so-called feedbacks involving water vapor and clouds greatly amplify the small effect of CO2. The lack of warming for more than a decade—indeed, the smaller-than-predicted warming over the 22 years since the U.N.'s Intergovernmental Panel on Climate Change (IPCC) began issuing projections—suggests that computer models have greatly exaggerated how much warming additional CO2 can cause. Faced with this embarrassment, those promoting alarm have shifted their drumbeat from warming to weather extremes, to enable anything unusual that happens in our chaotic climate to be ascribed to CO2. The fact is that CO2 is not a pollutant. CO2 is a colorless and odorless gas, exhaled at high concentrations by each of us, and a key component of the biosphere's life cycle. Plants do so much better with more CO2 that greenhouse operators often increase the CO2 concentrations by factors of three or four to get better growth. This is no surprise since plants and animals evolved when CO2 concentrations were about 10 times larger than they are today. Better plant varieties, chemical fertilizers and agricultural management contributed to the great increase in agricultural yields of the past century, but part of the increase almost certainly came from additional CO2 in the atmosphere. Although the number of publicly dissenting scientists is growing, many young scientists furtively say that while they also have serious doubts about the global-warming message, they are afraid to speak up for fear of not being promoted—or worse. They have good reason to worry. In 2003, Dr. Chris de Freitas, the editor of the journal Climate Research, dared to publish a peer-reviewed article with the politically incorrect (but factually correct) conclusion that the recent warming is not unusual in the context of climate changes over the past thousand years. The international warming establishment quickly mounted a determined campaign to have Dr. de Freitas removed from his editorial job and fired from his university position. Fortunately, Dr. de Freitas was able to keep his university job. This is not the way science is supposed to work, but we have seen it before—for example, in the frightening period when Trofim Lysenko hijacked biology in the Soviet Union. Soviet biologists who revealed that they believed in genes, which Lysenko maintained were a bourgeois fiction, were fired from their jobs. Many were sent to the gulag and some were condemned to death. Why is there so much passion about global warming, and why has the issue become so vexing that the American Physical Society, from which Dr. Giaever resigned a few months ago, refused the seemingly reasonable request by many of its members to remove the word "incontrovertible" from its description of a scientific issue? There are several reasons, but a good place to start is the old question "cui bono?" Or the modern update, "Follow the money." Alarmism over climate is of great benefit to many, providing government funding for academic research and a reason for government bureaucracies to grow. Alarmism also offers an excuse for governments to raise taxes, taxpayer-funded subsidies for businesses that understand how to work the political system, and a lure for big donations to charitable foundations promising to save the planet. Lysenko and his team lived very well, and they fiercely defended their dogma and the privileges it brought them.

#### Biodiversity loss irrecoverable and way bigger than the aff

Schroeder ’10 Ingrid Schroeder, frequent blogger on environmental issues, cites the UN’s Global Biodiversity Outlook report, the Australian Museum, and Dr. Aaron Bernstein, who is an author and speaker at the Lowry Institute, “Will biodiversity loss spell human extinction,” Cohabitaire, 5/21/2010, http://www.cohabitaire.com/2010/05/will-biodiversity-loss-spell-human-extinction/

The UN has declared the 22nd of May International Day of Biological Diversity and 2010 the International year of biodiversity to highlight the crucial tipping point we face. Climate change is but one piece of the puzzle that needs to be addressed along with pollution, introduced species and habitat loss. There has been plenty of press over the [rss-cut]recent launch of the UN’s Global Biodiversity Outlook report which notes that the linked challenges of biodiversity loss and climate change must be addressed by policymakers with equal priority and in close co-ordination, if the most severe impacts of each are to be avoided. UNEP executive director, Achim Steiner points out “Many economies remain blind to the huge value of the diversity of animals, plants and other life forms and their role in healthy and functioning ecosystems, from forests and freshwater to soils, oceans and even the atmosphere.” “Humanity has fabricated the illusion that somehow we can get by without biodiversity or that it is somehow peripheral to our contemporary world,” he said. “The truth is we need it more than ever on a planet of 6.8 billion people heading to 9 billion people in 2050.” Dr Aaron Bernstein, author of Sustaining Life: How Human Health Depends on Biodiversity, describes the situation as “the greatest delusion of our times”. Speaking at Sydney’s Lowy Institute last month, Bernstein presented a comprehensive—and sobering—view of how human medicines, biomedical research, the emergence and spread of infectious diseases, and the production of food, both on land and in the oceans, depend on biodiversity. He stressed that “our health relies on the health of the natural world” with over 67% of US pharmaceuticals derived from nature, while treatments for diseases such as cancer are only possible using complex molecules found in nature. Dr Bernstein went on to outline the destruction of symbiotic systems, sometimes irreversibly, as a result of human activity such as overfishing, deforestation, and agricultural run off resulting in oxygen-less ‘dead-zones’ – which will ultimately effect food supplies. New infectious diseases are also emerging as we destroy habitats – forcing species together that would not have been in contact naturally, and also through factory farming where large numbers of animals such as chickens, cows and pigs exist in such close proximity seeing infections mutate and spread more rapidly, eventually to humans. So what is being done about it? In 2002, targets were made at the Convention on Biological Diversity, compiling over 30 indicators, measuring different aspects of biodiversity, including changes in species’ populations and risk of extinction, habitat extent and community composition. Studies since have found no evidence for a significant reduction in the rate of decline of biodiversity, and that the pressures facing biodiversity continue to increase. “Our analysis shows that governments have failed to deliver on the commitments they made in 2002: biodiversity is still being lost as fast as ever, and we have made little headway in reducing the pressures on species, habitats and ecosystems”, says Dr Stuart Butchart, of the United Nations Environment Programme World Conservation Monitoring Centre and BirdLife International.

### Framing

#### You should reject preemption; it justifies war and creates the conflict it attempts to stop

Massumi 07 (Brian, Communication Department of the Université de Montréal , “Potential Politics and the Primacy of Preemption”) \*ableist language modified

Fear is always a good reason to go politically conditional. Fear is the palpable action in the present of a threatening future cause. It acts just as palpably whether the threat is determinate or not. It weakens your resolve, creates stress, lowers consumer confidence, and may ultimately lead to individual and/or economic serial policy failure. To avoid serial policy failure, which would make yourself even more of a target and carry the fear to even higher level, you must simply act. In Bush administration parlance, you "go kinetic."6 You leap into action on a level with the potential that frightens you. You do that, once again, by inciting the potential to take an actual shape you can respond to. You trigger a production of what you fear. You turn the objectively indeterminate cause into an actual effect so you can actually deal with it in some way. Any time you feel the need to act, then all you have to do is actuate a fear. The production of the effect follows as smoothly as a reflex. This affective dynamic is still very much in place, independent of Rumsfeld's individual fate. It will remain in place as long as fear and remains politically actuatable. The logic of preemption operates on this affective plane, in this proliferative or ontogenetic way: in a way that contributes to the reflex production of the specific being of the threat. You're afraid Iraq is a breeding ground for terrorists? It could have been. If it could have been, it would have been. So go ahead, make it one. "Bring 'em on," the President said, following Hollywood-trained reflex. He knew it in his "guts." He couldn't have gone wrong. His reflex was right. Because "now we can all agree" that Iraq is in actual fact a breeding ground for "terrrorists". That just goes to prove that the potential was always there. Before, there was doubt in some quarters that Saddam had to be removed from power. Some agreed he had to go, some didn't. Now we can all agree. It was right to remove him because doing so made Iraq become what it always could have been. And that's the truth. Truth, in this new world order, is by nature retroactive. Fact grows conditionally in the affective soil of an indeterminately present futurity. It becomes objective as that present reflexively plays out, as a effect of the preemptive action taken. The reality-based community wastes time studying empirical reality, the Bushites said: "we create it." And because of that, "we" the preemptors will always be right. We always will have been right to preempt, because we have objectively produced a recursive truth-effect for your judicious study. And while you are looking back studying the truth of it, we will have acted with reflex speed again, effecting a new reality. 7 We will always have had no choice but to prosecute the "war on terror," ever more vigilantly and ever more intensely on every potential front. We, preemptors, are the producers of your world. Get used to it. The War in Iraq is a success to the extent that it made the productivity of the preemptive "war on terror" a self-perpetuating movement. Even if the US were to withdraw from Iraq tomorrow, the war would have to continue on other fronts no matter who controls Congress or who is in the White House. It would have to continue in Afghanistan, for example, where the assymetrical tactics perfected in Iraq are now being applied to renew the conflict there. Or in Iran, which also always could have/would have been a terrorist breeding ground. Or it could morph and move to the Mexican-US border, itself morphed into a distributed frontline proliferating throughout the territory in the moving form of "illegal immigration". On the indefinite Homeland Security front of a protieform war, who knows what threats may be spinelessly incubating where, abetted by those who lack the "backbone" to go kinetic. Preemption is like deterrence in that it combines a proprietary epistemology with a unique ontology in such a way as to make present a future cause that sets a self-perpetuating movement into operation. Its differences from deterrence hinge on its taking objectively indeterminate or potential threat as its self-constitutive cause rather than fully formed and specified threat. It situates itself on the ground of ontogenetic potential. There, rather than deterring the feared effect, it actualizes the potential in a shape to which it hopes it can respond. It assumes a proliferation of potential threats, and mirrors that capacity in its own operation. It becomes proliferative. It assumes the objective imbalance of a far-from-equilibrium state as a permanent condition. Rather than trying to right the imbalance, it seizes it as an opportunity for itself. Preemption also sets a race in motion. But this is a race run on the edge of chaos. It is a race of movement-flushing, detection, perception, and affective actuation, run in irreparably chaotic or quasi-chaotic conditions. The race of preemption has any number of laps, each ending in the actual effecting of a threat. Each actualization of a threat triggers the next lap, as a continuation of the first in the same direction, or in another way in a different field. Deterrence revolved around an objective cause. Preemption revolves around a proliferative effect. Both are operative logics. The operative logic of deterrence, however, remained causal even as it displaced its cause's effect. Preemption is an effective operative logic rather than a causal operative logic. Since its ground is potential, there is no actual cause for it to organize itself around. It compensates for the absence of an actual cause by producing an actual effect in its place. This it makes the motor of its movement: it converts an absent or virtual cause really, directly into a taking-actual-effect. It does this affectively. It uses affect to effectively trigger a virtual causality.8 Preemption is when the futurity of unspecified threat is affectively held in the present in a perpetual state of potential emergence(y) so that a movement of actualization may be triggered that is not only self-propelling but also effectively, indefinitely, ontologically productive, because it works from a virtual cause whose potential no single actualization exhausts. Preemption's operational parameters mean that is never univocal. It operates in the element of vagueness and objective uncertainty. Due to its proliferative nature, it cannot be monolithic. Its logic cannot close in around its self-causing as the logic deterrence does. It includes an essential openness in its productive logic.9 It incites its adversary to take emergent form. It then strives to become as proteiform as its ever-emergent adversary can be. It is as shape-shifting as it is self-driving. It infiltrates across boundaries, sweeping up existing formations in its own transversal movement. Faced with gravity-bound formations too inertial for it to sweep up and carry off with its own operative logic, it contents itself with opening windows of opportunity to pass through. This is the case with the domestic legal and juridical structure in the US. It can't sweep that away. But it can build into that structure escape holes for itself. These take the form of formal provisions vastly expanding the power of the executive, in the person of the president in his role as commander-in-chief, to declare states of exception which suspend the normal legal course in order to enable a continued flow of preemptive action.10 Preemption stands for conflict unlimited: the potential for peace amended to become a perpetual state of undeclared war. This is the "permanent state of emergency" so presciently described by Walter Benjamin. In current Bush administration parlance, it has come to be called "Long War" replacing the Cold War: a preemptive war with an in-built tendency to be never-ending. Deterrence produced asymmetrical conflict as a by-product. The MADly balanced East-West bipolarity spun off a North-South sub-polarity. This was less a polarity than an axis of imbalance. The "South" was neither a second Western First nor another Eastern Second. It was an anomalous Third. In this chaotic " Third World ," local conflicts prefiguring the present "imbalance of terror" proliferated. The phrase "the war on terror" was in fact first popularized by Richard Nixon in 1972 in response to the attack at the Munich Olympics when the Israeli-Palestinian conflict spectacularly overspilled northward. Asymmetrical conflicts, however, were perceivable by the reigning logic of deterrence only as a reflection of itself. The dynamic of deterrence were overlaid upon them. Their heterogeneity was overcoded by the familiar US-Soviet duality. Globally such conflicts figured only as opportunities to reproduce the worldwide balance of terror on a reduced scale. The strategy of "containment" adopted toward them was for the two sides in the dominant dyad to operate in each local theater through proxies in such a way that their influence, on the whole, balanced out. "I decided," Nixon said after Munich , "that we must maintain a balance."11 He did not, as Bush did after 9-11, decide to skew things by going unilaterally "kinetic." The rhetoric of the "war on terror" fell into abeyance during the remainder of the 1970s, as Southern asymmetries tended to be overcoded as global rebalancings, and going kinetic was "contained" to the status of local anomaly.

#### Trade doesn’t solve conflict

Martin et al. ‘8 Philippe Martin, University of Paris 1 Pantheon—Sorbonne, Paris School of Economics, and Centre for Economic Policy Research, Thierry Mayer, University of Paris 1 Pantheon—Sorbonne, Paris School of Economics, CEPII, and Centre for Economic Policy Research, and Matthias Thoenig, University of Geneva and Paris School of Economics, Review of Economic Studies (2008) 75, pp. 865-900, http://econ.sciences-po.fr/sites/default/files/file/tmayer/MMT.pdf

Does globalization pacify international relations? The “liberal” view in political science argues that increasing trade flows and the spread of free markets and democracy should limit the incentive to use military force in interstate relations. This vision, which can partly be traced back to Kant’s Essay on Perpetual Peace (1795), has been very influential: The main objective of the European trade integration process was to prevent the killing and destruction of the two World Wars from ever happening again.1 Figure 1 suggests2 however, that during the 1870–2001 period, the correlation between trade openness and military conflicts is not a clear cut one. The first era of globalization, at the end of the 19th century, was a period of rising trade openness and multiple military conflicts, culminating with World War I. Then, the interwar period was characterized by a simultaneous collapse of world trade and conflicts. After World War II, world trade increased rapidly, while the number of conflicts decreased (although the risk of a global conflict was obviously high). There is no clear evidence that the 1990s, during which trade flows increased dramatically, was a period of lower prevalence of military conflicts, even taking into account the increase in the number of sovereign states.

#### Great power war is still possible–competition, security concerns, nationalism, and mindsets of policymakers

Mearsheimer ’99 John Mearsheimer, R. Wendell Harrison Distinguished Service Professor of political science at the University of Chicago and co-director of the Program on International Security Policy, “Is Major War Obsolete?” Great Debate Series, 25 February 1999, CIAO

Now I think the central claim that’s on the table is wrong-headed, and let me tell you why. First of all, there are a number of good reasons why great powers in the system will think seriously about going to war in the future, and I’ll give you three of them and try and illustrate some cases. First, states oftentimes compete for economic resources. Is it hard to imagine a situation where a reconstituted Russia gets into a war with the United States and the Persian Gulf over Gulf oil? I don’t think that’s implausible. Is it hard to imagine Japan and China getting into a war in the South China Sea over economic resources? I don’t find that hard to imagine. A second reason that states go to war which, of course, is dear to the heart of realists like me, and that’s to enhance their security. Take the United States out of Europe, put the Germans on their own; you got the Germans on one side and the Russians on the other, and in between a huge buffer zone called eastern or central Europe. Call it what you want. Is it impossible to imagine the Russians and the Germans getting into a fight over control of that vacuum? Highly likely, no, but feasible, for sure. Is it hard to imagine Japan and China getting into a war over the South China Sea, not for resource reasons but because Japanese sea-lines of communication run through there and a huge Chinese navy may threaten it? I don’t think it’s impossible to imagine that. What about nationalism, a third reason? China, fighting in the United States over Taiwan? You think that’s impossible? I don’t think that’s impossible. That’s a scenario that makes me very nervous. I can figure out all sorts of ways, none of which are highly likely, that the Chinese and the Americans end up shooting at each other. It doesn’t necessarily have to be World War III, but it is great-power war. Chinese and Russians fighting each other over Siberia? As many of you know, there are huge numbers of Chinese going into Siberia. You start mixing ethnic populations in most areas of the world outside the United States and it’s usually a prescription for big trouble. Again, not highly likely, but possible. I could go on and on, positing a lot of scenarios where great powers have good reasons to go to war against other great powers. Second reason: There is no question that in the twentieth century, certainly with nuclear weapons but even before nuclear weapons, the costs of going to war are very high. But that doesn’t mean that war is ruled out. The presence of nuclear weapons alone does not make war obsolescent. I will remind you that from 1945 to 1990, we lived in a world where there were thousands of nuclear weapons on both sides, and there was nobody running around saying, “ War is obsolescent.” So you can’t make the argument that the mere presence of nuclear weapons creates peace. India and Pakistan are both going down the nuclear road. You don’t hear many people running around saying, “ That’s going to produce peace.” And, furthermore, if you believe nuclear weapons were a great cause of peace, you ought to be in favor of nuclear proliferation. What we need is everybody to have a nuclear weapon in their back pocket. You don’t hear many people saying that’s going to produce peace, do you? Conventional war? Michael’s right; conventional war was very deadly before nuclear weapons came along, but we still had wars. And the reason we did is because states come up with clever strategies. States are always looking for clever strategies to avoid fighting lengthy and bloody and costly wars of attrition. And they sometimes find them, and they sometimes go to war for those reasons. So there’s no question in my mind that the costs of war are very high, and deterrence is not that difficult to achieve in lots of great-power security situations. But on the other hand, to argue that war is obsolescent-I wouldn’t make that argument. My third and final point here is, the fact of the matter is, that there’s hardly anybody in the national security establishment-and I bet this is true of Michael-who believes that war is obsolescent. I’m going to tell you why I think this is the case. Consider the fact that the United States stations roughly 100,000 troops in Europe and 100,000 troops in Asia. We spend an enormous amount of money on defense. We’re spending almost as much money as we were spending during the Cold War on defense. We spend more money than the next six countries in the world spend on defense. The questions is, why are we spending all this money? Why are we stationing troops in Europe? Why are we stationing troops in Asia? Why are we concentrating on keeping NATO intact and spreading it eastward? I’ll tell you why, because we believe that if we don’t stay there and we pull out, trouble is going to break out, and not trouble between minor powers, but trouble between major powers. That’s why we’re there. We know very well that if we leave Europe, the Germans are going to seriously countenance, if not automatically go, and get nuclear weapons. Certainly the case with the Japanese. Do you think the Germans and the Japanese are going to stand for long not to have nuclear weapons? I don’t think that’s the case. Again, that security zone between the Germans and the Russians-there’ll be a real competition to fill that.

#### Even limited nuclear volleys risk extinction—newest studies

Starr and King ‘9 Steven Starr, published work in Bulletin of Atomic Scientists and Moscow Inst. of Physics, director of Clinical Laboratory Science Program at the University of Missouri-Columbia, has addressed the UN General Assembly on environmental consequences of nuclear war, and Peter King, “Nuclear suicide,” Science Alert, 8/2/2009, http://www.sciencealert.com.au/opinions/20090208-19496.html

But there is little evidence yet that either the government or the Commission is fully alert to the most momentous truth of the present era: Our best science now predicts that nuclear arsenals are fundamentally incompatible with continued human existence. It is imperative that the message coming from scientists in the US, Russia and elsewhere about the environmental consequences of nuclear war be included in the general debate about the control and abolition of nuclear weapons. Unfortunately, the nuclear weapon states apparently remain oblivious to the climatic, ecological and biological consequences of nuclear war. No "environmental impact statement" has ever been created for the US or Russian nuclear weaponry, which is one of the reasons why there still are 22,000 intact nuclear weapons in their deployed and reserve arsenals. However, new peer-reviewed studies done at several US universities predict the detonation of even a tiny fraction of the global nuclear arsenal will result in major changes in the global climate and massive destruction of the stratospheric ozone layer (which protects the Earth from deadly UV light). Even a "regional" nuclear conflict between India and Pakistan, fought with 100 Hiroshima-size weapons, is predicted to loft five million tons of smoke above cloud level; there it would block about 10 per cent of warming sunlight from reaching the surface of the Northern Hemisphere. This would produce average surface temperatures colder than any experienced for the last 1000 years. The smoke would remain in the stratosphere for more than a decade and seriously impact global climate. It would probably be too cold to grow wheat in Canada for several years; grain exports would likely cease from grain-exporting nations and global nuclear famine would result. Within a few years, most of the already-hungry human populations could perish, and the populations of any nation dependent upon grain imports would be at risk. One hundred Hiroshima-sized bombs contain about one half of one percent (0.05 per cent) of the explosive power of the deployed and operational nuclear arsenals of the US and Russia. The new studies predict that a war fought with any significant fraction of these arsenals would cause catastrophic changes in the global climate that would virtually eliminate growing seasons for a decade or more. The US and Russia now have 900 missiles armed with 2200 strategic nuclear warheads on high-alert which can be launched with only a few minutes warning, and another 5330 deployed warheads available for use within an hour or less. According to a December, 2008, article in Physics Today, the detonation of 4400 of these warheads in urban areas would cause up to 180 million tons of soot from burning cities to rise into the stratosphere. The smoke would block about 70 per cent of sunlight in the Northern Hemisphere and 35 per cent of sunlight in the Southern Hemisphere from reaching the surface of the Earth. The resulting nuclear darkness would cause global Ice Age weather conditions virtually overnight. Minimum daily temperatures in the large agricultural regions of the Northern Hemisphere would drop below freezing for at least one to three years. It would become colder than it was 18,000 years ago at the height of the last Ice Age. Most humans and large animals would starve to death.

### Solvency

#### Squo solves – U.S. and Mexico are cooperating on regulations now

HLRCC 12 (High-Level Regulatory Cooperation Council, Executive Office of the President of the United States, “UNITED STATES-MEXICO HIGH-LEVEL REGULATORY COOPERATION COUNCIL WORK PLAN,” 02/28/2012, http://www.whitehouse.gov/sites/default/files/omb/oira/irc/united-states-mexico-high-level-regulatory-cooperation-council-work-plan.pdf, AC)

The fourth item on the HLRCC Work Plan involves the potential alignment of U.S. and ¶ Mexican policy approaches to oversight of applications of nanotechnology and nanomaterials. ¶ The relevant agencies are the Office of Information and Regulatory Affairs (OIRA) and the ¶ National Metrology Centre (CENAM).¶ Description: Mexico and the United States are in the process of developing principles and ¶ approaches to inform government oversight and regulation of nanotechnology applications and ¶ nanomaterials.¶ Objective/Desired Outcome: Share information and develop approaches on foundational ¶ regulatory elements, including terminology/nomenclature, information-gathering, and ¶ approaches to risk assessment and management. Develop initiatives to align regulatory ¶ approaches in specific areas, such that consistency exists for consumers and industry in Mexico ¶ and the United States.¶ 8¶ INEGI, National Accounts, January to August 2011. UNITED STATES-MEXICO High-Level Regulatory Cooperation Council WORK Plan¶ 9¶ Specific Deliverables and Timeline: Specific deliverables identified in the Work Plan include: ¶  The United States will share with Mexico the list of regulators that were involved in ¶ the development of the general nanotechnology principles (accomplished by ¶ September 2011);¶  Response of Mexico’s relevant regulators to the U.S. Memorandum on “Policy ¶ Principles for the U.S. Decision-making Concerning Regulation and Oversight of ¶ Applications of Nanotechnology and Nanomaterials,” of June 9, 2011 (accomplished ¶ by October 2011);¶  Creation of a mechanism for exchanging information between the United States and ¶ Mexico on regulatory matters for nanotechnology applications and nanomaterials ¶ (accomplished by February 2012);¶  Share the advances of the Mexican side on potential principles on regulations for ¶ nanotechnology applications and nanomaterials (accomplished by February 2012);¶ and ¶  Engage in a dialogue to consider a possible model framework providing key elements ¶ and approaches to regulating nanotechnology applications and nanomaterials with ¶ respect to potential impacts on the environment, human health, labor, food or ¶ agriculture (by February 2013).¶

#### Low industry involvement means Latin American nanotech fails

Kay et al 09 School of Public Policy, Georgia Institute of Technology; Shapira- Manchester Institute of Innovation Research, Manchester Business School, University of Manchester (Luciano, Philip, “Developing nanotechnology in Latin America”, 02/11/2009, <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2988220/#__ffn_sectitle>//VS)

Our findings suggest policy issues and implications for our group of Latin American countries. For example, all four countries present some level of institutional concentration in their research. This is most pronounced in the case of Brazil, which seems to follow a strategy based on national targets rather than international collaboration, as suggested by the implementation of programs aimed at creating national research networks, like the Rede BrasilNano program. The institutional concentration of research is even greater in Uruguay (which is a much smaller country), but in this case it is consistent with its emphasis in regional collaborations and less developed S&T system. Whether greater incentives for international collaboration in nanotechnology research in Latin America are appropriate is an issue that policymakers in these countries may wish to consider.¶ Moreover, we note the weakness of industry involvement in nanotechnology research. For countries like Chile or Uruguay this is perhaps not surprising, given the emerging state of development in their industrial sectors. The weakness of industry involvement is most significant for Brazil (where conglomerates and internatioally oriented companies have emerged in technology and natural resource sectors) and, to less extent, Argentina. Possible explanations for low industry involvement include the still early stage of nanotechnology development in Latin America, the weakness of domestic corporate R&D, the dominance of foreign multi-national branches who draw on their own company rather than local universities for R&D, a general lack of industry awareness of nanotechnology, and bureaucratic barriers faced by industry in working with universities. Whatever the causes, this finding foreshadows weaknesses not only in industry R&D but also in the absorptive capabilities of firms in Latin America to apply nanotechnology applications. In Brazil, given its efforts to develop aerospace, electronics, and other advanced technologies, as well as in the resource-intensive areas of all the countries (such as the prominent minerals, metals, and pulp and paper sectors in Chile) there may be unexploited opportunities for collaborative nanotechnology R&D with industry in nanomaterials and other nanotechnology domains.

#### Latin American nanotech initiatives aren’t aligned with key industries—devastates nanotech projects

Kay et al 09 School of Public Policy, Georgia Institute of Technology; Shapira- Manchester Institute of Innovation Research, Manchester Business School, University of Manchester (Luciano, Philip, “Developing nanotechnology in Latin America”, 02/11/2009, <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2988220/#__ffn_sectitle>//VS)

Related to this, we observe the concentration of nanotechnology research in a few disciplines and sectors in the four focal countries.29 Although this finding is not surprising when compared with results of previous research, we suggest that these countries might consider strategies that seek to better align public R&D with industry and innovation priorities. At the same time, given the convergent scientific characteristics of nanotechnology, any approach should incorporate different disciplines (de la Vega et al. 2007) as intended by, for example, by the Brazil multidisciplinary research programs. However, the data suggest that nanotechnology research may be not fully aligned with all key industry sectors. For example, there may be needs for additional efforts at nanotechnology interfaces in engineering and electronics in Brazil, and biology and agriculture in both Argentina and Uruguay. On the other hand, Chile is undertaking nanotechnology research in more diverse areas including biology, which is related to important sectors for the country such as forestry and fishing. We note that allying research with economic sectors and potential commercialization targets is not an insignificant task, and even in the leading international centers is not clear what (and how) opportunity area in nanotechnology should best be targeted (Zucker and Darby 2005). Still, there seem to be challenges here for Latin American countries in the mix of research areas: at present, research occurs where academic presence is strongest, but these areas may not always mesh with economic sector opportunities. At the same time, given the existing problems of research scale and resources, it may not be feasible for most Latin American countries to develop new research areas.¶ We found that “Southern” (or intra-MERCOSUR) collaboration levels are relatively low in these four countries.

#### Patenting failures and lack of incentives kills nanotech development

Kay et al 09 School of Public Policy, Georgia Institute of Technology; Shapira- Manchester Institute of Innovation Research, Manchester Business School, University of Manchester (Luciano, Philip, “Developing nanotechnology in Latin America”, 02/11/2009, <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2988220/#__ffn_sectitle>//VS)

Finally, the lack of nanotechnology patenting activity has two possible explanations. The first is that these countries are in an early stage of nanotechnology development and only after some years they will be able to transform research knowledge to intellectual property that can be used for the commercialization of nanotechnology applications and nanotechnology-based products. The second explanation has more policy implications: not only may these countries be undertaking nanotechnology research that is not aligned to local industry priorities but there may also be insufficient incentives for researchers to collaborate with incumbent industries and to initiate their own start-up enterprises. If Latin American S&T policymakers want to foster the development of nanotechnology and increase transfer to and take-up by key industry sectors, they may need to encourage research and incentives that can lead to the commercialization of new technologies in national and international markets. For this, it may be necessary to increase industry–academy collaborations, intellectual property protection, and enterprise support—all pending tasks for Latin American countries (Kraul [2003](http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2988220/#CR29); Fernández and Schatzmann [2007](http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2988220/#CR12); Foladori and Fuentes [2007](http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2988220/#CR15)).