## 1AC – NU - Final

### Solvency

#### The SQ denies antitrust remedies for patent abuse

Gunderson 14 [Adam, practicing attorney at the Gunderson Law Group, “Protecting the Environment by Addressing Market Failure in Intellectual Property Law: Why Compulsory Licensing of Green Technologies Might Make Sense in the United States: A Balancing Approach,” *BYU Law Review* 2014.3, p.679-81, JCR]

Concern over patent suppression is not hypothetical. There have been a number of documented cases in which this phenomenon has taken place. In each case, patent suppression has been a means of hindering the progress of new technologies. Inasmuch as patent law is authorized under the Constitution in order to “promote the progress science and the useful arts,” patent suppression—whereby patent holders purposefully acquire patents only to prohibit their use or development—is contrary to that purpose and represents a clear abuse of that law. This section briefly explores a few examples of patent suppression and explains how the current legal framework of intellectual property [IP] and antitrust law is generally insufficient to stop the abuse. Perhaps one of the most well-known examples of patent suppression was brought to the forefront of public attention by the film Who Killed the Electric Car. 42 This documentary details the development and eventual suppression of battery technology capable of powering zero-emission automobiles.43 According to the documentary, General Motors acquired a small battery technology company, Ovonics—which had made tremendous advances in battery technology—and began to develop an electric car that would eventually be named the EV-1.44 When California’s political climate and the looming threats of burdensome regulations made GM nervous about the timing of the technology’s release, Texaco (which was soon after acquired by Chevron) stepped in and purchased the rights to the battery technology in order to suppress it.45 Another example occurred in the light bulb industry in the early 1900s.46 General Electric, which had a large stake in the incandescent light bulb industry, purchased the patent for a moreefficient fluorescent light bulb.47 In order to maximize its profits for the incandescent light bulbs, General Electric sat on the patent for the fluorescent lights, refusing to either bring the technology to market itself or to license the technology to other market participants.48 Not until Sylvania, another electronics company, successfully marketed a similar technology did General Electric begin to use its patented florescent light bulb technology.49 Bell Telephone also implemented patent suppression techniques in order to preserve the status quo.50 A 1920s investigation by the federal government found that Bell Telephone had purchased and suppressed over 3,000 patents.51 Bell had developed a practice of acquiring patents for the sole purpose of keeping those technologies out of the hands of their competitors.52 The law regarding patent suppression has not always been clear and while it appears that antitrust remedies may be available as a means of preventing some instances of patent suppression, such remedies are still not generally available.53 In 1886, a federal district court held that a patent holder could only be guaranteed legal protection of its patent if the holder was actually using the patented technology.54 However, in 1908, the U.S. Supreme Court held that patent non-use does not foreclose the patent holder’s right to protection under the law.55 With the birth of antitrust law, new remedies became available to stop anticompetitive behavior through which powerful companies tried to eliminate competition.56 While it may appear that patent suppression would fall into this category of behavior, courts have demonstrated an unwillingness to apply antitrust remedies to cases of patent suppression.57 For example, in SCM v. Xerox, the Supreme Court held that so long as a patent is acquired legally, it is not a violation of antitrust law to use the patent to the “full extent allowed under patent law,” which includes preventing third parties from using a technology, even when the patent holder itself is not using the patented technology.58 The holding of this case has been followed in subsequent decisions and is still good law.59 Thus, despite the similarities between patent suppression and those problems generally meant to be addressed by antitrust laws, it seems that antitrust law by itself is insufficient to stop patent suppression.

#### Federal action on climate patent monopolization is a prereq to innovation and development

Cayton 20 [Samuel, Adjunct Prof at Seattle Univ School of Law, legal intern at the Media Law Group, “The ‘Green Patent Paradox’ and Fair Use: The Intellectual Property Solution to Fight Climate Change,” *Seattle Journal of Technology, Environmental & Innovation Law* 11.1, p.239-45, JCR]

Congress has the constitutional authority to create laws that advance the development of technology through patents.197 Therefore, the optimal step to promote the use of green patents is to pass a federal law that provides a defense to patent infringement for green technology. While fair use is not codified in any form within Title 35 of the U.S. Code, Congress has enacted patent provisions tailored for specific purposes that involve loosening patent protection for the rightsholder.198 For instance, the Patent Act permits infringement where secondary use is part of a process to obtain approval of a new drug from the Federal Drug Administration.199 Additionally, the Act limits a patentee’s ability to recover damages when a patented invention is used in a medical or surgical procedure.200 These statutory exceptions to patent infringement reflect the notion that American society values technologies that provide a public health benefit, even if it is at the expense of a patent holder’s right to exclude.201 To ensure that the policy motives around green technology in the American industries are captured, Congress should engage in extensive fact-finding through congressional hearings and research. A bill from either chamber should incorporate the international consensus that climate change is a global threat to the planet that also has the potential to jeopardize public health.202 It should also make clear that climate change is anthropogenic and has accelerated in part due to environmentally hazardous industrialization.203 Furthermore, the bill should capture factual findings that touch on the following: that technological innovation plays a vital role in mitigating the effects of climate change;204 that a mass expansion of environmentally sustainable technology is needed to substitute the environmentally hazardous technologies;205 and that altering the U.S. patent law is a necessary action to promote this expansion.206 These findings should also qualify that patent holders’ incentives are equally important to the development of an environmentally sustainable economy.207 The elements of fair use in the law should not only be specific enough to guide the courts in their analysis of whether the secondary user is privileged as a fair user of a green patent but also general enough to provide a working template for courts to use in infringement suits. Even if Congress does not implement a fair use doctrine for green patents–a probable scenario given its current state of dysfunction–the federal court system is also authorized to intervene on its own. Two justifications permit the courts to allow fair use in patent law: first, fair use in copyright law was originally judicially created208 before Congress codified it,209 and, second, federal courts have already ruled on patent infringement cases with outcomes that favor continued use by second-comers as seen in eBay and Paice. 210 Whether or not the primary authority comes from the legislature, courts should undergo the following analysis in its fair use defense: (1) Does the patent at issue cover a field of green technology? The first part of the analysis requires courts to determine whether the patent at issue covers environmental sustainability or protection. To properly guide their analysis, the courts would benefit from having Congress enumerate a non-exhaustive list of industries that can utilize a fair use defense, such as alternative energies, fuel-efficiency, GHG and pollution reductions, and so on. Nevertheless, courts are equally capable of making their own determination. (2) If the patent covers green technology, and the second-comer infringes on its use, is that user privileged as a fair user? Under this prong, the court will assess several considerations regarding the patent regime, much like Dean Emerita O’Rourke’s aforementioned proposal. However, the factors for this green patent fair use proposal will be tailored to capture the considerations of green technology industries. Although Congress should enumerate these factors into the law, the court can further develop and define them: (1) the market potential; (2) the patentee’s developments; (3) the purpose and nature of the secondary use; and (4) the interests of the patentee and industry. First, the court should consider the potential market impact of the patented technology at issue. To adequately assess this factor, experts in technological fields can testify in federal infringement suits and make reasonable valuations of the patented technology’s capabilities in the market. This judicial assessment can reveal the untapped potential that may justify secondary use. Second, the court should evaluate the patentee’s developments of each patent. This part of the test will determine whether the patentee is sitting on the patent or whether they are capitalizing on its potential found in factor one. This step in the test aims to remedy the concerns around the Green Patent Paradox by determining whether the patent holder is making the best use of the patent. If the patentee has no intention of using their patent to fill the market demand, then this factor would weigh strongly in favor of its fair use. Third, the court should look at the purpose and nature of the second-comer’s advance on the technology. This factor combines two of Dean Emerita O’Rourke’s factors211 and prompts the court to look at the secondary use itself. However, this part of the test is more tailored to the innovations in green technology. Ultimately, the crux of this factor is determining whether the secondary user’s use of the technology is meant to provide positive results for the sustainability market. For example, using lucrative solar panel technology that achieves an environmentally beneficial purpose can be deemed fairer than using an eco-friendly pet product that may be in a smaller potential market. Additionally, if the secondary user is mainly striving to achieve a particular sustainability standard for their innovative pursuit, rather than directly compete with the patent holder in the market, then this factor would weigh in favor of secondary use. Finally, the court should analyze whether permitting secondary use would drastically impact the interests of the patent holder or the green technology industry at large. Here, a court should consider the incentives, resources, and commercial interests of the patentee as well as the interests of the relevant green technology industries. If the patent holder has a legitimate reason to hold onto their patent rights, this factor would weigh strongly in favor of excluding the second-comer from using the technology without a license. Otherwise, this factor should be equally weighed together with the other three factors. (3) If the secondary user is a fair user, does justice require compensation for the patent holder? Because the second part of this proposal imposes a heightened standard against the patentee’s incentives, court-ordered royalties should remain an option much like Dean Emerita O’Rourke’s proposal.212 This part of the test recognizes that the fair use assessment is binary: secondary use of the green patent is either allowed or not allowed. Thus, awarding a modest, reasonable amount of royalties can offset any grievances that may arise if the patentee loses their exclusive right over the green patent at issue. Because the four factors in the second prong of this proposal are more strictly applied against the patent holder, rather than imposing the same four factors as Dean Emerita O’Rourke proposes, the court should instead determine on its own whether royalties should be awarded. However, depending on the capital and resources of the secondary user, these royalties should be limited so as not to chill the subsequent implementation of the green technology. B. Further Considerations This technology-specific proposal is designed to speed the process of implementing green technology in the U.S. while still recognizing that the patent scheme is inherently designed to promote innovation. Once secondary users are permitted to use patented green technology, they can actively work toward bringing the U.S. into a sustainable economy without fear of infringement action. Ultimately, the issues raised by the Green Patent Paradox would be resolved by this proposal, which seeks to streamline and advance outside innovation while ensuring patent holders arer sufficiently compensated. However, with any proposal, several considerations remain to be addressed. 1. The Patentee’s Rights Although this proposal directly addresses concerns surrounding the climate crisis, it must be acknowledged that many scholars are skeptical of both the expansion of patent rights beyond the patentee and the impact it would have on the patent incentive scheme.213 Patentees in the field of green technology have a particular incentive to hold onto their rights, especially companies with larger carbon footprints.214 Moreover, fair use of patented green technologies, unlike certain transformative uses of copyrighted works, would almost always be for commercial purposes. However, the overarching goal of this proposal is to change the dynamics within the green technology industry. As Dean Emerita O’Rourke points out, fair use would promote standard-setting whereby companies can set their own guidelines regarding the allocation of their intellectual property based on reasonable terms.215 Moreover, it would serve as a bargaining chip for licensing, which can reduce the royalty rate for second-comers.216 Hence, as this proposal promotes sharing within the private sector, companies can work together toward the common goal of combatting climate change. Another consideration involves whether to allow fair use if the patentee specifically refuses to license their patent to the infringer. In copyright law, a fair user of copyrighted work is still allowed to go forward with their derivative creation, regardless of whether the rightsholder denied that user permission.217 In recognition of the existential threat posed by the climate crisis, patent law should follow suit and bypass this potential concern. As previously mentioned, a patentee’s reasoning behind the refusal to license can be considered in the assessment of fair use or whether ongoing royalties should be awarded. 2. Implementation Additionally, even with fair use in patent law, the ITC’s independence from the federal judiciary remains a concern for expanding green technology to the market. Because of its independence, it is unknown whether it would incorporate fair use into its investigations, and thus, a plaintiff who loses in court may still use this alternate forum to preclude secondary use.218 To prevent a patent holder from utilizing other avenues to curb secondary use, this proposal will include guidelines on congressional action that would help establish boundaries on what the ITC can investigate regarding green technology. While it conducts its investigations, the ITC should recognize the global threat of climate change. Furthermore, because patents and trade secrets can protect the same subject matter,219 a prospective inventor could seek trade secret protection for their intellectual property to avoid the prospect of fair use by others.220 Thus, rather than apply for a patent, an inventor or company that invents a novel green technology could employ security measures to keep their idea secret and, in effect, the schematics of the invention would never reach public view and society would not benefit. However, trade secrets have their downsides as they can be difficult to enforce and risk losing their protections if others utilize the same idea.221 Additionally, from an investor’s perspective, the value of a patent is more tangible than the value of a trade secret.222 This realization is an important distinction given that green technology is a capital-intensive industry.223 Moreover, inventors in green technology industries can benefit from having their works made public because in the long run because public access “can support the diffusion and adaptation of existing green technologies that are in the public domain.”224 Lastly, concerns around timing need to be addressed. If Congress does not codify this proposal and leaves any developments to the courts, expansions of green technology will not accelerate at a necessary rate. Instead, a judicially created fair use doctrine for patent law may merely provide incremental change to green patents at best as it would only develop case-by-case through individual lawsuits.225 Regardless of whether federal institutions will initiate this proposal, industries at large should still strive to advance green technology at a rapid pace. Although inventors and entrepreneurs risk becoming defendants to patent infringement suits, eBay remains a shield for their technologies’ continued development.226 Eventually, the climate crisis’s growing threat will pressure the U.S. to tolerate transfers of patented green technology so that such technologies receive their highest and best use at the lowest cost to the patent holders and other users The world faces an imminent threat from climate change that requires drastic structural attention. The U.S. has always led the world in promoting and preserving global security, but political gridlock within the nation could stall the massive changes to steer the world in the right direction. Fortunately, the private sector has an equally important role and duty in the pursuit to reform various industries. However, while industry and entrepreneurship can further develop necessary green technology, a comprehensive transformation in the U.S. patent regime must take place in order to fix the inherent issues around secondary innovations. The Green Patent Paradox demonstrates that the patent system impedes innovation by allowing rights’ holders to sit on their patent rights further slowing the transition to an environmentally sustainable economy. Although eBay is a victory in that it helps encourage continued use of other patent holder’s green patents, the ITC functions as a loophole for patent holders who want to halt secondary users or pressure them to take unwanted licensing agreements. The public and private sectors have both revealed possible solutions in the wake of the climate crisis. While the public sector can fix the patent regime through various means, these solutions either have substantial barriers to becoming reality or pose implementation issues that inhibit inventor incentives. Even with goodwill gestures from large companies, not all businesses are positioned to donate their intellectual property. The doctrine of fair use does not exist in patent law under conceivable rationales even though many viable justifications support its application. However, the lurking effects of the climate crisis demonstrate the societal need to implement a system that tolerates secondary uses of patented green technologies.

#### The innovation disad doesn’t apply to new areas of research like climate tech – patent accessibility is key

Bernardini 21 [Jessica, JD from Lewis & Clark Law School, works at the small business legal clinic at the Patent Program at Lewis & Clark Law School, registered Professional Engineer and engineering consultant with focus on renewable energy development, “Leveraging Mandatory Licensing Under the Clean Air Act – A Novel Framework to Domestic Reduction of Greenhouse Gases,” *Environmental Law* 51.1, p.324-8, JCR]

The use of compulsory licensing would be especially valuable for forcing a patentee to work a patent in an area that is relatively new. Opponents of compulsory licensing believe it will reduce incentive for innovation and encourage inventors to maintain their knowledge as a trade secret rather than disclose through patents.153 And while obtaining a patent requires sufficient disclosure so that a “person having ordinary skill in the art” may practice the patent, disclosure (without actual reduction to practice and use in the industry) of newer technologies, such as carbon capture, is not as useful as it is for more established technologies. Consequently, in areas of newer technology, innovation is stifled when there is no practicing of the technology, which allows innovators to understand how the technology works.154 Especially in the case of newer technologies, compulsory licensing would actually support innovation by forcing the technology’s real-world application, thereby allowing other innovators to improve upon the technology. While the EPA has significant discretion in selecting a BSER, no existing precedent allows the EPA to establish regulations on the sole basis that a patent exists but has not been demonstrated to be technologically feasible, on even a very small scale. Therefore, the absence of a working requirement under the Patent Act jeopardizes the EPA’s ability to regulate GHGs.155 The Mandatory Licensing provision provides authority for the EPA to pursue mandatory licensing of patented technologies necessary to achieve emissions standards. Invocation of the provision does not require a showing that the patented technology has been adequately demonstrated.156 However, to establish the emission standards in the first place, the technology used to achieve the standards must have been adequately demonstrated (i.e. worked and put into practice even in some small fashion).157 If a technology has not been adequately demonstrated, it should not be considered by the EPA to be part of an emission reduction system.158 In this instance, a general compulsory licensing provision under the Patent Act would help work technologies, show them to be technologically feasible, and ultimately allow the EPA to consider them as part of a BSER. Opponents to compulsory licensing argue that it is unnecessary to invoke compulsory licensing to mitigate non-working of patents because inventors of useful inventions will want to recoup their investments and will do so through working or licensing of the patent.159 However, this argument fails to take into consideration that some entities will not want the patent to be put into use. When a patent is subject to use as part of an environmental regulation, its use would adequately demonstrate the patented material and make it readily available. Therefore, regulated entities would rather have these categories of patents suppressed in an attempt to avoid potential environmental regulation. Patent suppression by fossil-fuel companies has already occurred, as discovered by state prosecutors.160 The prosecutors were looking into whether fossil-fuel companies misled their investors by making statements dispelling climate change and the impacts that it would ultimately have on the companies’ viability.161 These investigations led to the discovery that these same companies patented carbon-capture technologies and never put them into use, suppressing them since the 1960’s.162 The non-working of patented carbon-capture technology is already occurring, possibly to keep patented technologies from EPA consideration. For example, Exxon has the highest number of patented carbon-capture technologies and is funneling millions into research,163 yet it does not operate any plant in the U.S. with large-scale carbon-capture. It is obvious that, with no regulatory driver to reduce carbon dioxide emissions and require the installation of carbon-capture technologies, industry will not utilize these technologies in the absence of a compliance threshold. The proposed framework provides a regulatory driver to implement the technologies. The emission threshold would deter patent suppression, and if not, then the second step of the framework— mandatory licensing—prevents suppression. Under the second step, the EPA would threaten to step in and require licensing of those technologies if industry was not willing to provide reasonable licenses to others in the industry. Refusal to license patents after the enactment of the new emission standards could have a detrimental effect on industry’s ability to comply with the strict standards. Once emission standards are in effect, patentees could reasonably license their patents to other industry participants without government intrusion or proceed to practice monopolistic market power. A refusal to license a patent could mean a unilateral outright refusal, or that restrictions on the patent use are unreasonable or the price to license is so prohibitive that it equates to an outright refusal.164 In the U.S., a refusal to license typically will not lead to a finding of monopolization unless there is a finding that the refusal is completely unrelated to the patent.165 It is unlikely that court-mandated compulsory licensing will be used to require licensing solely to address refusal to license or the use of monopolistic pricing. In Verizon Communications v. Law Offices of Curtis V. Trinko,166 the Supreme Court emphasized that “[t]he opportunity to charge monopoly prices . . . induces risk taking that produces innovation and economic growth.”167 Furthermore, monopolistic power alone is not unlawful, but rather it needs to be “accompanied by an element of anticompetitive conduct.”168 However, the Court goes on to clarify that, while the right to refuse to license with other firms may be allowed, it “does not mean that the right is unqualified.”169 Because the threshold for finding anticompetitive behavior by a patentee is quite high, it may be necessary to resort to statutorily authorized compulsory licensing to overcome monopolistic behavior and establish reasonable and fair licensing agreements. In addition to a refusal to license existing carbon-capture technologies, another opportunity exists for patent holders to further monopolize the market when existing patent holders build upon existing carbon-capture technologies. For example, companies are investing in research and development for scaling up and integrating carbon-capture into plant design, as opposed to retrofitting, and developing more integrated approaches to carbon-capture utilization.170 The ability to build upon existing patented technologies with no willingness to license (or work) these technologies is troublesome because these improvements will result in new patents which will be valid for up to another twenty years, the critical time period necessary for deployment of technologies that reduce emissions contributing to climate change.171 Even though statutory compulsory licensing has never been invoked by the government, some individuals contemplate the threat of compulsory licensing when considering the cost of their innovation.172 Their concern is that the government will step in before they can recoup their research and development costs. The potential negative effect of compulsory licensing on the incentives for innovation could be outweighed by the positive impact on innovation for an industry as a whole, particularly in the context of climate change action.173 The potential threat of compulsory licensing alone may be enough to encourage entities to license on more flexible terms to avoid governmental intrusion.174

#### If the federal government doesn’t act, the states will – and it will destabilize the entire patent system.

Mazur 07 [Tanya, attorney specializing in intellectual property law, winner of the Southern California Rising Star award in Intellectual Property Litigation, “Free for the ‘Taking’: Why States Should Not Be Able to Invoke Sovereign Immunity in Patent Infringement Disputes,” *The George Washington Law Review* 75.2, p.398-9, JCR]

There is a crisis looming on America’s horizon, whether in the form of bioterrorism, an avian flu pandemic, or the bankrupting of the federal government due to the aging population’s need for health care. All of these crises demand widespread access to patented inventions, such as pharmaceuticals, to prevent the enormous suffering of Americans. Emergency situations, such as the flu pandemic, will require production of patented products on a scale so massive that it would require circumventing a patent’s normal protections.2 Even the aging baby boomer population’s need for access to low-cost prescription drugs through programs like Medicare could be considered an emergency situation.3 Never before has the health and well-being of our nation been so inexorably linked to patented inventions. In recent years, Congress has attempted to address the coming crises and has proposed a number of changes to the patent laws; these changes, however, have failed to provide adequate solutions.4 States, therefore, are becoming increasingly proactive with regard to their residents’ needs in these crisis situations and are beginning to look to a loophole created by the Eleventh Amendment that exists in the patent laws.5 This loophole threatens to destabilize the United States’ incredibly successful patent system and the hundreds of years of technological innovation this system has provided to the nation.6 This Note examines the delicate balance between the public’s need for ready access to patented goods and the patent protections necessary to promote innovation, within the framework of the present patent system. Also discussed in this Note are problems that result from the approaches to patent “takings” and compulsory licensing that states and local governments have begun to employ. This Note proposes a vital amendment to the patent laws that would alleviate the aforementioned crises while still encouraging innovation and protecting the basic tenets of the patent system. Furthermore, this Note advocates that state sovereign immunity in patent cases be abrogated to curtail states’ abilities to impose compulsory licenses upon patent holders. By allowing only Congress to wield the power to extract compulsory licenses, rather than state or local governments or officers or appointees of the executive branch of the federal government, this proposal protects the sanctity and stability of the patent system. This protection furthers the aims of the Constitution and fosters the progress of the useful arts and sciences. In cases of national emergency, however, Congress would retain the authority to implement takings or compulsory licensing of patents.

### TRIPS

#### ‘Refusal to license’ has kept climate tech out of the hands of developing countries

Qin 18 [Dong, Assoc Prof at Nanjing Univ of Information Science & Technology, “After Paris: Do we need an international agreement on green compulsory licensing?” in *The Implementation of the Paris Agreement on Climate Change*, ed. Vesselin Popovski, p.183-7, JCR]

This patent suppression behaviour has many negative impacts on technology research, development and diffusion. For example, many patentees build patent thickets, which are thick patent webs consisting of various related and overlapping patents, so that their competitors will have much more trouble researching and developing new technologies. Facing patent thickets, firms can require access to dozens, hundreds or even thousands of patents to produce just one commercial product20. The most troublesome quality of a thicket is the risk that one may not be able to conclusively determine that all of the patents have already been read on a product or service21. Relevant patents can pop up and catch even sophisticated manufacturers by surprise22. Addressing this awkward situation, the Secretary General of the United Nations pointed out that the rise of strategic patenting and a series of legislative changes to expand monopoly rights had led to a very complex system of patents, which was increasingly geared to support the rights of incumbent large firms over new, smaller, innovative firms23. Additionally, the system in many countries had moved from its original objective of stimulating innovation through the provision of incentives to innovators, to preventing new domestic and foreign market entrants24. In many green industries, core technologies have already been monopolized by a few large companies. For example, the technologies in hybrid vehicles are very important for developing countries in reducing greenhouse gases under the Paris Agreement. However, more than 90% of patents in hybrid vehicles belong to companies in the United States, Germany and Japan25. It is very difficult for developing countries to get access to these technologies at affordable prices. In the field of LED, a kind of low-carbon light, some companies in developed countries monopolize most of the core technologies and never permit companies in developing countries to use their patents. Because of patent suppression, the technology gap between developing countries and developed countries keeps widening. On the one hand, patenting rates for clean energy technologies have increased faster than for other sectors, at a rate of about 20% per year since the adoption of the Kyoto Protocol by the United Nations Framework Convention on Climate Change, in 199726. On the other hand, most green technology patents continue to be controlled by only a few developed countries. According to statistics provided by the Secretary-General of the UN, six developed countries, including Japan, the United States, Germany, the Republic of Korea, the UK and France, account for almost 80% of all patent applications in clean energy technology27. Some other statistics show that developing countries own too few high-value inventions in the field of climate change technology. Taking China and Brazil as examples, the former owns only 2.3% high-value inventions in the field of climate change technology and the latter owns only 0.2%. Although green patent suppression is now very serious and has become an important barrier to technology transfer, it is not right to jump to the conclusion that the governments of parties to the UNFCCC are devoid of political willingness to deal with it. On the contrary, these governments have already shown some resolve on removing barriers to the international transfer of green technology. Article 4, para. 5, of the UNFCCC states that the developed countries shall take all practicable steps to promote, facilitate and finance the transfer of environmentally sound technologies to other parties, particularly developing countries, to enable them to implement the provisions of the Convention. Article 5 of the UNFCCC also states that the parties shall support international and intergovernmental efforts to strengthen national technical research capacities and capabilities, particularly in developing countries. Moreover, Article 10 of the Kyoto Protocol also rules that all parties shall take all practicable steps to promote, facilitate and finance the transfer of environmentally sound technologies pertinent to climate change, in particular to developing countries. The parties of the UNFCCC tried to develop more detailed plans to promote the international transfer of green technologies after the signing of the Kyoto Protocol in 1997. For example, the Conference of the Parties, on its seventh session held in Marrakesh from 29 October to 10 November 2001, made the decision on development and transfer of technologies (Decision 4/ CP.7)29. According to this decision, the parties would establish an expert group on technology transfer, the objective of which was enhancing the implementation of Article 4, para. 5, of the Convention, including, inter alia, by analysing and identifying ways to facilitate and advance technology-transfer activities. The decision also decided to urge developed country parties to provide technical assistance through existing bilateral and multilateral co-operative programmes. The decision even provided a framework for meaningful and effective actions to enhance the implementation of Article 4, para. 5, of the Convention30. According to the framework, all parties of the UNFCCC were urged to improve the enabling environments for technology transfer, which focused on government actions, such as fair-trade policies, removal of technical, legal and administrative barriers to technology transfer, sound economic policy, regulatory frameworks and transparency. Although many efforts have been made by the international community to promote international transfer of green technologies, the results are quite disappointing. For example, the Kyoto Protocol created the Clean Development Mechanism (CDM) to help developing countries to contribute to the ultimate objective of UNFCCC. According to Article 12 of the Kyoto Protocol, developing countries will benefit from CDM project activities resulting in certified emission reductions. Other countries that have qualified greenhouse gas reduction obligations may use the certified emission reductions accruing from s project activities to contribute to compliance with part of their own quantified emission limitation and reduction commitment. When the Clean Development Mechanism was designed during the negotiations of the Kyoto Protocol, almost all parties of the UNFCCC expected the mechanism to be a helpful tool in promoting green technology transfer between developed countries and developing countries. In fact, it was estimated that about 26% of the projects in relation to the CDM would involve at least some kind of technology transfer31. However, the results have proved very frustrating. Statistics shows that only 0.6% of projects involved technology transfer and the contribution of the CDM to technology transfer can at best be regarded as minimal32. Of course, the reasons for the frustrating results are many, but undoubtedly one of them is that some entities who own advanced green technologies have strong IP protection tactics, including building patent thickets, so that others have little opportunity to get technologies relating to their CDM projects. Yet another important reason why many efforts of the parties of the UNFCCC have been frustrated is that they only aim to regulate the behaviour of governments rather than the behaviour of patentees. However, the fact is that patentees, rather than governments, have the final say in green technology transfer. The right of patentees to refuse to share their patents with other people is strictly protected by the international intellectual property rights system. According to Article 28 of the Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS), where the subject matter of a patent is a product, the owner of the patent has exclusive rights to prevent third parties from the acts of making, using, offering for sale, selling or importing for these purposes that product unless they have the consent of the owner. Where the subject matter of a patent is a process, the owner of the patent has exclusive rights to prevent third parties from the act of using the process unless they have the consent of the owner. Accordingly, the problem of green patent suppression can never be solved if the parties of UNFCCC cannot manage to improve the current IP system. If the owners of green technologies neither use their technologies nor permit others to use their technologies to reduce greenhouse gases, the goal of the Paris Agreement can never be fulfilled. If we want to make the Earth, which is becoming warmer and warmer, safer for us to live, attention should be paid not only to the protection of the private interests of patentees, but also to the protection of public interests.

#### This puts the US in breach of international obligations, which collapses climate treaty implementation globally – IP is the bottleneck

Zhou 19 [Chen, Assist Prof in the Law School of Xiamen Univ, “Can intellectual property rights within climate technology transfer work for the UNFCCC and the Paris Agreement?” *International Environmental Agreements: Politics, Law and Economics* 19.1, p.108-10, JCR]

Climate change is a well-researched issue both scientifically and in terms of legal scholarship. It is widely recognized that technological solutions play an important role in climate mitigation and adaptation. Due to historical and practical reasons, relevant technologies are distributing unevenly across the world.1 To combat climate change, the wide and rapid diffusion of such technologies is in the global self-interest (Watal 2010: 14). There is evidence that technology transfers increase the incentives for participation in multinational environment agreements (MEAs) (Shephard 2007: 10548). In the context of climate change, the United Nation Framework Convention on Climate Change (UNFCCC 1992) requires industrialized countries to facilitate technology transfers to developing countries to enable them to minimize their emissions of greenhouse gas emissions (GHGs). The 2015 Paris Agreement (Paris Agreement 2015) emphasizes this once more as it further commits the Parties to strengthening cooperation on climate technology. However, in reality, state-of-the-art climate mitigation and adaptation technologies are not being automatically transferred through business-as-usual practices where traditional legal protection of intellectual property (IP) operates under the Climate regime. In the light of the growing urgency of climate risks and damage and the emerging recognition of the potential violation of human rights, it is critical to examine what is the key bottleneck to technology transfer and how this can be addressed. Hence, this article explores how IP laws can be used by climate change policymakers in the post-Paris era to enhance technology transfer. To capture the entire picture, I use a statutory perspective to summarize and analyse the UNFCCC (see Sect. 2) and the WTO (see Sect. 3), the legal setting in which climate technology transfers operate, and explore possible solutions to situate IP in the context of climate change. In the context of climate change, technology transfer is predominantly regulated by the UNFCCC. Designed as a broad framework to comprehensively deal with the climate crisis, the UNFCCC has, since 1992, endeavoured to reduce GHG emissions through a range of solutions.2 As early as 1992, the UNFCCC shed light on technology as a solution by framing technology development and transfer as an essential international assistance tool. Two core articles were laid down to facilitate technology transfer: Article 4.5 and Article 4.7. Article 4.5 is cited as a classic clause and has been placed at the heart of the technology transfer commitment system.3 It obliges the developed country Parties of the UNFCCC (Annex I countries) to commit to technology transfer in order to fulfill the principle of common but differentiated responsibilities and respective capabilities. This principle aimed at substantive equity, international solidarity and assistance. To further confirm this commitment, Article 4.7, known as the conditionality clause, made the fulfilment of the developing countries’ commitments conditional on actions taken by developed countries.4 Under this Article, the developing country Parties could suspend the Convention’s implementation if the developed country Parties did not provide technology transfer and financial assistance. Therefore, it can be said that the conditionality clause makes technology transfer absolutely indispensable for the effective implementation of climate change agreements. A violation of the provisions on technology transfer might consequently constitute a material breach and would conflict with the purpose and objective of the Convention (Verhoosel 1998: 66).

#### The US leverages the WTO/TRIPS Agreement to block patent access – application of antitrust allows legal triggering of compulsory licensing

Ni 15 [Kuei-Jung, Prof of Law at the National Chiao Tung University School of Law’s Institute of Technology Law, “Legal Aspects (Barriers) of Granting Compulsory Licenses for Clean Technologies in Light of WTO/TRIPS Rules: Promise or Mirage?” *World Trade Review* 14.4, p.708-17, JCR]

The concept of developing countries granting themselves compulsory licenses and gaining access to climate-related technologies was an unwelcome, or even disturbing, proposal for developed countries and their resident companies who hold the IPRs for these technologies.32 They disagreed with the statement that an IPR constitutes a barrier to technology transfer and instead argued that poor IPR enforcement and high tariffs on environmental products should be blamed for the stalemate on transfers.33 On the basis of various promising instances in which Western companies have transferred clean technologies to and deployed them in emerging markets, Lane remains skeptical of the rhetoric that claims IPRs to be an obstacle to technology transfer and dissimilation.34 Thus far, the compulsory licensing of clean technologies seems not to have occurred, despite strong appeals by developing countries for the use of this mechanism. Although the UNFCCC does not have applicable rules specifically pertaining to the use of compulsory licenses per se, the WTO/TRIPS forum appears eligible to govern them, especially regarding the negotiation of a new agenda and law enforcement. The UNFCCC is the major global forum through which developing countries have consistently proposed using compulsory licenses as one means, among others, of gaining access to clean technologies. However, the climate regime does not specify any binding rules or disciplines for regulating the application of such a measure. Instead, the WTO/TRIPS is the competent regime governing the use by national authorities.35 In effect, all WTO members must guarantee that their national laws and measures relating to compulsory licenses are in compliance with the TRIPS obligations in question.36 During the mid-1990s, under the threat of economic sanctions resulting from US Section 301, the GATT Uruguay Round negotiations finally resulted in crafting comprehensive and multilateral protection for IPRs, which operates with an effective dispute settlement mechanism.37 The effectiveness of the TRIPS Agreement represents a triumph for developed countries, particularly the US, which have long called for strong global IP protection. The TRIPS Agreement specifies a minimum threshold of IP protection and enforcement by WTO members.38 To balance the rights of IP owners, most of whom are from developed nations, with the interests of general users and developing countries and to pursue members’ legitimate public objectives, certain measures limiting the prerogatives of IP owners are permissible, especially regarding their monopoly rights. A patentee may prevent others from using a patented technology before the patent expires.39 However, Article 30 of the TRIPS Agreement provides for exceptions to this right. In addition, patentees who are not using the patent themselves may authorize others to make use of their protected subject matter by voluntarily signing a licensing agreement.40 The freedom of contract that individuals and firms have in choosing their partners and deciding the content of deals would be constrained by the governmental authorization of compulsory licenses to other users. Article 31 of the TRIPS Agreement specifies the rules for implementing such licenses.41 An analysis of the structure of Article 31 of the TRIPS Agreement indicates that the provision does not explicitly provide grounds on which compulsory licenses can be based but simply specifies the 12 conditions with which WTO members ought to comply. All conditions are obligatory. Although the incorporation of compulsory licenses into the TRIPS Agreement is part of a balancing act for countering the predominant power of patentees, such a move should not be interpreted merely for the convenience of developing countries.43 The use of compulsory licenses is not intended to be a ‘free lunch’ because the challenges associated with observing the requirements are quite severe and the costs of implementing the collateral duties may be relatively high. The following sections first examine whether a new declaration or similar document is likely to be finalized to underpin developing countries’ proposal. The focus is then on the legal challenges in, and obstacles to, complying with the TRIPS obligations with reference to the compulsory licensing of Philips CD-R patents, which can serve as a benchmark practice. In response to the HIV/AIDS health crises affecting many developing countries, the WTO adopted the Declaration on TRIPS Agreement and Public Health at its 2001 Fourth Ministerial Conference in Doha. The conclusion of the agreement exemplified how the global IP regime can support, rather than hinder, access to the affordable medicines, most of which are covered by IPRs. Regardless of its legal status,44 the Declaration provides developing countries with powerful leverage and flexibility when interpreting and implementing their TRIPS obligations. The flexibilities elaborated by the Declaration consist of compulsory licenses. First, the right to grant compulsory licenses and the freedom to determine the grounds on which to do so are recognized.45 Second, the Declaration confirms the right of WTO members to define the circumstances that constitute a national emergency and explicitly equates public health crises to national emergencies.46 Third, because many members have insufficient manufacturing capacities, the Declaration requested that the TRIPS Council sort out a solution that makes compulsory licenses more effective for these countries.47 Overall, the flexible approach streamlines the compulsory licensing with a view to promoting access to essential drugs. The Doha’s position on global IP enforcement presents an opportunity for balancing private property rights with other societal values, such as human rights and environmental protection. The mandate on IP and public health signals that multilateral trade negotiations and law-making processes can accommodate the interests of developing countries when their demands are on strong moral and legal grounds. The successful experience in Doha provides momentum for developing countries to pursue other similar goals. Although the appeal for adopting a TRIPS declaration on IP and climate-related technologies seems acceptable, at least morally, the feasibility of concluding a similar text as for public health, especially in the WTO community, remains in doubt. From the perspective of international politics, the WTO members’ lack of political will to earnestly negotiate seems unchanged.48 In addition, as opposed to the mandate of the Doha Declaration, most free trade agreements (FTAs) concluded by the US after 2001 have constrained the use of compulsory licenses.49 The prevalence of alleged TRIPS-plus arrangements in US-initiated FTAs heralds greater difficulties ahead for adopting a new declaration on TRIPS-related social concerns at the WTO. Without the support of the US, it would be difficult to achieve a result that facilitates access to climate-related technologies in multilateral trade negotiations. Discrepancies between access to medicine and access to clean technologies and their products may create obstacles for constructing a new declaration. The possible discrepancies can be divided into three parts (Table 1). First, accessing patented drugs appears unaffordable for the public in developing countries, but whether climate-related technologies are too expensive is uncertain. Second, regarding emergency levels, there are strong moral and legal grounds for protecting people from public health crises by, among other approaches, using compulsory licenses as flexibly as possible. Without access to essential drugs, millions of people could die. However, climate change, despite its considerable impact on human society, is a gradual process and not an emergency similar to that of HIV/AIDS.50 In addition, the effective use of compulsory licenses depends on the presence of a competitive local production capacity. Given the relative infancy of climate-related technologies,51 manufacturing capacities for these products may be more insufficient or entirely absent in many developing countries. This limitation could make granting compulsory licenses less fruitful.52 By comparing the distinctive features of pharmaceutical and clean technologies, McManis and Contreras emphasize that market and patent coverage factors may considerably diminish the effects of green compulsory licensing as opposed to that of essential medicines.53 Thus, they are skeptical that ‘an international accord modeled on the Doha Declaration is achievable or desirable in the area of clean technologies’. 54 The authority to grant compulsory licenses lies with governments but is subject to a number of conditions that each WTO member is required to observe. The requirements, listed under Article 31 of the TRIPS Agreement, impose strict discipline on the members and provide competent national authorities with limited discretion. Observing the obligations is a twofold task: first, national authorities must determine the grounds on which such licenses are granted; second, they must fulfill each of the listed conditions, which begin with an appeal for granting the licenses in question and end on their termination. Article 31 does not explicitly regulate the right of members to stipulate the grounds for resorting to a compulsory license, nor does it provide definite parameters for determining the scope of the grounds, apart from the grounds for semiconductor technology.55 Such an omission causes ambiguity concerning the legality of the grounds chosen by national authorities under the TRIPS Agreement. During the Uruguay Round negotiations, most developed countries, including the US, favored a restrictive approach allowing only for matters of anti-trust, public non-commercial use, and national emergencies to legally trigger such licenses.56 In contrast, developing nations argued for an open approach under which there would not be any constraints regarding setting the grounds. In the end, the proposal to limit the grounds for issuing a compulsory license was not adopted. Instead, the final text on compulsory licenses focused on procedural matters and the substantial conditions to be observed.57The TRIPS preparatory work may support the assertion that the drafters had no definite intention of limiting the scope of the grounds.58 Subsequent developments regarding the interpretation of the TRIPS Agreement, particularly evident in the 2001 Doha Declaration, endorse the views of developing countries. However, the controversy regarding the legal status of the Doha text persists, and no judicial decisions have yet been made by the WTO relating to its legal authority. The US considers the Declaration to be a political statement that lacks any binding power on WTO members.59 By contrast, because the Declaration was adopted by consensus, developing countries claim that it represents a genuine and legitimate expectation among WTO members. Despite this disagreement, many academics consider the Declaration as a subsequent agreement that facilitates the interpretation of the TRIPS provisions in question.60 Irrespective of its function for treaty interpretation, debate continues regarding whether the Doha document can shape fields beyond the contexts of IP and public health. Countries in the midst of public health crises may encounter fewer challenges when availing themselves of the TRIPS flexibilities; however, when addressing situations that do not clearly represent public emergencies or that lack nearly uniform public support, a government’s selection of grounds may be severely questioned. Certain grounds specified in the patent laws of many developing countries are applied to balance the prerogatives of patent owners, such as their refusal to deal, failure to produce locally, and failure to obtain licenses under reasonable terms.61 The legality of invoking such grounds appears quite controversial. De Carvalho is strongly skeptical of the contention that countries are free to decide any grounds or can grant licenses on frivolous grounds.62 Considering that the use of compulsory licenses constitutes an exception to the normal exercise of patent rights, he argues that the grounds should be confined to exceptional or critical situations, such as national emergencies and public non-commercial use.63 According to de Carvalho’s argument, compulsory licenses should not be pursued to remedy individual benefit at the expense of eroding patentees’ right to license voluntarily (i.e., ‘say no to third parties’).64 Therefore, commercial disputes between licensees and patent owners, such as disputes over a refusal to license or failure to reach reasonable commercial deals, should not constitute a sufficient cause.65 After a Taiwanese business failed, after a considerable amount of time, to obtain licensing under reasonable commercial terms and conditions from Philips, the Taiwan Intellectual Property Office (TIPO) decided to grant compulsory licenses of the Philips CD-R patents to the local company. The action incited the critical complaints of both the patentee and the EC. The CD-R technologies and correlated patents were owned by Philips, which had acquired patent protection from the Taiwan Intellectual Property Office (TIPO) during the late 1980s.66 By the 1990s, CD-R production in Taiwan had increased considerably, with most production being licensed by Philips.67 However, Gigastorage, a Taiwanese CD-R manufacturer, was unable to reach a licensing deal with the patentee because of a disagreement over royalty rates. TIPO reviewed the appeal of Gigastorage for compulsory licensing of Philips’ five patents and determined the situation facing Gigastorage matched the grounds in question. TIPO’s interpretation as to what amounted to a reasonable commercial term was mainly subject to alleged suitable royalty rates. After reviewing the opinions and findings of public officials and professional institutions, TIPO concluded that Philips’ offer was not a fair and reasonable royalty arrangement.68 Because Gigastorage had spent almost a year engaging in negotiations with Philips, TIPO was satisfied that the period of negotiations had been considerable. In July 2004, according to Taiwan’s Patent Act,69 the decision of TIPO to grant the compulsory licenses was rendered.70 The EC protested that the reason used for triggering the compulsory licenses was a violation of the TRIPS agreement. The EC’s argument was largely based on a textual analysis and was offered with a view to preserving the patentee’s right to license voluntarily. First, the EC argued that Taiwan’s granting of compulsory licenses based on a failure to reach reasonable terms would diminish the protection extended to patent holders and that this effect conflicted with the essence of Article 28 of the TRIPS Agreement. In analyzing Article 28, the EC contended that the provision bestows on patent owners a freedom to license, which inherently carries with it a right to refuse to negotiate.71 Furthermore, the EC emphasized that Article 28 does not obligate patentees to engage in a licensing agreement but rather clearly states that patent owners have a right to do so.72 Second, the alleged ‘failure to obtain reasonable commercial terms’ was strictly categorized by the EC as a procedural condition as opposed to a substantial condition, which is one of the grounds for granting compulsory licenses. Because such a condition is explicitly specified in the first sentence of paragraph (b) of Article 31 as a procedural rule to be observed prior to an authorization of compulsory licenses, the EC insisted that it fell outside of what might be considered substantial grounds. The second sentence of the same paragraph stipulates that the obligation of WTO members to obtain licenses (voluntarily) under reasonable commercial terms in advance may be waived in the event of a national emergency or for public non-commercial use. According to paragraph (k), the members’ obligation to observe such conditions can also be waived when addressing an anti-trust situation. Reading the text restrictively, the EC insisted that Article 31 embodies the intent to distinguish such procedural elements from substantial grounds.73 Thus, the EC concluded that Taiwan’s allowance of Gigastorage’s failure to obtain licenses under reasonable commercial terms as grounds for issuing compulsory licenses was illegitimate. Climate change is a grave global concern; however, as mentioned previously, it may not, in terms of national emergencies, be universally recognized as equivalent to a global public health crisis because it affects countries differently and the problem persists over a long time frame. Some nations, such as small Micronesian island states, are obviously more vulnerable to the effects of climate change, whereas particularly well-developed countries can prove more resilient and adaptive to the challenges. Thus, most developed countries may not be persuaded by the arguments of developing countries and rising powers such as China and India, which attempt to equate the threat of climate change with more immediate national emergencies. Of course, the restrictive European approach toward establishing convincing grounds is open to dispute. In addition, whether a refusal to license or intransigence in negotiations on the part of rights holders constitutes sufficient reason to grant compulsory licenses remains controversial. It has been observed that the practice of refusing licensing for climate-related technologies may grow more common as companies find it profitable to invest in the technologies and ‘thus seek to maintain their competitive advantage’. 74 As tensions between developing countries (including their local companies) and climate-related technology owners increase, undercutting those IP rights by resorting to compulsory licenses under the guise of mitigating global warming will certainly provoke serious complaints from the governments of developed countries. Developed countries will not always ignore the granting of compulsory licenses on technologies critical to their industries and may opt for further legal action. The challenges to Taiwan’s authorization of the use of the Philips CD-R patents, as mentioned previously, could have become an international litigation brought to the WTO mainly because the format of the EC’s trade barrier report nearly constituted a complaint submitted to the WTO. More importantly, the proceedings that occurred both locally and internationally as a whole provide a vivid example of how difficult it is for a WTO member to satisfy the requirements for issuing compulsory licenses under the TRIPS Agreement.

#### The US stance generates massive political tension – countries will impose their own antitrust laws, leading to regulatory uncertainty and trade retaliation

Sarnoff & Chon 18 [Joshua, Prof of Law at Depaul College of Law, served as a Distinguished Scholar at the US Patent and Trademark Office, Margaret, Prof for the Pursuit of Justice at the Seattle Univ School of Law, “Innovation Law and Policy Choices for Climate Change-Related Public-Private Partnerships,” *The Cambridge Handbook of Public-Private Partnerships, Intellectual Property Governance, and Sustainable Development*, eds Margaret Chon et al, p.265-7, JCR]

As stated earlier, many people and institutions have recognized the unequal technology transfer framework for climate change and energy innovation. To address these concerns, numerous changes, some highly controversial, have been proposed to the global patent regime.130 These include: broad, categorical exclusions of environmentally sound or climate friendly technologies from the patent system; and regulation of licensing and market behaviors, including compulsory licensing, antitrust scrutiny, and price controls.131 These direct means of regulating prices and competition will remain legally available to governments that hope to induce – but may be forced to compel – more favorable licensing and pricing practices than would voluntarily occur.132

\*\*\*Begin Note 132\*\*\*

Concerns over IP rights and climate change technologies have already caused significant political tensions. At an earlier stage of international negotiations, the UNFCCC Ad Hoc Working Group on Long-term Cooperative Action (WG-LCA) considered various proposals that had been suggested by some countries in the South. These measures would have placed significant restrictions on the traditional operation of the patent system. The measures ranged from requiring patent pooling and royalty free compulsory licensing to excluding green technologies entirely from patenting – even retroactively revoking existing patent rights. See, e.g., Ad Hoc Working Group on Long-Term Cooperative Action Under the Convention, Ideas and proposals on the elements contained in paragraph 1 of the Bali Action Plan, 23 UNFCCC (2009); Ad Hoc Working Group on Long-Term Cooperative Action Under the Convention, Report of the Ad Hoc Working Group on Long-Term Cooperative Action under the Convention on its Seventh Session, UNFCCC Doc. No. FCCC/AWGLCA/2009/14, 156 (2009).

\*\*\*End Note 132\*\*\*

Although further amendment of the WTO Agreement on Trade Related Aspects of Intellectual Property (TRIPS Agreement) – as has been discussed by the United Nations Secretariat133 – is a theoretical possibility, consensus for adopting amendments in the short term is highly unlikely. Without such treaty amendments, countries (particularly those in the developing South) may seek to make greater use of existing TRIPS Agreement flexibilities to tailor their patent doctrines to assure access and to lower costs. They may adopt exclusions from patent eligibility, exceptions to patent rights, and alternatives to private licensing (such as a global technology pool). They also may expand access to publicly funded technologies to better promote technology development, transfer, and use.134 These options may provide greater ex ante predictability “in accessing technologies and [may] further enable much-needed research and development for local adaptation and dissemination, which would further reduce the cost of the technologies.” 135 Governments addressing private refusals to license patented technologies or high prices for access to those technologies may regulate such conduct directly, by adopting compulsory licenses or by imposing price control regulations.136 Alternatively, they may regulate such conduct indirectly, by treating restrictive or costly licensing as a competition violation (for example, as an abuse of dominant position) or by treating the patents themselves as essential facilities (that is, as products or services that are considered competitive necessities and for which access also can be required by compulsory licenses).13 Such direct or indirect regulation, moreover, may be largely ineffective in regard to assuring transfers of tacit knowledge.138 Both direct and indirect approaches to regulating access and prices will be highly controversial, and may threaten substantial trade retaliation or may prompt withholding by businesses of technology and foreign investment. Compulsory licensing, price regulation, and antitrust treatment have been repeatedly resisted by the United States and (somewhat less so) by other developed countries, particularly in foreign markets where the countries do not bear the costs but reap the benefits of technology exports.139 The developing South may be unwilling to resist such trade pressures, even if the threats and trade sanctions would be found illegal under WTO rules.140 These legal and political constraints bring us to proposals discussed in the next Part of this chapter, which emphasize private sector, voluntary initiatives to increase access and technology transfer, within a context of public sector laws and policies that promote innovation and access.

#### Wrecks the green tech market – need consistency to provide regulatory certainty

Choi 20 [Jay, University distinguished Prof in the Dept of Economics at Michigan State Univ, Prof in the School of Economics at Yonsei Univ, “Competition Law and Economics: International cooperation and convergence in competition policy,” in *Competition Law and Economics: Developments, Policies and Enforcement Trends in the US and Korea*, ed Jay Pil Choi et al, JCR]

Thus, it is a welcome development that more countries are adopting competition laws and plan to implement competition policies. For instance, when the International Competition Network (ICN, hereafter) was formed in 2001, only 16 competition agencies from 14 developed countries were participating members. The number now stands at 126 competition agencies from 111 jurisdictions (as of April 26, 2013).1 One of the most noteworthy developments on this front is China’s adoption of the Anti-Monopoly Law (AML), which took effect on August 1, 2008 after more than 10 years of drafting. However, promulgating competition law and setting up a competition agency, however, are not enough. In fact, mushrooming competition agencies in every country may turn out to be counterproductive if competition laws are applied in an inconsistent manner. As the globalization of the world economy entails a growing interdependence among national economies, a nation’s competition policies are no longer confined to domestic firms within the nation’s jurisdiction. With the prominence of multi-national firms, what counts is not the nationalities of firms but the locus of their economic effects. Antitrust authorities often take action against foreign firms if the firms affect competition in their jurisdictions. As a result, it is a distinct possibility that multinational firms may be subject to contradictory policies in the absence of policy harmonization among countries, which may significantly add to the complexity and costs of doing business and severely hamper the proper functioning of the market economy. In this paper, I discuss several issues that arise with “decentralized” enforcement of antitrust across jurisdictions due to the proliferation of independent antitrust authorities. These issues necessitate harmonization and coordination of policies in antitrust enforcement. However, divergence in economic conditions and policy goals in different jurisdictions presents a stumbling block in achieving harmonization in antitrust enforcement. Thankfully, economic analysis has a common methodology that is applicable across national boundaries in the assessment of antitrust enforcement effects. Antitrust law enforcement thus should be effects-based and be guided by the economic model of competition. The rest of the paper is organized as follows. In section II, I discuss potential pitfalls of antitrust proliferation with a focus on enforcement externalities. Section III considers specific enforcement areas in which enforcement externalities pose a serious problem. Section IV considers potential pathways to achieve policy harmonization across jurisdictions. I also briefly comments on the use of economics as a facilitating analytical tool in the harmonization of antitrust enforcement. Concluding remarks are contained in section V. The proliferation and potentially independent implementation of antitrust enforcement across more than a hundred different jurisdictions can lead to a variety of problematic issues, especially when the rules and enforcement procedures vary across jurisdictions. I will discuss some of the most important issues below, which call for harmonization of antitrust rules and cooperation among enforcement agencies. With the globalization of the economy and many multinational firms operating in so many different jurisdictions, the effects of an antitrust enforcement activity in one country is not necessarily confined to the country of enforcement. This often leads to what Geradin (2009) calls the “Strictest Regime Wins” problem and the risk of overregulation. To see the nature of the problem, imagine that there are two independent antitrust authorities in two different countries. Consider a unilateral conduct by a dominant firm such as tying or rebates. Let the effects of such a conduct on national welfare be W1 and W2, in country 1 and country 2, respectively. Such a conduct will be globally efficient if W1 + W2 ≥ 0. However, such a conduct will be prohibited and subject to antitrust enforcement in country i, if Wi < 0, where i = 1, 2. Suppose that a unilateral conduct confined to an individual country is not feasible. Then, the unilateral conduct in question will be allowed only when W1≥ 0 and W2 ≥ 0, 2 which is a more stringent condition to satisfy than W1 + W2 ≥ 0, and may lead to overregulation of unilateral conducts. The shaded areas in Figure 1 represent the overregulated areas. In both areas A and B, the unilateral conduct is globally efficient. However, the antitrust authority in country 1 prohibits such conduct in area A and the antitrust authority in country 2 does the same in area B. The same logic applies to other areas of antitrust enforcement. If we consider enforcement costs, the enforcement externalities can also lead to a collective decision dilemma and the concomitant free-rider problem in antitrust enforcement. To see this, let us now assume that the welfare effects of the unilateral conduct is the same and harmful for both countries, that is, W1 = W2 =W < 0. In addition, assume that there are enforcement costs C. Then, it is optimal to enforce against this conduct in one country as long as 2W + C < 0. There can be two types of inefficiencies. If W + C > 0 and 2W + C < 0, no country is willing to enforce against this conduct unilaterally because the cost of enforcement is not justified although the enforcement is globally efficient. In this case, the only way to enforce against this conduct is to share the enforcement costs between the two countries. If W + C < 0, each country is willing to unilaterally enforce against the conduct, but each country may have incentives to free ride on the other country’s enforcement efforts unless both countries can coordinate. Independent and uncoordinated antitrust enforcement can be a considerable burden for multinational firms operating in many different countries if the antitrust rules differ and/or procedural rules of enforcement vary across countries. Merger proposals may need to satisfy the conditions of the agency with the strictest antitrust rules. The same applies to unilateral conducts. A nightmare scenario may be the case where different agencies require conflicting rules that cannot be satisfied simultaneously. Multiple jurisdictions with independent agencies can also significantly increase the complexity of defense strategies of a firm that is investigated for an alleged antitrust violation. Defense lawyers need to be extra cautious so that a position taken in one country cannot be adversely used against the alleged company in other countries with different rules and procedures. The need to adopt a cohesive defense strategy in the face of many different antitrust rules may severely limit the ability to defend the alleged firms. Language can be another issue. The in-house general counsels of firms investigated for alleged conduct need to formulate coordinated defense strategies in multiple languages without anything being “lost in translation.” There is a broad consensus that the main objective of antitrust enforcement should be the protection of consumers. However, there may be countries that pursue additional or different objectives with antitrust policies, which would certainly create inconsistencies in the policy implementation. For instance, the newly enacted Antitrust Monopoly Law (AML) in China states that one of its objectives is to “promote the socialist market economy.“ Considering the growing importance and influence of the Chinese economy, it may be a concern if the antitrust authority in China actively pursues this objective, even though it is too early to tell. Its merger review also considers among other factors the "effect on the development of the national economy and public interest." It remains to be seen how this consideration will affect actual merger decisions in China. Even in countries where the stated goal of antitrust authorities is purely the protection of consumers, we cannot rule out the possibility that antitrust authorities misuse their power for other purposes or succumb to “regulatory capture,” to which any regulatory agency is susceptible. This possibility is especially worrisome in developing countries where antitrust authorities are not completely independent and usually political appointees. First, there is a concern that antitrust decisions can be used as a disguised protectionist policy. This is especially so in antitrust cases that pit domestic firms against foreign multinational firms and domestic firms have previously been shielded from foreign competition. In such cases, antitrust policy could be enforced in a discriminatory fashion against foreign companies as an instrument of protectionist policy. Second, politically-minded and overzealous enforcement officials may also see high-profile antitrust cases (especially those against foreign multinationals) as a stepping stone that leads to promotion in their bureaucratic or political career. They can use such an opportunity to portray themselves as crusaders who bravely stand against powerful foreign multinationals to protect domestic interests. There could be a race to be the toughest in an attempt to be a relevant player, which can preclude many pro-competitive mergers and single firm conducts. Finally, the lack of uniform antitrust enforcement across jurisdictions raises the possibility of “forum shopping” in the presence of antitrust enforcement externalities. With multiple antitrust authorities in different jurisdictions, competitors of the merging parties or an allegedly dominant firm have incentives to bring the case to the antitrust authority with the most sympathetic ear, which ensures that the strictest antitrust rule is enforced in the global economy. In this section, I focus on three important classes of antitrust enforcement in which enforcement externalities become a problem due to the proliferation of antitrust agencies. If multiple antitrust jurisdictions are in place, enforcement externalities naturally arise in cases of international mergers. The increasingly global nature of business transactions has resulted in a growing number of mergers falling under multiple jurisdictions and corresponding competition authorities. This inevitably invites potential conflicts among competition authorities. For instance, the European Commission can block or force changes to company mergers and takeovers, even when they do not involve any European firms, if they are deemed to adversely affect the competitive landscape in the European market.4 The same applies to US antitrust authorities such as the Department of Justice and the Federal Trade Commission. They routinely take actions against foreign firms if the firms’ actions harm competition and adversely affect consumers in the US market.5 The current situation naturally raises concerns about the potential for intergovernmental disagreements about the effects of antitrust actions. This type of potential conflict is best illustrated by the proposed merger between General Electric (GE) and Honeywell, which was approved in the U.S., but blocked by the European Commission.6 With the proliferation of antitrust authorities that enforce merger regulations, this type of conflict can only be magnified. As of 2001, the American Bar Association identified 46 international merger notification requirements.7 China is now an active player in this area. For instance, the Anti-Monopoly Bureau of the Ministry of Commerce (“MOFCOM”) reviews the filing of “concentration of operators” under the AML and recently denied the acquisition of Huiyuan by Coca-Cola by claiming that Coca-Cola would have the ability to transmit its dominant position in the soda soft beverage market into the juice beverage market. 8 The proliferation of decentralized antitrust enforcement agencies implies that any merger between large multinational firms that have a presence in any of these countries needs to notify and receive approvals without any single exception; any veto from any of these countries can torpedo the proposed merger. The problem with the current regime without any harmonization of policies is that any international merger will essentially be determined by the least permissive agency without any considerations of its effect on consumers in other jurisdictions. This decision mechanism is likely to be inefficient, and the degree of inefficiency will be exacerbated as more agencies are involved, since the view reflected in the decision would be the one most extreme. This is true even if all antitrust agencies pursue the same economic goal (either social or consumer welfare maximization) without any political considerations and the effects of mergers are uniform across jurisdictions. If we consider the outcome of each investigation as an independent estimate of the effects of the proposed merger, the best estimate in the statistical sense would be the average view unless there is any systematic bias in the evaluation process. With the current system, however, the merger enforcement would be driven by the first order statistic, i.e., by the competition authority with the most pessimistic view about the proposed merger. Even if there is no uncertainty in the evaluation of the effects of mergers, there could be conflicts if the effects of mergers are not uniform across jurisdictions. Suppose that there is a proposed merger that affects two countries, 1 and 2. The welfare impacts of the merger on each country are given by W1 and W2. As discussed above, the merger is globally efficient if and only if W1 + W2 ≥ 0. However, the merger will be approved if and only if W1≥ 0 and W2 ≥ 0 under the current system. The latter condition is more stringent than the former condition, which implies that efficient mergers can be blocked since each agent ignores external effects. Once again, the scope of this type of inefficiency certainly increases as more agencies are involved. The issue of externalities also arises in the context of single firm conduct. As in the merger cases, the decision of one agency may have positive or negative impacts on consumers in other jurisdictions. If a country has no antitrust enforcement, other countries’ enforcement against unilateral conduct can have positive effects on the country’s welfare. However, if the country also has an active enforcement agency and deeds a firm’s unilateral conduct efficient and welfare-enhancing, other countries’ enforcements against the same conduct can eliminate efficiency-enhancing business practice by the firm, leading to overregulation. Recent examples in which the U.S. antitrust agencies and the EC made divergent decisions include the British Airways conditional rebate case. In the US, the rebate scheme used by British Airways was deemed to be permissible but the same conduct was condemned to be anticompetitive by the EC.9 Intel was another case in which the conduct was deemed lawful in the US, but condemned to be anticompetitive in Europe and Korea. The Microsoft case is another example in which the company was subject to allegations of antitrust violations in multiple jurisdictions and faced different remedies that are not necessarily consistent. In antitrust cases that involve intellectual property rights [IPRs], additional issues may arise. As an example, consider the case of compulsory licensing as an antitrust remedy to solve an interoperability problem.10 When an “essential facility” is a physical property, the access can be limited to a particular geographic area. Thus, the issue of different antitrust approaches can be confined to the areas of dissonance without affecting others. In contrast, if the essential facility is intellectual property, limiting the use of the property in other areas or related fields may be difficult. To use the example of the Microsoft case in Europe, it would be impractical to enforce that the interoperability information shared with third party vendors of Windows server software be limited to the products sold only in Europe. Thus, compulsory licensing enforced in Europe can affect competitive conditions in other areas as well. This also raises the possibility of “forum shopping,” as explained above. With multiple antitrust authorities in different jurisdictions, competitors of the essential facility owner have incentives to bring the case to the antitrust authority with the most sympathetic ear for the competitors. This possibility highlights the need to harmonize competition policies across jurisdictions. There is a near consensus that the first priority of antitrust enforcement should be to combat price fixing, and the economic harms caused by hard core cartels are universally recognized. Thus, there is less conflict in this area among antitrust agencies. In addition, the enforcement in this area usually confers positive benefits on other countries. The main issue in this area is underenforcement rather than over-enforcement. When multinational firms operate in several jurisdictions in the presence of arbitrage opportunities across markets, the sustainability of collusion in one local market can be affected by the existence of collusion in other markets. Consider, for example, the vitamin cartel case of Empagran S.A. v. F. Hoffman-LaRoche. Empagran S.A. of Ecuador and other foreign companies (that purchase and resell vitamins) filed a suit against F. Hoffman-LaRoche of Switzerland and numerous other foreign companies for an alleged international price-fixing conspiracy.11 The case concerned a price-fixing conspiracy that allegedly took place overseas even though the case itself was filed in a US federal district court. The foreign plaintiffs, suing under the U.S. Foreign Trade Antitrust Improvement Act (FTAIA), claimed that "the cartel raised prices around the world in order to keep prices in equilibrium with United States prices in order to avoid a system of arbitrage" and therefore that "the foreign plaintiffs were injured as a direct result of the increases in United States prices even though they bought vitamins abroad." The interdependence of cartel stability across markets leads to potential externalities in antitrust enforcement across jurisdictions with independent antitrust authorities. For instance, cartel detection and desistance in one market can lead to cartel breakdown in other markets, conferring positive externalities. The domino effect may induce each antitrust agency to free ride on other agencies’ enforcement efforts. This calls for cooperation and coordination among antitrust agencies to eliminate a collective decision problem. To understand the nature of the free-rider problem when there are enforcement costs, consider the following simple cartel enforcement game. There are two antitrust agencies that must decide whether or not to spend resources on cartel detection and prosecution. For simplicity, let me assume that the welfare effect of a hardcore cartel on consumers is the same across jurisdictions. Let us denote the welfare loss due to the cartel in each country by L. The cartel should desist, but the agency’s enforcement cost is C. The game can be described by the following matrix (Table 1). Each enforcement agency independently decides whether or not to enforce. We assume that the cartel in both countries can be broken up by enforcement in any one of the two countries due to the domino effect. We further assume that L > C >0, which implies that the cartel enforcement is beneficial in each country if there is no other enforcement agency. There are multiple equilibria in this game, with two asymmetric pure strategy equilibria and one symmetric mixed strategy equilibrium. In the two asymmetric pure strategy equilibria, one agency enforces while the other chooses not to, and the resulting equilibrium is efficient. However, the most natural equilibrium may be the symmetric mixed strategy equilibrium since both agencies are symmetric in this game. Without any coordination and information sharing, the unique, symmetric equilibrium is that each agency enforces with probability p = L C L − . With the symmetric mixed strategy equilibrium, however, we have a coordination failure and the price fixing will continue with probability (1-p)2 . Another source of inefficiency with independent investigations is the possibility of duplicative efforts in the event that both agencies decide to enforce, which occurs with probability p 2 . In this stylized situation, it would be beneficial for both parties to consider the designation of a “lead agency” to eliminate duplication and streamline the process. All the reasons listed above support a more integrated approach in the enforcement of international mergers. In addition, information sharing among antitrust authorities would be a very important tool in the fight against hardcore cartels. Information sharing arrangements would allow antitrust agencies to coordinate their investigative strategies and provide them with access to subjects, evidence, and witnesses that are located outside each country’s borders.12 In previous sections, we pointed out potential perils from the proliferation of antitrust agencies and emphasized the need for policy harmonization and coordination across jurisdictions. It is important not to impose any additional burden on businesses with unnecessary regulatory uncertainty. Different substantive and procedural regimes make conducting businesses with an international locus of effects complex, time consuming, and expensive. Clear and consistent standards across jurisdictions will facilitate global businesses and eliminate any bureaucratic burdens associated with uncertainty. Given this broad consensus on the high desirability of a uniform substantive and procedural antitrust regime, the difficult question is a more practical one of how we can achieve the needed policy harmonization among countries with sovereign rights.

#### Concessions on IP licensing restores WTO credibility – key to pandemic recovery and ensures developing country transition to green tech

Okonjo-Iweala 21 (Ngozi Okonjo-Iweala, director-general of the World Trade Organization, 3-2-2021, Ngozi Okonjo-Iweala: WTO members must intensify co-operation, Financial Times, <https://www.ft.com/content/0654600f-92cc-47ad-bfe6-561db88f7019>, MAM)

On Monday I became the first woman and the first African to lead the World Trade Organization. Now we must roll up our sleeves and get to work. The WTO already faced acute challenges, and they have been **amplified by Covid-19.** The pandemic has wreaked havoc on the global economy, affecting supply chains and disrupting transport and travel. The crisis has upended trade and economic activities, leading to job losses and reduced incomes around the world. It has erased years of economic gains made by developing countries and even decades of growth in some low income and least-developed countries. There is hope on the horizon. The WTO expects world merchandise trade to rebound strongly this year. The IMF forecasts an 8 per cent growth in global trade volumes in 2021 and a 6 per cent growth in 2022. It estimates global gross domestic product to rebound from falling 4.4 per cent in 2020 to growing 5.5 per cent in 2021. However, for the global economy to return to sustained growth, we must intensify co-operation to ensure equitable and affordable access to vaccines, therapeutics and diagnostics. The WTO can and must play a more forceful role in encouraging members to minimise or remove export restrictions and prohibitions that hinder supply chains for medical goods and equipment. WTO members have a further responsibility to reject vaccine nationalism and protectionism while co-operating on promising new treatments and vaccines. We must find a “third way” on intellectual property that preserves the multilateral rules **that encourage research and innovation while promoting licensing agreements** to help scale-up manufacturing of medical products. Some pharmaceutical companies such as AstraZeneca, Johnson & Johnson and the Serum Institute of India are already doing this. More broadly, WTO members agree that the organisation needs reforms. But a lack of trust means they do not agree on what changes are needed or their sequencing. If we are to restore the WTO's credibility, we must set aside our differences and agree on reforms when trade ministers meet later this year. We must contribute to ocean sustainability by agreeing to eliminate harmful fisheries subsidies which lead to too many vessels chasing too few fish. A robust deal will signal that **the WTO is back** and that it can conclude a multilateral agreement vital for future generations. The WTO cannot afford to stumble over this; the negotiations have been going on for 20 years. This is far too long. Absent an agreement, there will be no fish left over which to argue. The dispute settlement system has been central to the security and predictability of multilateral trade. But it needs reform and ministers need to agree this year on the nature of these reforms and how to make them. The WTO rule book must be updated to take account of 21st-century realities such as the digital economy. The pandemic has accelerated the use of ecommerce, enabling women and small and medium-sized enterprises to participate in international trade. But we must bridge the digital divide that makes some developing countries reluctant to join the ecommerce negotiations. Negotiations among some WTO members on facilitating investment and removing regulatory red tape in services trade have continued fairly intensively despite the pandemic. Participants need to broaden the support for these initiatives and attract interest from developing countries with the aim of concluding talks by the end of the year. More can be done to ensure the WTO addresses the nexus between **trade and climate change**. Members should reactivate and broaden **the negotiations** on environmental goods and services. But climate-related restrictions cannot become disguised restrictions on trade, and we must assist developing countries as they transition to the use of more environmentally friendly technologies. The WTO’s work in new or innovative areas does not mean that we have forgotten traditional topics such as agriculture. Improving market access for export products and dealing with trade-distorting farm subsidies remain of paramount importance to developing and least-developed countries. One area ripe for early agreement involves the removal of export restrictions on farm products purchased for humanitarian purposes by the World Food Programme. Ensuring that government support for state-owned industrial enterprises does not distort competition is also a top priority for many WTO members. The WTO faces numerous tricky challenges, but **they are not insurmountable**. There is hope if we work together in a manner that builds trust and builds bridges.

#### Diverging climate policies between countries causes protectionist trade wars – a strong role carved out for the WTO is key.

Hufbauer 8/30 (Gary Clyde Hufbauer, Nonresident Senior Fellow; Peterson Institute for International Economics, 8-30-2021, Divergent climate change policies among countries could spark a trade war. The WTO should step in, PIIE, <https://www.piie.com/blogs/trade-and-investment-policy-watch/divergent-climate-change-policies-among-countries-could>, MAM)

The United States, China, and Europe have committed themselves to raising the penalty for carbon emissions but at different speeds and with different coverage and approaches. Raising the carbon penalty, through taxes, trading systems, or regulations will inevitably make home-produced goods and services more expensive. The fear therefore is that nations with less ambitious efforts will export goods that are cheaper because their penalties are less costly. This fear, in turn, inspires concern in other countries that their exports will be **unfairly penalized by protectionist measures**. For example, Europe is now threatening a new array of carbon tariffs, while the United States and China are threatening to retaliate. These threats could lead to an escalation of protectionist actions that would **undermine the world trading system.** One possible solution to this problem may be to bring in the World Trade Organization **(WTO)** to adjudicate differences while preserving momentum for tackling carbon emissions. Time is running out if the climate change agenda goals are to be met. The meeting of the 26th UN Climate Change Conference of the Parties (COP26), starting November 1 in Glasgow, **will provide a test** of whether these competing interests can be reconciled. Both the European Union and the United States have released border tax proposals as part of their green initiatives. The primary purpose of border adjustments is to prevent "carbon leakage"—shorthand for the risk that high-carbon imported goods, paying little or no carbon fees, will take market share from low-carbon fee-paying domestic firms, thereby defeating the effort to reduce global emissions while harming the domestic industry. But border tax proposals are controversial for two reasons: First, trading partners fear disguised protection that violates WTO rules; second, many observers believe that the proposals, if implemented, will provoke opposition and obstruct cooperative action to reduce global emissions. After a summer of fires, droughts, floods, and furnace-like temperatures, public demand for decisive measures is overwhelming. The heat wave sweeping northwestern North America in late June 2021 caused 569 heat-related deaths in British Columbia. Meanwhile, in mid-July, China faced devastating floods across central Henan province, leading to 302 deaths and 50 missing persons. Responding to these calamities, China, the United States, and the European Union have proposed updates to their emission reduction commitments, aligning with their own political and economic constraints. The table below summarizes the proposals.

#### Escalates to nuclear war

Nye and Kitfield 20 (Glenn; president of the Center for the Study of the Presidency & Congress and a former member of Congress, James Kitfield; ; senior fellow at CSPC, and a three time recipient of the Gerald R. Ford Award for Distinguished Reporting on National Defense, 12/10/2020, Biden’s First Move on Nuclear Weapons, Defense One, <https://www.defenseone.com/ideas/2020/12/bidens-first-move-nuclear-weapons/170652/>, MAM)

The world is currently living through a period of great instability as it copes with **the worst global pandemic** since 1918, **the worst economic** shock since the Great Depression, and **the worst tensions** in major power relations since the early days of the Cold War. These crises come at a time when the treaties and multilateral institutions that are the foundation of the international order and strategic stability are visibly weakening, and **in danger of collapse**. In the past such periods of deep economic distress and geopolitical tensions have given rise to dark political forces, and are **ripe for confrontation** among nation-states. History will not judge kindly American political leaders who stood idle while a nuclear arms race was added to that already volatile mix.

#### Plan: The United States federal government should prohibit the refusal to license climate mitigation and adaptation technologies as an anticompetitive business practice.

### Climate

#### Plan key to solve climate change – ‘refusal to license’ is the roadblock to all solutions

Cayton 20 [Samuel, Adjunct Prof at Seattle Univ School of Law, legal intern at the Media Law Group, “The ‘Green Patent Paradox’ and Fair Use: The Intellectual Property Solution to Fight Climate Change,” *Seattle Journal of Technology, Environmental & Innovation Law* 11.1, p.218-22, JCR]

The justification for a patent holder’s right to exclude rests on the principle that it promotes innovation by giving the inventor an incentive to use their invention and benefit the public.30 However, while patent law assumes patent holders will efficiently license their technologies to make the best use of its potential, this notion is not always true.31 Even with the U.S. antitrust system geared toward preventing an entity’s full market control over products, patent grants give the rightsholder the power to exclude others from unauthorized secondary use of that technology.32 Furthermore, the refusal to license is not a defense against patent infringement in a lawsuit.33 If this principle is carried out to its fullest extent, there could be a prohibitive effect on initiatives to combat climate change. Globally, companies have filed numerous green patents at varying rates among specific subsectors.34 While trends show that green patent applications are declining in part because of delays in research and development (R&D) and investment,35 certain technologies such as renewable energy are becoming “more profitable” and “less reliant on government subsidies.”36 Moreover, although the U.S. remains dependent on oil and thus resistant to transforming its energy system,37 these statistics demonstrate significant innovation within green technology. Although the U.S. is now very likely to rejoin the global efforts to combat climate change, the consensus remains that private sector innovation is needed to effectuate the challenges ahead.38 This tension between the rights of the patent holder and the need to use their green technology can be described as the Green Patent Paradox, whereby patented technologies geared toward mitigating the effects of climate change or substituting environmentally hazardous industries may not reach their full potential in part because patentees refrain from licensing their products. Whether a major crisis within the patent regime concerning green technology exists is still too early to determine.39 However, recent suits in federal court foreshadow the prospect of this issue developing in the years to come. With regard to patent reform specifically, progress has been made around the world to actively combat the effects of climate change.40 At the same time, many lawsuits have been filed and argued in federal court concerning secondary and more expansive uses of patented green technology. A patent holder is entitled to relief when a secondary user “makes, uses, offers to sell, or sells” the patented invention regardless of whether the secondary user possesses41 However, the degree to which patentees can gain relief was limited by the Supreme Court in eBay v. MercExchange whereby permanent injunctive relief in patent infringement suits must meet four basic requirements for an injunction.42 A heightened standard for plaintiffs means that secondary uses of patented technologies have a better chance of surviving infringement suits. For commentators as well as secondary users, this decision is seen as a partial victory because the patent infringement gravitated from the old standard which automatically gave injunctive relief to the plaintiff.43 Since eBay, many subsequent green patent infringement cases have come before federal courts, providing mixed signals for future developments of green technology.44 In 1992, Paice LLC, a startup company in the business of hybrid gas-electric vehicles, filed a patent for its developed hybrid technology.45 Paice’s patent application covered the utilization of an electric motor in conjunction with the standard internal combustion engine (ICE) that supplies additional power and transfers torque to the drive wheels of conventional automobiles.46 In 1994, the USPTO granted Patent No. 5,343,970 (“the ‘970 patent”) to Paice.47 One year later, Toyota started developing hybrid gas-electric vehicles in Japan and later launched the Prius in 1997, which was subsequently released to the U.S. in 2000.48 Paice founder, Dr. Alex Severinsky, met with representatives of Toyota USA to demonstrate Paice’s hybrid technology and offer a license agreement; however, Toyota refused because it had “no intention of developing [Paice’s] technology.”49 At subsequent meetings between the parties, Toyota acknowledging Paice’s strong contributions but still refusing its offer to license the patent.50 Thereafter, Paice filed suit against Toyota in the Eastern District of Texas for infringement of the ‘970 patent.51 Pursuant to eBay, the District Court denied permanent injunctive relief for Paice; however, the Court went on to hold that Toyota infringed on the patent rights of Paice and awarded ongoing royalties of $25 per infringing hybrid Toyota vehicle to Paice.52 On appeal, the Federal Circuit Court affirmed the denial of the injunction but remanded on the issue of royalties, holding that the District Court could not allow further use by Toyota without clarifying how to calculate the ongoing royalty.53 On remand, after providing the parties an opportunity to settle on a rate themselves, the District Court raised the ongoing royalties to $98 per hybrid vehicle.54 Paice demonstrates the sheer benefit that eBay has toward resolving the Green Patent Paradox. If Dr. Severinsky had his way, Toyota would not have been able to sell the Prius, Highlander, Lexus RH400h, or other hybrid models in the U.S.55 Given Toyota’s success and leadership in the fuel efficiency market, such a result could have imposed a severe impact on the climate.56 However, given Dr. Severinsky’s zealousness to hold dominion over the hybrid motor, this case also reveals the potential threat of a patent holder not fully utilizing their rights on the rights of valuable green patents. Infringement suits on green patents have also covered alternative energy. In 2002, General Electric (GE) obtained U.S. Patent No. 5,083,039 (the ‘039 patent),57 which covered a “wind turbine mechanism operating at variable speed under different wind condition[s].”58 This advancement was beneficial because U.S. electric companies previously had to adjust wind turbines based on “a standard fixed frequency [of 60Hz].”59 A few years later, GE and Mitsubishi, a Japanese wind turbine manufacturer, engaged in a patent dispute over the ‘039 patent. GE brought an infringement action against Mitsubishi.60 Mitsubishi countered by filing61 a complaint in the Western District of Arkansas, accusing GE of violating antitrust law by dominating the market of variable speed wind turbines.62 These suits illustrate what is considered “the beginning of an arms race for IP in the clean energy industry.”63 While these companies are advocating for what they believe are their rights to use this technology, the need to expand this technology in the pursuit of mitigating the effects of climate change is sidelined. The ‘039 patent is a quality patent that effectively blocked use by other companies wishing to achieve an energy quality standard without proper licensing.64 If a patent of this nature gets into the hands of an entity that sits on their intellectual property rights,65 then the benefits of the green technologies covered will not be imputed on society. While Paice and GE are two major lawsuits in the area of green technology, other forms of patent infringement actions have reached federal court involving a wide variety of green patents.66 For example, one technology that has gained success in the realm of alternative energy is energy-efficient lighting such as light-emitting diodes (LEDs). LEDs are an effective substitute for standard incandescent lightbulbs and are more environmentally friendly; producing more light per watt, emitting particular colors of light without utilizing other color filters, and radiating very little heat.67 Additionally, LEDs are eco-friendly substitutes for technologies such as traffic lights and cell phones.68 Given the potential widespread use of LEDs, patent infringement disputes are inevitable. In 2019 alone, Technical LED Intellectual Property and Lighting Science Group collectively filed nineteen patent infringement lawsuits against other companies, alleging that certain products infringe on their LED patents.69 Additionally, numerous infringement lawsuits have arisen in other green technology sectors such as solar power, batteries, and even eco-friendly pet products.70

#### IPR key to solve climate change – meets stakeholder interests and is necessary to disperse climate tech.

Rosencranz et al 18 [Armin, founder of Jindal Global School of Environment and Sustainability at OP Jindal Global University, Sangram Parab, P. Modi, A. Vora; OP Jindal Global University, January 2018, “Climate Change and the Patent Regime: Are Patents the Answer?” *Journal of Intellectual Property Rights* 23, MAM]

It is almost certain that developing countries desperately need greenhouse gas abatement technology. How will that happen? Clean energy is the answer. To get the technology, they'll need to create it themselves or buy it from the patent-holder. The avenues discussed above aim to enable developing countries to shift to clean energy, and thereby to make our planet a greener and safer place to live in. The advent of clean energy technologies is **inevitable.** The only question that needs to be addressed is **how the government will regulate this transition**. The faster that developing countries implement the transition, the better for everyone involved. How will that happen? Intellectual property laws are the answer. In this article, by comparing the success of IPR in the pharma and technology sectors, it is shown that IPR is the way forward in the energy sector as well. The trinity of patent pools, patent databases and compulsory licensing will ensure that the interests of all stakeholders are met and that clean energy is pushed forward. At the same time, the importance and benefits of providing a legal framework for transactions in this nascent sector; and that maintaining a level of regulation **is essential** to meet the aim of providing clean and environmentally-friendly technology are also highlighted. It may lead to a hope to start a conversation with this article and invite people to explore various strategies and policies to mitigate the effects of climate change. Time is of the essence — polar bears are in the path toward extinction in the North Pole as we speak — and any step taken away from fossil fuels, however small, is the way forward.

#### Aggressive action from the U.S. and China is necessary – patent access fast-tracks the process and gears competition towards solving climate change.

Ladislaw 21 (Sarah Ladislaw is senior vice president and director of the Energy Security and Climate Change Program at the Center for Strategic and International Studies, 1-21-2021, Productive Competition: A Framework for U.S.-China Engagement on Climate Change, CSIS, <https://www.csis.org/analysis/productive-competition-framework-us-china-engagement-climate-change>, MAM)

The United States and China remain two of the most important countries for addressing climate change. They are the largest greenhouse gas emitters globally, though China far surpasses the United States on a national basis, and the United States surpasses China on a per capita basis. They are both significant contributors to the creation of low-carbon energy technology. Here, too, China has surpassed the United States as both a market for clean energy technology and as a manufacturer of those technologies. From a scientific perspective, it is impossible to address climate change and the goal of keeping global temperature rise to less than 2 degrees Celsius above pre-industrial levels without **both China and the U**nited **S**tates taking aggressive action to reduce emissions within the next decade. There is precedent for cooperation between the United States and China on climate change: the partnership between the two during the Obama administration created the global political dynamic that enabled the Paris Agreement. Given the urgency of the task at hand and the diplomatic muscle memory of the Biden administration, it is tempting to once again seek bilateral cooperation between the United States and China as the anchor in a new model of global climate leadership. But times have changed. First, and most importantly, the relationship between China and the United States has grown much more contentious since the end of the Obama administration. Beijing’s economic, technological, and military power has grown along with its ability to assert its distinct agenda on the global stage. It is unclear which issues will take top priority for the Biden administration regarding U.S.-China relations, but there will be many areas where U.S. and Chinese interests will conflict, and even more where the two will regard each other as competitors. Still, some degree of compartmentalization will likely be necessary to manage a contentious but essential relationship. Worsening U.S.-China relations under the new administration will likely have significant repercussions for the climate agenda. Trade disputes, concerns over human rights, and national security concerns could all disrupt clean energy supply chains between the United States and China, not to mention other countries. National security and competitiveness pressure could lead to less collaboration between the U.S. and Chinese scientists and institutions. Second, how we think about the climate challenge is different too. The main goal is no longer to negotiate a global agreement but to deliver on the actions pledged in those agreements. The United States' reentry to the Paris Agreement is a positive first step, and it needs to submit a new pledge of climate action (National Determined Contribution) to the UN Framework Convention on Climate Change. Still, beyond that, the high-stakes items are not about negotiations and agreements. The economic and political atmosphere in which climate change exists is different too. Countries are still reeling from the Covid-19 pandemic. Even before the pandemic, countries were pulling back from one another due to a crisis of confidence in globalization and free trade sparked by inequality-fueled domestic populism. Add to this an unprecedented growth in climate activism in civil society, climate risk awareness in global financial institutions, and pledges to be carbon neutral by countries and significant corporations alike. The result is enormous pressure for actions that deliver economic and climate benefits to domestic constituencies. Europe, China, India, Japan, and the United States, among others, are adopting more industrial strategy-oriented models of climate action that seek to create clean energy economic opportunity as they do emissions reduction. At one point, the vision for reducing greenhouse gas emissions was through a system of globally linked carbon markets and integrated supply chains that would drop the cost of technology. Now countries exist in an uneven playing field consisting of varying approaches to dealing with climate change and rising incentives to compete to extract maximum domestic economic value from their climate investment and policies. This environment might foster less of a tendency toward bilateral cooperation, and instead toward competition. The goal should be to make it a productive competition where players compete to achieve good rather than destructive outcomes. In this case, the United States could challenge China to be the first country to reach net-zero greenhouse gas emissions and to be the top provider of clean energy technology solutions to the world. Others will compete too, of course—formidable challengers like Europe, India, South Korea, and Japan. This productive competition dynamic will still require some elements of cooperation as well as efforts to co-opt China. For example, the United States, China, and other countries should continue to facilitate cross-border collaboration on energy research and development. Here, cooperation among scientists, industries, and sectors is critical. When it comes to research-led innovation, there are no benefits to breaking down scientists and innovators' network, which will deliver the essential breakthroughs we need. The United States and China might also need to agree on some things, like new rules to ensure the multilateral financial, development, and trade systems encourage climate change measures. While concerns over China’s unfair trade practices are indeed valid, the United States should find ways to protect the climate agenda from these ongoing economic tensions. A strategy of working with like-minded countries to pressure China to come on board may be necessary. In the current trade environment, it is quite likely policies to manufacture and deploy clean energy technologies will run into trade barriers (as they have in the past) due to China's massive use of state subsidies to develop technologies and protect domestic industries. One way to avoid this is to **agree to a climate waiver** **under the** World Trade Organization (**WTO**), which would allow countries to subsidize and protect clean energy industries and technologies that help them to meet their climate commitments. Thus far, the European Union, Japan, and the United States have been leading the charge to reign in the Chinese overall state-led economic model using pressure in the WTO. Working within this group to propose a climate waiver to China would allow these countries to remain united on other aspects of their agenda while compelling China to address climate change. The United States might also want to find other ways to co-opt China into doing more positive things for the climate. For example, in the context of Covid-19 debt relief, the United States and other countries could pressure China to restructure existing debt holdings from developing countries into climate-beneficial projects. These so-called debt-for-climate swaps could be similar in format to the debt-for-nature swaps that became popular following the sovereign debt crisis of the 1980s. There may be other ways to co-opt Chinese investment in global infrastructure projects to be greener by granting them recognition for their green performance as part of a multilateral initiative. The first and most important part of this strategy is for the United States to get serious about its clean energy and climate policy and commit to being more competitive. The Biden administration has already pledged to do this as part of its Build Back Better plan, but there is reason to believe both parties in Congress could support some of this agenda. As I wrote in an earlier commentary on the topic, the last remaining bipartisan area of agreement in Washington concerns U.S. competitiveness relative to other countries, particularly China. As the American Council on Competitiveness notes, no matter the measure or sector of the economy, the United States is either newly lagging or weakening its leadership across the board. Before the end of 2020, Congress passed a clean energy innovation package that makes a substantial down payment toward a more competitive U.S. clean energy sector. But more must be done. The final thing to note is that there will likely still be areas where the United States and China simply cannot and will not trust each other. These could be concrete issues like the inclusion of Chinese-made equipment in our critical infrastructure, including the electric power grid. Or significant, principle-related matters like human rights violations in the clean energy supply chain for solar panels. There may be excellent reasons for the United States to confront China on a range of trade or security issues, but **getting tough on China is no substitute for launching a viable U.S. strategy to compete in** the field of **clean energy** technologies. A productive competition strategy means leaning into our instincts to compete with China but in a way that advances shared global interests.

#### Climate change causes extinction – feedback loops make adaptation impossible.

Beard et al. 21 (S.J. Beard; Senior Research Associate and Academic Programme Manager at the Centre for the Study of Existential Risk, S.J. Beard, Lauren Holt, Asaf Tzachor, Luke Kemp, Shahar Avin, Haydn Belfield; Centre for the Study of Existential Risk research associates, Phil Torres of Torres 16; visiting scholar at the Centre for the Study of Existential Risk at Leibniz Universität Hannover, Assessing climate change’s contribution to global catastrophic risk, Futures Volume 127, March 2021, 102673, [https://www.sciencedirect.com/science/article/pii/S0016328720301646#](https://www.sciencedirect.com/science/article/pii/S0016328720301646)!, MAM)

While most of the impacts of climate change so far have fallen within the range of what was experienced during the Holocene, the rate of change is **faster than** in **the Holocene** and we are now beginning to see climate change push **beyond these boundaries**. In the latest edition of the planetary boundaries’ framework, climate change is placed in the zone of increasing risk, implying that while this boundary has been breached, there remains some **potential** for normal functioning and recovery (Steffen et al., 2015). It thus lies between what the authors identify as the ‘safe zone’ and other ‘high risk’ transgressions, such as disruption to the biochemical flows of nitrogen and phosphorus and loss of biosphere integrity. As part of their discussion of BRIHN Baum and Handoh (2014) note that climate change is the planetary boundary for which the risk to humanity has received most meaningful consideration and they suggest that this attention is deserved. Yet little research attention has been paid to climate change’s extreme or catastrophic effects. Kareiva and Carranza (2018) argue that, despite currently falling outside of the area of high risk, climate change has the clear potential to push humanity across a threshold of irreversible loss by “changing major ocean circulation patterns, causing massive sea-level rise, and increasing the frequency and severity of extreme events… that displace people, and ruin economies.” Even if humanity was resilient to each of these individual impacts, a global catastrophe could occur if these impacts were to occur **rapidly and simultaneously**. One scenario that has received comparatively more attention is that of the global climate crossing a tipping point that would trigger environmental feedback loops (such as declining albedo from melting ice or the release of methane from clathrates) and cascading effects (such as shifting rainfall patterns that trigger desertification and soil erosion). After this point, anthropogenic activity may cease to be the main driver of climate change, making it accelerate and become harder to stop (King et al., 2015). Other scenarios can be discerned from the numerous historical cases in which the modest, usually regional, climatic changes experienced during the Holocene have been implicated in the collapse of previous societies, including the Anasazi, the Tiwanaku, the Akkadians, the Western Roman Empire, the lowland Maya, and dozens of others (Diamond, 2005, Fagan, 2008). These provide a precedent for how a changing climate can trigger or contribute to societal breakdown. At present, our understanding of this phenomena is limited, and the IPCC has labelled its findings as “low confidence” due to a lack of understanding of cause and effect and restrictions in historical data (Klein et al., 2014). Further study and cooperation between archaeologists, historians, climate scientists and global catastrophic risk scholars could overcome some of these limitations by identifying how the impacts of climate change translate into social transformation and collapse, and hence what the impacts of more rapid and extreme climatic changes might be. There is also the potential for larger studies into how global climate variations have coincided with collapse and violence at the regional level (Zhang, Chiyung, Chusheng, Yuanqing, & Fung, 2005; Zhang et al., 2006). However, these need to be interpreted and generalized with care given the differences between pre-industrial and modern societies. Societies also have a long history of adapting to, and recovering from, climate change induced collapses (McAnany and Yoffee, 2009). However, there are two reasons to be sceptical that such resilience can be easily extrapolated into the future. First, the relatively stable context of the Holocene, with well-functioning, resilient ecosystems, has greatly assisted recovery, while **anthropogenic climate change** is more rapid, pervasive, global, and severe. Large-scale states did not emerge until the onset of the Holocene (Richerson, Boyd, & Bettinger, 2001), and societies have since remained in a surprisingly narrow climatic niche of roughly 15 mean annual average temperature (Xu, Kohler, Lenton, Svenning, & Scheffer, 2020). A return to agrarian or hunter-gatherer lifestyles could thus have more devastating and long-lasting effects in a world of rapid climate change and ecological disruption (Gowdy, 2020).7 Second, modern human societies may have developed **hidden fragilities that amplify the shocks** posed by climate change (Mannheim 2020) and the complex, tightly-coupled and interdependent nature of our socio-economic systems makes it more likely that the failure of a few key states or industries due to climate change could cascade into a global collapse (Kemp, 2019). A third set of plausible scenarios stem from climate change’s broader environmental impacts. Apart from being a planetary boundary of its own, Steffen et al. (2015) point out that climate change is intimately connected with other planetary boundaries (see Table 1). Climate change is thus identified by the authors as one of two ‘core’ boundaries with the potential “to drive the Earth system into a new state should they be substantially and persistently transgressed.” This transformative potential was elaborated on in subsequent work exploring how the world could be pushed towards a ‘Hothouse Earth’ state, even with anthropogenic temperature rises as low as 2 ◦C (Steffen et al., 2018). The connection between climate change and biosphere integrity (the survival of complex adaptive ecosystems supporting diverse forms of life) is particularly strong. The IPCC is highly confident that climate change is adversely impacting terrestrial ecosystems, contributing to desertification and land degradation in many areas and changing the range, abundance and seasonality of many plant and animal species (Arneth et al., 2019). Similarly, the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES) has reported that climate change is restricting the range of nearly half the world’s threatened mammal species and a quarter of threatened birds, with marine, coastal, and arctic ecosystems worst affected (Diaz et al., 2019). According to one estimate, climate change could cause 15–37 % of all species to become ‘**committed to extinction’** by mid-century (Thomas et al., 2004). Disruption to biosphere integrity can have profound economic and social repercussions, ranging from **loss of ecosystem services and natural resources** to the **destruction of traditional knowledge and livelihoods.** For instance, desertification, which threatens a quarter of Earth’s land area and a fifth of the population, is already estimated to cost developing nations 4–8 % of their GDP (United Nations, 2011). Many other rapid regime shifts involving loss of biosphere integrity have been observed, including shifts in arid vegetation, freshwater eutrophication, and the collapse of fish populations (Amano et al. 2020). There is a theoretical possibility of still more profound regime shifts at the global level (Rocha, Peterson, Bodin, & Levin, 2018). However, the contribution of loss of biosphere integrity to GCR is yet to be assessed. Kareiva and Carranza (2018) argue that it is unlikely to threaten human civilization, due both to a lack of plausible mechanisms for this threat and the fact that “local and regional biodiversity is often staying the same because species from elsewhere replace local losses.” However, in their classification of GCRs, Avin et al. (2018) suggest the potential for ecological collapse to threaten the safety boundaries of multiple critical systems with diverse spread mechanisms at a range of scales, from the biogeochemical and anatomical to the ecological and sociotechnological. Note that both these studies were conducted for largely conceptual purposes and should not be taken as rigorous analyses of this risk, this topic warrants further investigation.

#### Each tenth of a degree matters and saves millions of lives

Aronoff & Denvir 21 [Kate, staff writer at the New Republic, writing fellow at In These Times, Daniel, visiting fellow in International and Public Affairs at Brown Univ, “Capitalism Can’t Fix the Climate Crisis,” *Jacobin*, 08/25/21, <https://jacobinmag.com/2021/08/capitalism-climate-crisis-global-green-new-deal-clean-energy-fossil-fuel-industry>, accessed 08/26/21, JCR]

The text of the Paris Agreement says that warming should be constrained to well below two degrees Celsius. 1.5 degrees is an aspiration. It’s good to understand where that demand comes from; it has been a standing call from the folks in climate-vulnerable countries in the Global South, for whom the difference between 1.5 and 2 degrees is huge. The folks talking about 1.5 degrees have been marching through the halls of UN climate talks, chanting “1.5 to survive,” because for low-lying island states, warming of 1.5 degrees represents an existential threat. Currently we are on track for about 1.1 degrees Celsius of warming. That gives us a punishingly short window in which to meet even two degrees, which is a bit of a fabrication; there’s some debate about where the two-degree target came from. Some people credit that to the economist William Nordhaus, who is not the most reliable source on a lot of these things. But there’s something comforting about a target. There’s something comforting about saying that this thing that is happening is far-off, and that we can potentially avoid it. We have a bit of time, and two degrees gives us more time than 1.5 degrees. Reaching targets has been the popular goal. That’s what you see in the fossil fuel industry assessments. But the conversation about targets can sometimes obscure what’s actually happening. It’s not as if somebody who is living through a hurricane or a natural disaster will say, “Oh no, we’ve hit two degrees Celsius.” The climate crisis is playing out all around us. There’s not a point at which we cross the boundary toward a disastrous future. Every tenth of a degree of warming that we avoid makes an enormous amount of difference, saving on the order of tens of thousands of lives. If we cross 1.5 or even two degrees of warming, it’s not that we should all pack up, go home, and wait to die. There are still millions of lives that can be saved by preventing each additional tenth of a degree of warming.

#### Climate change will exacerbate geopolitical tensions and lead to widespread wars

Busalacchi and Goodman 8/6 (Antonio Busalacchi - president of the University Corporation for Atmospheric Research and former co-chair of the National Research Council’s Committee on National Security Implications of Climate Change for U.S. Naval Forces, Sherri Goodman - senior fellow at the Wilson Center and the Center for Climate & Security and former U.S. deputy under secretary of defense (environmental security), 8-6-2021, Why National Security Agencies Must Analyze Climate Risks, Lawfare, <https://www.lawfareblog.com/why-national-security-agencies-must-analyze-climate-risks>) \*edited for ableist language\*

July marked the initial deadline for the Pentagon and other federal agencies to draw up plans for potential climate risks, under an executive order by President Biden. Such plans are an essential first step, but the greater challenge for national security agencies is to continue to redirect their focus to changing climate conditions that pose a complex, two-pronged threat: **social and political instability overseas and damage to U.S. infrastructure.** Climate change is accelerating geopolitical tensions in many regions of core strategic interest to the United States. Increasingly destructive storms, rising seas and the melting Arctic are fueling global tensions, with nations bracing for mass migrations of displaced people and vying to take advantage of newly accessible natural resources. Changing climate patterns have become a catalyst for internal conflicts and international unrest, with severe droughts playing a role in setting the stage for the Syrian civil war and shrinking lake levels in Lake Chad contributing to widespread violence across the four African nations of the lake’s basin. Even in places where climate change has not sparked conflicts directly, it looms as a threat multiplier, exacerbating competition for food and water and worsening ethnic tensions. The Defense Department highlighted these risks earlier this year in its first climate and environmental security tabletop exercise, known as Elliptic Thunder. Set in East Africa and based on climate, economic and population forecasts, the multiagency exercise highlighted the extent to which climate change can **worsen natural disasters** and **trigger regional instability**, opening the door for strategic rivals and **extremist groups** to gain power. Closer to home, altered weather patterns and warming temperatures are battering military installations across the nation. From the devastating impacts of Hurricane Michael on Tyndall Air Force Base in Florida to the thawing and erosion in Alaska that is undermining the foundations of vital radar facilities, climate change is costing billions of dollars while **degrading U.S. military readiness.** More broadly, coastal surges, floods, heat waves and wildfires are exacting a toll on U.S. transportation networks and energy systems, **threatening supply disruptions** and increasing the cost and complexity of potential defense operations. As climate change becomes a central focus for national security policymakers, scientists are gaining new insights into the complex interconnections of Earth’s climate system. By collaborating with a range of stakeholders, they also are helping to develop actionable projections of climate impacts in specific regions. In one notable breakthrough, for example, a research team drew on the complex interactions of the ocean and atmosphere to demonstrate that changes in Arctic sea ice coverage can be predicted several years in advance. This is critical for U.S. security interests at a time when changing ocean circulation patterns and salinity are affecting how submarines maintain their stealthy features and track Russian and other activity in the warming Arctic. **Russia is taking advantage of a warming climate to rearm in the Arctic,** conducting high-profile military exercises in the region earlier this year and launching increasingly powerful icebreakers while President Vladimir **Putin pledges to reinforce his nation’s presence** in the region. Also looming are growing international tensions over trillions of dollars of natural resources that are becoming more accessible because of retreating sea ice. Looking further into the future, scientists are studying how storms are likely to shift later this century in ways that may lead to widespread flooding or lightning-induced wildfires in parts of North America and overseas regions. This type of research is critical for designing more resilient infrastructure and anticipating shifts in weather patterns that can displace vulnerable populations. To enhance understanding of how the climate is likely to change and the extent to which **reductions in g**reen**h**ouse **g**as **emissions** could **lessen future impacts**, the government must boost funding for science in ways that can support decision-makers. The research and analysis community needs more powerful supercomputers, next-generation observing tools such as advanced satellites and enhanced models of regional climate conditions, along with improvements to such cutting-edge techniques as artificial intelligence. Investments in climate research and analytics will **more than pay for themselves** by producing increasingly detailed and reliable projections of the climate threats the U.S. faces at the regional scale at which decisions are made and conflict arises. This will produce economic benefits as well, with private firms already generating jobs that provide climate risk services to many sectors of the economy, from real estate to banking.

#### Expanding application of compulsory licensing would ensure needed access to environmental tech

Gunderson 14 [Adam, practicing attorney at the Gunderson Law Group, “Protecting the Environment by Addressing Market Failure in Intellectual Property Law: Why Compulsory Licensing of Green Technologies Might Make Sense in the United States: A Balancing Approach,” *BYU Law Review* 2014.3, p.683-4, JCR]

Broadening the application of compulsory licensing laws can help to reduce the suppression of important technologies; it is impossible to completely suppress a technology when the law requires that the holder license it to others. While there are some risks associated with expanding compulsory licensing,70 there are tremendous benefits as well. As discussed previously, the constitutional justification for the protection of a patent is to promote scientific and technological progress.71 Given the pressing nature of many of our environmental problems, progress in this area of science and technology is especially important. Expanding the application of compulsory licensing to include more green technologies will promote scientific and technological progress in solving environmental problems. Specifically, compulsory licensing can promote such progress by: 1) ensuring prompt access to important technologies, 2) increasing the likelihood of future innovation, and 3) decreasing judicial inefficiencies. The most obvious advantage of a compulsory licensing policy is that it ensures that technological advances cannot be suppressed. There is no progress when a patent holder obtains a patent and refuses to use the patented technology. In these instances, progress can be slowed by twenty years or more, as current patent laws give a filed patent a life of twenty years, and that timeline may also be extended for various reasons.72 Given the inherent urgency of solving certain environmental problems (such as climate change), a prolonged suppression of important technology could be detrimental. Any social costs associated with the expansion of compulsory licensing may be worthwhile if society can make swift progress in addressing environmental concerns—ending environmental tragedies decades earlier than otherwise possible.

#### Reliance on public sector funding will be too expensive and controversial. IP licensing and incentives will be key driver of tech adoption

Sarnoff & Chon 18 [Joshua, Prof of Law at Depaul College of Law, served as a Distinguished Scholar at the US Patent and Trademark Office, Margaret, Prof for the Pursuit of Justice at the Seattle Univ School of Law, “Innovation Law and Policy Choices for Climate Change-Related Public-Private Partnerships,” *The Cambridge Handbook of Public-Private Partnerships, Intellectual Property Governance, and Sustainable Development*, eds Margaret Chon et al, p.246-7. JCR]

The Paris Agreement placed substantial emphasis on R&D and technology transfer through private markets, contrary to competing recommendations to rely more on public funding11 and despite the many government alternatives that exist for funding technology development and transfer.12 In particular, governments can play an important role in stimulating innovation and technology transfer. Mechanisms that are available for governments to fund, develop, and transfer innovations include public provision of necessary infrastructure, subsidized research, and prioritized public procurement. All of these options can substitute for, supplement, or support market-driven intellectual property (IP) rights. But there are limits to government resources (particularly at local levels), and the public sector “does not always have the resources required to push through new projects independent of the IP-related costs involved.” 13 Given the political difficulties of committing to massive expenditures as public obligations, the choice to rely primarily on private markets and consequent IP rights to generate the bulk of the committed funding for climate change-related mitigation and adaptation technologies hardly comes as a surprise. Reliance on private sector development and transfer thus will encourage the acquisition of IP rights (of differing kinds, to differing degrees, and in various industries) in the hopes of appropriating greater economic returns. In turn, the costs of climate change mitigation and adaptation measures will depend in part on whether specific climate change technologies are subject to IP rights, on how those rights are licensed, and on what technological substitutes are affordably available.14 For example, widely cited assessments have assumed there would be price constraints on patented climate change technologies because of the availability of ready substitutes for existing technologies, or because of development of incremental rather than breakthrough technologies. But these assumptions may not always hold,15 as climate technologies are very diverse. These assumptions are particularly unlikely to be true if we move to novel geoengineering solutions that have not previously been deployed in markets, such as carbon capture and sequestration technologies or solar climate engineering methods (which include the use of aerosols or marine cloud brightening to increase the Earth’s albedo, i.e., reflectivity).16

# 2AC

### 2AC – Adv CP – Carbon Tax

#### Taxing is hard – 4 reasons

Marron et al 15 (Donald, director of economic policy initiatives and Institute fellow at the Urban Institute, Eric Toder, co-director of the Urban-Brookings Tax Policy Center and Institute fellow at the Urban Institute, Lydia Austin, a research assistant at the Urban-Brookings Tax Policy Center, Tax Policy Center, "Taxing Carbon: What, Why, and How," [www.taxpolicycenter.org/sites/default/files/alfresco/publication-pdfs/2000274-Taxing-Carbon-What-Why-and-How.pdf](http://www.taxpolicycenter.org/sites/default/files/alfresco/publication-pdfs/2000274-Taxing-Carbon-What-Why-and-How.pdf), 6/23)

WHAT SHOULD WE TAX? For both efficiency and fairness, a tax should apply as broadly as feasible to all greenhouse gas emissions, regardless of source. Electric power plants, automobiles, home heating systems, factories, farms, ranches, and airplanes should all face the same carbon price. Unfortunately, that aspiration runs into four challenges: the difficulty of monitoring emissions, the multiple ways carbon emissions are created, the greenhouse gases other than carbon dioxide, and the need to give credit for efforts to capture carbon emissions or remove them from the atmosphere.5 Taxing Carbon Dioxide When Monitoring Emissions Is Difficult Most carbon emissions come from combustion of coal, oil, and natural gas. In principle, policymakers could require emitters to install monitoring equipment and then tax based on actual emissions. In practice, that would be prohibitively expensive except at the largest power plants. Because of the simple chemistry of combustion— an atom of carbon in fuel becomes a molecule of carbon dioxide—a close substitute is to tax the carbon content of fuel (box 1). Taxing Carbon Dioxide From Industrial Processes Taxing the carbon content of fuels captures only carbon dioxide emissions from processes that involve combustion. It thus does not cover processes like manufacturing cement and certain chemicals. Taxing those emissions would still be relatively straightforward, however, since many of these facilities already must report their carbon dioxide emissions through the Environmental Protection Agency’s (EPA) Greenhouse Gas Reporting Program. Taxing Other Greenhouse Gases Carbon dioxide is the most prevalent greenhouse gas, accounting for 83 percent of US emissions in 2012 according to one standard metric (table 1).6 To be truly comprehensive, however, a tax should also apply to methane, nitrous oxide, hydrofluorocarbons, and other greenhouse gases, unless their sources have characteristics that make other policies more efficient. Most methane comes from natural gas systems, cattle, and landfills, and most nitrous oxide comes from agriculture. Incorporating these sources would expand the administrative burden of collecting the tax, so policymakers will have to decide which gases and sources are best suited to including in the tax base. In doing so, policymakers must address the fact that greenhouse gases differ in their chemical and atmospheric properties. Methane, for example, traps more heat, gram-for-gram, than carbon dioxide does, but it has a shorter atmospheric lifetime. A cost-effective tax should reflect such differences, raising the tax rate for gases that are more potent and lowering it for gases that stay in the atmosphere for less time. Analysts have developed measures known as global warming potentials to make such comparisons. According to the potentials the EPA uses, methane is 21 times more potent than carbon dioxide over a century, and nitrous oxide is 310 times as potent (table 1). By those measures, a $10 per ton tax on carbon dioxide would imply a $210 per ton tax on methane and a $3,100 per ton tax on nitrous oxide.7 That scaling is not without controversy, however. Global warming potentials are subject to uncertainty; in fact, the Intergovernmental Panel on Climate Change (IPCC) now uses different potentials (e.g., 28 for methane and 265 for nitrous oxide) than the EPA does.8 Potentials do not account for the ocean acidification carbon dioxide causes. In addition, potentials depend on the discount rate used to value expected damages. The lower the discount rate, the more important long-lived gases like carbon dioxide are relative to shorter-lived gases like methane. Misestimating potentials reduces the potential efficiency of a carbon tax.9 Tax Credits for Avoided Emissions An efficient system should give appropriate credit for actions that avoid emissions of previously taxed carbon. For example, if fuel does not get combusted, such as oil used as a feedstock for plastics, it should be exempt from the tax or receive a rebate of tax already paid. That approach is already used for the gasoline tax, which exempts the use of gasoline and diesel for farming and other off highway uses. Similarly, a power plant that employs carbon capture and storage should receive a tax rebate for any carbon that does not get emitted.10

#### Even ‘well-designed’ business friendly carbon taxes face insurmountable opposition from business and the public and get rolled back or get implemented improperly – Australia proves

Benny, 15 – PhD in Political Science UC Santa Barbara, MS International Affairs from Georgetown, PhD Dissertation: The International Political Economy of Carbon Markets in Emerging Economies, Assistant Professor of Political Science at University of Utah, Research Fellow for the Earth Research Governance Network, Co-Chair of the Scholars Strategy Network’s Utah Chapter (Tabitha M., Scholars Strategy Network, "The Challenge of Putting a Price on Carbon Emissions in the United States" www.scholarsstrategynetwork.org/page/challenge-putting-price-carbon-emissions-united-states) jb

Even if taxes are relabeled as “fees,” they are obviously politically controversial. This is especially true in a country like the United States where many people argue that climate change is not real or not amenable to government response. Without widespread citizen understanding and support, a large new tax on consumers and businesses is not likely to be enacted, even if it makes it onto the agenda of public discussion.

Australia shows the political difficulties a carbon tax can run into. In Australia, leaders with strong public support imposed a carbon tax and used the new revenues to fund dividends to compensate citizens. Following the best practice approach, the Australian program also targeted only the top polluters in certain industries and exempted agriculture and transportation, industries where a new tax and higher prices would have had the most disruptive impact. Australia’s tax program was very well designed from a theoretical standpoint and heralded as cutting edge because it even provided assistance to businesses that might be unfairly impacted. Slated tax increases were also very gradual, to allow people and businesses to adjust each step of the way. Nonetheless, despite the many ideal features, Australia’s carbon tax remained politically vulnerable. When a new, conservative government took office, it repealed the tax just two years after it was instituted.

A carbon tax will be difficult to enact without the support of corporations, whose lobbying associations invariably exercise huge clout.

In general, businesses like the predictability of taxes. But when it comes to carbon pricing, most of them prefer policies like cap and trade. Business groups, consequently, may fight to block carbon tax legislation. Or if a tax somehow passes, business opposition may prevent proper implementation.

### 2AC – Reg CP

#### SQ mechanisms for compulsory licensing fail – a new compulsory licensing regime is necessary

Gunderson 14 [Adam, practicing attorney at the Gunderson Law Group, “Protecting the Environment by Addressing Market Failure in Intellectual Property Law: Why Compulsory Licensing of Green Technologies Might Make Sense in the United States: A Balancing Approach,” *BYU Law Review* 2014.3, p.681-3, JCR]

One remaining way to avoid technology suppression is through compulsory licensing. Compulsory licensing eliminates the possibility of patent suppression by requiring a patent holder, under certain circumstances, to license its technology to others for “reasonable” compensation. Compulsory licensing is not a new idea. While it is not commonly relied upon as a means of ensuring the diffusion of new technologies, compulsory licensing is already an important part of American law. Compulsory licensing laws exist by statute in some circumstances to be described below. Additionally, courts occasionally create a de facto compulsory licensing situation by refusing to enjoin patent infringers. This existing compulsory licensing framework, while helpful, is severely limited in its ability to address the full scale of patent suppression. The Clean Air Act, Atomic Energy Act, and the Plant Variety Protection Act all include compulsory licensing provisions that are applied narrowly to specific types of technologies.60 The Clean Air Act, for example, requires that when a technology is necessary in order to comply with certain federally established emissions standards and is the only such technology available, it must be licensed for a reasonable price to others seeking to comply with the emissions standards.61 The Atomic Energy Act gives the Atomic Energy Commission the authority to designate certain atomic energy technologies as being within the public interest, and thus subjects them to compulsory licensing to either the Commission itself or to those authorized by the Commission.62 This authority has been construed by the courts fairly narrowly and does not include, for example, patents for safety-related inventions such as anti-radiation chemical compounds.63 The Plant Variety Protection Act gives the Secretary of Agriculture the authority to designate certain patented plant varieties as open to the public in exchange for “reasonable remuneration” in the event of a shortage of fiber, food, or feed.64 In addition to these very specific compulsory licensing provisions, the United States government has additional rights in regards to third party patents under Section 1498 of Title 28. The statute dictates that whenever a patented technology is “manufactured by or for the United States,” without a license, the patent holder may sue the United States government for “reasonable compensation” but may not be granted an injunction.65 Though limited in its application to use by the federal government, in practice this statute constitutes the equivalent of a compulsory license. When a patent holder’s only remedy is to receive compensation for the use of his patent, the outcome is practically identical to that of a compulsory license situation. In addition to these statutory provisions for compulsory licensing, courts can sometimes create a de facto compulsory licensing regime for others by refusing to enjoin patent infringers. While courts will ordinarily give injunctive relief against patent infringers, this is not always the case.66 The patent code says that courts may grant injunctive relief in cases of patent infringement.67 Sometimes, in the public interest, courts determine that it is better to allow the infringer to continue use of the patented technology while paying damages.68 For example, in City of Milwaukee v. Activated Sludge, the City of Milwaukee was using patented technology in one of its waste treatment plants, but didn’t have a valid license from the patent holder. The court refused to enjoin the city from using the patent and instead required the city pay damages to the patent holder.69 In so doing, the court created a compulsory license in fact; the city was permitted to continue use of the technology while paying monetary damages, just as a licensee would pay a licensing fee for licensed technology. Each of these examples of compulsory licensing within U.S. law has potential to prevent patent suppression, but their limitations in scope and applicability prevent them from solving the problem in a substantive way. Under the Clean Air Act, the Atomic Energy Act, and the Plant Variety Protection Act, compulsory licensing provisions apply only to a very small subset of technology and only in very specific circumstances. As a result, technologies outside of those specific industries can still be suppressed. Similarly, compulsory licensing to the United States government, while it can occur with a broader set of technology, does not allow suppressed technology to reach the national marketplace where it can be diffused and innovated upon, because only the government or its agents are authorized to manufacture otherwise suppressed technologies. Right now, a patented technology can be ensured entry into the marketplace only when a court creates a de facto compulsory license. Even this form of compulsory licensing is limited in effectiveness because the suppressed technology is still only legally available to the firm or individual who first sued for infringing on the patent. To really address problems associated with patent suppression, it is necessary to create a compulsory licensing regime that reaches a wider variety of technologies and guarantees access to a larger segment of the market.

### 2AC – States

#### Patents are preempted

Samp, Chief Counsel, 14

(Richard, Washington Legal Foundation, “The Role of State Antitrust Law in the Aftermath of Actavis”, 15 MINN. J.L. SCI. & TECH. 149 (2014).https://scholarship.law.umn.edu/mjlst/vol15/iss1/14 ) NJR

This paper concludes that state antitrust liability can be imposed on parties to patent settlements so long as the state action “parallels” federal antitrust law. On the other hand, state law is preempted to the extent that it seeks to impose antitrust liability for conduct not deemed actionable under federal law; under such circumstances, state-law liability would be impliedly preempted because it would stand as an obstacle to accomplishing the purposes of federal patent law. The scope of preemption likely would include any effort by states to apply a stricter standard of review to reverse payment patent settlements—either a “quick look” review accompanied by a presumption of illegality, or a declaration that such settlements are “per se” illegal.

#### Antitrust -- A patchwork of state enforcement causes massive inefficiencies.

Jacob P. Grosso 21. J.D. Candidate. “The Preemption Of Collective State Antitrust Enforcement In Telecommunications” University of Richmond School of Law. 02-11-21. https://lawreview.richmond.edu/files/2021/04/5-Grosso-552.pdf

Preemption would result in cognizable benefits to the regulatory and business spheres. These benefits would include **clear guidance**, **increased enforcement efficiencies**, and the ability to pursue nonenforcement agendas and broader policy goals.236 Businesses would receive clear guidance on the legality of their business choices. State antitrust enforcers would redeploy costs to state-specific issues. Federal enforcers would be able to effectively pursue broader policy goals. Consolidated enforcement and regulatory schemes would provide clarity to businesses through more uniform regulations and decreased litigation concerns. This consolidation, in turn, would reduce costs for the government and the competitors while encouraging competition and unnecessary compliance costs.237 Clear regulations serving a common goal, without the inherent biases of individual state interests, can provide clarity to businesses and preserve the balancing of consumer welfare with the aggregate social welfare. Individual states make decisions based on their individual needs, as seen in the T-Mobile-Sprint merger.238 When federal law conflicts with state law, federal law controls.239 Despite this standard, multistate task forces continue to come forward as the interpreters of federal law.240 This approach poses problems because of the inherent state biases that underlie the enforcement actions. **Preemption could decrease the effects of individual state biases on the guidance given to competitors**. Antitrust analysis considers geographic differences in determining the concentration of a market, meaning a one-size-fits-all approach does not work for aggregating individual state markets.241 This restructuring would reduce the effects of an individual state’s interests on collective action.242 While any individual state may be best served by one plan, the economy as a whole might suffer for that decision.243 “Divergent approaches to the exercise of enforcement discretion are not just possible, they are likely.”244 States likely face pressure from several groups that can influence their enforcement decisions, as well as the selfish motivation to protect their consumers regardless of the cost to national welfare.245 **Uniform, clear guidance at the federal level**, **without state interference, will reduce opportunities for the individual motivations of states to negatively impact a clear enforcement scheme**. Adding states as parties to a telecommunications antitrust lawsuit complicates the suit by increasing the number of parties that must agree to a settlement.246 The effects of the preemption and resulting enforcement system will create efficiencies for federal and state enforcers, as well as for businesses. For telecommunications antitrust enforcement actions, this will limit costs to the federal agencies, prevent the duplication of effort (in reviewing transactions), and eliminate the costs of coordination that NAAG multistate enforcement teams face.247 Extending even beyond telecommunications, this results in a net positive for the antitrust sections of state attorneys general offices to redeploy resources to monitor and combat anticompetitive behavior in the state-specific areas that these sections were designed to handle.248

### 2AC – Innovation DA

#### Link turn - Patent concentration deprives the market of innovation and competition – patent thickets are self-reinforcing

Day and Schuster 19 (Gregory R Day; Assistant Professor at the University of Georgia Terry College of Business and University of Georgia School of Law & W. Michael Schuster, Assistant Professor at the University of Georgia Terry College of Business, 2019, Patent Inequality," Alabama Law Review 71, no. 1 (2019): 115-162, https://heinonline.org/HOL/Page?handle=hein.journals/bamalr71&collection=journals&id=125&startid=&endid=172)

A. **Not All Patents Are Good for Innovation**

Significant debate exists among both practitioners and academics regarding whether the existence of all patents is beneficial for technological (and thus economic) growth. For instance, former FTC Commissioner Maureen K. Ohlhausen unequivocally asserts "that [more] patents materially spur [more] innovation" and lead to "demonstrably superior innovation in IP-intensive industries."'17 3 This sentiment echoes the early work of Simone A. Rose, which asserted that "technological innovation and economic growth" are undercut when patent filings diminish. 174 Absolute positions of this nature are ultimately summed up in the policy stance that "more patents equals more innovation."175 While some empirical work supports this position, 17 6 another body of literature stands in disagreement. 77

Our findings fill a void in the literature by adding an empirical underpinning to these concerns. Patents-a tool meant to encourage innovation-are actually discouraging research **when large portfolios are held in a discrete field.** This is exacerbated by the self-reinforcing nature of the problem; firms respond to patent thickets by propelling their own patenting activities, **which strengthens the thicket**, requiring firms to further propel patenting activities. 178

These determinations are of particular concern given the firm-size specific nature of our conclusions. Firms with substantial patent holdings are unaffected by an upsurge in patents in their field; they continue to spend on R&D. In contrast, those with relatively fewer patents reduce research expenditures in the face of substantial patent holdings. This divergent response to patent thickets initially **deprives the market of new products**, net innovation, and competition. There is, however, a second, less obvious harm from this phenomenon. Discouraging research by nascent firms undermines the creation of potentially ground-breaking technologies that commonly arise from less mature companies (i.e., those owning fewer patents).' 79 Concentrations of patents thus **deprive the public of research** that can both create market competition and introduce particularly important innovations.

Recognizing these shortcomings of the current system, we now propose methods to correct this misalignment. As set forth in the following Subpart, our findings provide necessary empirical backing to proposals to discourage overpatenting and its associated ills.

#### IP system disincentivizes innovation

Hanna et al 20 [Thomas, Research Director at the Democracy Collaborative, “Democratising Knowledge: Transforming Intellectual Property and Research and Development,” *The Democracy Collaborative*, September, p.9-10, JCR]

One of the primary methods used by large corporations to extract incredible rents from the US IP system is through numerous “defensive patenting” and “patent gaming” techniques that prevent market competition.60 Defensive patenting is the strategy of amassing a large portfolio of patent protections without necessarily intending to assert or enforce those negative rights associated with the patents, thus monopolizing a whole market space and protecting against suit from other inventors. This strategy is prevalent in many sectors (including computer software and hardware), but shows up clearly – and nefariously – with regards to medicines and medical technologies on the US market, where across the top 12 highest grossing drugs, there's an average of 125 patent applications, 71 patents granted, and 38 years of market exclusivity.61 “A majority of patents,” Quereshi writes, “are used not to produce commercial value, but to create defensive legal thickets that can keep potential competitors at bay. As the system expands, patent trolling and litigation soar. Lawsuits by patent trolls comprise more than three-fifths of all lawsuits for IP infringement in the U.S., and cost the economy an estimated $500 billion in 1990-2010.”62 Thus, in the US system, huge amounts of resources that could be used to further innovation or provide more equitable access to its fruits are instead funnelled into activities that function to prevent innovation and competition by conferring ever greater protections on existing products. Additionally, as corporations – such as large pharmaceutical companies – have begun to store more and more of their “value” in IP, they have been incentivized to financialize to such a degree that they often downsize human resources, sell off equipment and other assets, and pursue numerous other cost cutting measures in order to pay dividends to shareholders, all of which further hampers their ability to innovate. This has created the rather alarming situation in which a number of companies that have recently won large government contracts for COVID-19 related R&D are those that have never brought a single product to market, but rather, have shown their promise by simply amassing valuable IP.63

### 2AC – BizCon

#### Link turn - Demand is high – investors across sectors proves.

Max Chen, writer for ETF Trends, 8-27-2021, Investing in Climate Tech Is Gaining Mainstream Attention, https://www.etftrends.com/esg-channel/investing-in-climate-tech-is-gaining-mainstream-attention/?utm\_source=Yahoo&amp;utm\_medium=referral&amp;utm\_campaign=ReadMore

As environmental, social, and governance investments begin to expand from a niche group into the mainstream, socially responsible programs are now able to attract a wider pool of capital to fund sustainable projects.

“I think some of the extreme weather events are making some things a little more apparent to people," Mike Winterfield, founder and managing partner of Active Impact Investments, told Yahoo Finance Live. “But I think the second thing that's happened is it moved from, say, a group of do-gooders and concerned environmentalists to people who were serious about business and wanted to leverage capitalism sincerely in a way to make this a profitable endeavor, and I think that's when it dragged investors in.”

Venture capital-backed climate technology companies brought in $14.2 billion globally so far during the year that ended June 25, according to PitchBook data. From 2013 to 2019, global annual venture capital funding into **climate tech surged 3,750%** in absolute terms, or three times the rate of VC investment into artificial intelligence for the time period, according to PwC.

“I think there's just a lot of tailwinds for the space,” Winterfield added. “This is where the talent wants to work, when you look at millennials. This is where the regulations are going. This is where consumer behavior and preferences are changing. This is where investor money is flooding. So I would expect in the next 10 years that sustainability will become sort of a big go-to and big growth and performance space in investing.”

Some warned of the cyclical nature of the clean energy technology segment. For example, between 2006 through 2011, Silicon Valley VC firms funneled $25 billion into the clean tech sector, but by 2011, over half of that amount was lost, and new clean tech companies in the following years fell off.

Nevertheless, proponents believe that climate tech is more focused on solving the main drivers of climate change in all sectors. Consequently, climate tech leans toward transport and mobility sectors, with 63% of investments going to those areas, according to PwC. Additionally, climate tech is being supported by consumers and governments, which didn't play that large of a role a decade ago.

“The need is bigger and more urgent than it has ever been before, and [so is] people's understanding of that," Winterfield said.

#### No Taiwan war- China’s territorial ambitions are known, limited, and don’t cause war.

David Kang, Professor of IR @ USC, ‘20 “THOUGHT GAMES ABOUT CHINA” ISSN: 1598-2408 , 2234-6643; DOI: 10.1017/jea.2020.18 Journal of East Asian studies. , 2020, Vol.20(2), p.135-150 Cambridge University Press.

WHAT DOES CHINA WANT? Perhaps a more perplexing aspect to these types of studies on contemporary China is the almost willful way in which many scholars do not research China itself. All four books under review begin with the assumption that a state’s goals are almost completely unknowable. Indeed, a large swath of IR theory relies directly on the assumption that states’ goals are opaque and indeed unknowable, while simultaneously ascribing particular objectives to them, ranging from defensive to offensive realist aims. A problem with applying many abstract IR theories to actual cases is that most theory is spare and assumes all states have little information about each other and approach each other de novo and in a “fog of uncertainty.” In this case, scholars frequently expect states to believe the worst about each other and to misperceive more generally. Indeed, much contemporary international relations theory is suffused with these pessimistic assumptions. The security dilemma, many variants of realism, and some applications of the bargaining theory of war are all examples of this. But these are simply assumptions, not empirical states of the world. Indeed, as Schultz and Goemans (forthcoming) recently argued, “historically states bargain within far more limited confines defined by wellbounded claims … the size of claims is weakly related to the relative power of disputants and unaffected by dramatic changes in power, and smaller claims are associated with a higher probability that the challenger will receive any concession.” The reality is that most countries have limited aims and good information about each other. And, most countries do not plan based on worst-case, what-if assumptions. Bolivia is not preparing for a surprise attack from Chile “just in case,” while the United Kingdom and Germany are not arming based on worst-case, “just wait” possibilities of a third European war. In the case of East Asia, theories based on worst case assumptions and just-incase expectations lead to fears of East Asian instability caused by China; but a closer look at the countries in the region leads to a different conclusion. China is not a cipher upon which we need to endlessly speculate about what they want. China has clear and consistent priorities. Rooted in deep history and enduring relationships, China cares about Taiwan, the South China Sea, and residual border claims with India. It also deeply cares about its sovereign rights over various parts of China that the rest of the world has agreed are Chinese—Tibet and Xinjiang. As Taylor Fravel (2005, 46–83) noted years ago, China has resolved over 22,000 kilometers of borders. What China does not care about is invading and conquering Korea and Vietnam, much less Japan, the Philippines, Indonesia, and perhaps eventually the US. This is clear empirically, but we are so blinded by theory we ignore what is in front of us. Some might argue that the issue is not war, but rather the possibility of China limiting US access to the region militarily, weakening alliances, and creating economic dependencies. But this is inconsistent: the four books in question—and indeed, the overwhelming majority of the power transition literature—see war as the big risk in power transitions (Organski and Kugler 1980, 42–45; DiCicco and Levy 1999, 682). It is inconsistent to then switch and argue that we are not concerned about war with China. If we are not concerned with war, then scholarship on power transitions loses much of its urgency and relevance. And, China is probably unlikely to start a war.

By many measures, the US is the revisionist power in East Asia, not China (Johnston 2003). On North Korea, it is the US that is trying to implement regime change, or at least upend the status quo—not China. It is the US that wants China to directly intervene in the affairs of a sovereign nation, and China that resists. One of the chief US frustrations with Chinese leaders has been that they do not pressure or interfere in North Korea more. But this makes little logical sense: we want China to interfere in other countries when we want them to, and we don’t want them to interfere when we don’t want them to. A better explanation for Chinese behavior is that China has some issues it cares about and some issues it does not care about. Korea and China have successfully navigated a neighboring relationship since the seventh century CE. By 1034 CE, China and Korea had formally demarcated their border at the Yalu river, and that border has remained the same since that time. There is no evidence that China has any interest in invading or conquering Korea. And, neither North Koreans nor South Koreans treat China as if it did. In fact, the Chinese intervened on the Korean peninsula in 1950 to defend what China deemed to be the legitimate Korean government, just as China had intervened three centuries earlier, during the 1592 Japanese invasion of Korea.2 In both cases, Chinese troops were the only reason that Korea did not fall. In both cases, Chinese troops could easily have remained on the peninsula indefinitely, and Korea could have been incorporated into China proper with little effort. However, in both cases, Korea was clearly not Chinese, and Chinese military forces were withdrawn back to China proper within a few years of the end of the conflict. There was no Chinese land grab in Korea in 1950, and nobody expects one now, either. By 1958, China had withdrawn all its troops back to its home country and has never sent troops back to the DPRK (Tian 2014). Since then, despite recurrent wishful claims that China has finally changed its mind about North Korea, China has continued to treat North Korea as a sovereign country and does not interfere nearly as much as some pundits argue it should.

### 2AC – Infrastructure

#### Won’t pass – Manchin opposition

MSNBC News 9-12-21 (Sen. Manchin casts doubt on reconciliation deal by Pelosi's Sept. 27 deadline. https://www.nbcnews.com/politics/congress/sen-manchin-casts-doubt-reconciliation-deal-pelosi-s-sept-27-n1279005)

A budget reconciliation package isn't likely to pass Congress by Sept. 27, Sen. Joe Manchin, D-W.Va., said Sunday.

"There's no way we can get this done by the 27th if we do our jobs," Manchin said on CNN's "State of the Union," because the differences are too big.

"It makes no sense at all," he said.

Manchin came out against a $3.5 trillion budget bill this month, throwing cold water on one of President Joe Biden's top legislative ambitions. It was a warning to Democrats, who have no path to pass a multitrillion-dollar budget bill without his vote in a Senate that is split 50-50 between Republicans and Democratic-voting members.

Writing in The Wall Street Journal opinion section, Manchin called on his party to hit "a strategic pause" on the legislation, rejecting the idea of "artificial political deadlines" to advance it.

Manchin said in an interview Sunday on NBC's "Meet the Press" that there's no reason to rush to meet the deadline.

Pro-impeachment GOP congressman from Ohio won't run again, cites party's 'toxic dynamics'

"I'm just saying that we should be looking at everything, and we're not. And that we don't have the need to rush into this and get it done within one week because there's some deadline we're meeting or someone's going to fall through the cracks," he said.

His reasoning for a pause, he said, is that, because of the unknowns with the Covid pandemic, "inflation is still very high and rampant, and then on top of that, the geopolitical unrest that we have going on, we might be challenged there."

Asked whether he would be OK with being the lone "no" vote on Biden's economic agenda, Manchin said he doesn't think he is the only senator against it. He didn't go into further details.

"I've said this: If I can't go home and explain it, I can't vote for it," Manchin said. "I can't explain what we're doing now

#### Antitrust thumps – he’s spending capital on antitrust now

Vaalal 7-16-21 (Lindsey. Attorney at Vincent and Elkins Global Cartel Defense and Coordination Team and represents companies and individuals in investigations and litigation in the U.S. and abroad. . Labor, Defense, and Rail Services Among Top Competition Concerns Targeted in President Biden’s Executive Order et al https://www.velaw.com/insights/labor-defense-and-rail-services-among-top-competition-concerns-targeted-in-president-bidens-executive-order/)

The EO seeks to harness the coordinated power of the full federal government, emphasizing “that a whole-of-government approach is necessary to address” competition concerns in the U.S. economy.2 To that end, the Order establishes a White House Competition Council, to be led by the Director of the National Economic Council (“NEC”).3 An integral part of the Office of White House Policy, the general bailiwick of the NEC is to advise the president on economic policy matters. By embedding the new council within the White House, President Biden is sending the strong message that competition is a focus area over which he intends to keep close tabs and invest his personal political capital.

#### No PC link and LT - A shift in political will is generating broad bipartisan Congressional support for more aggressive antitrust enforcement -

Megan Browdie, Jacqueline Grise. Howard Morse 21 (Partners at Cooley. BIDEN/HARRIS EXPECTED TO DOUBLE DOWN ON ANTITRUST ENFORCEMENT: NO “TRUMP CARD” IN THE DECK. https://www.concurrences.com/en/review/issues/no-1-2021/on-topic/the-new-us-antitrust-administration-en#browdie)

Even before the most recent election, there has been a shift in political will and federal agencies’ willingness to pursue aggressive antitrust enforcement. By all objective metrics, antitrust is entering the public consciousness in a way not seen for years. In particular, antitrust is viewed as key to addressing what some see as high pharmaceutical prices and powerful tech companies and life science companies allegedly stamping out nascent competitors.

9. Members of Congress on both the left and right are pushing a more aggressive antitrust agenda. Most recently, the Subcommittee on Antitrust Law of the House Judiciary Committee issued the Digital Competition Report concluding “[antitrust] laws must be updated to ensure that our economy remains vibrant and open in the digital age,” and that “the antitrust agencies failed, at key occasions, to stop monopolist from rolling up their competitors and failed to protect the American people from abuses of monopoly power.” [34]

10. Down Pennsylvania Avenue, in response to these political winds, the DOJ and FTC have recently filed monopolization suits against some of the biggest tech companies and are aggressively suing to stop so-called “killer acquisitions” of nascent competitors. For example, the FTC in December 2020 filed to block Procter & Gamble’s proposed acquisition of Billie, a startup direct-to-consumer company that only started selling women’s razors and body care products in November 2017. In announcing the complaint, the director of the FTC’s Bureau of Competition stated, “As its sales grew, Billie was likely to expand into brick-and-mortar stores, posing a serious threat to P&G. If P&G can snuff out Billie’s rapid competitive growth, consumers will likely face higher prices.” [35]

11. Earlier, the FTC alleged Illumina’s proposed acquisition of PacBio would allow Illumina to maintain its “longstanding monopoly” in next-generation DNA sequencing by extinguishing PacBio as a “nascent competitive threat.”

12. The agencies have also opened investigations into a number of high-tech companies, and several have drawn aggressive lawsuits. Both the FTC and DOJ, along with state attorneys general, have filed high-profile suits accusing the tech companies of monopolizing various markets and seeking remedies ranging from injunctions against future conduct to divestitures of previously acquired assets.

13. There is now bipartisan support for additional funding for the DOJ Antitrust Division and FTC, suggesting there will be even more enforcement

in the future. Indeed, Commissioner Rebecca Slaughter dissented from the FTC’s 2021 budget request to Congress because she thought “more funding is necessary to meet the increasing demands on the FTC to protect American consumers.” Republican Commissioner Christine Wilson recently said: “I agree that the budgets of the FTC and the DOJ should be increased to keep up with the size of the economy that we are policing. So, a much larger budget would be appreciated.”

14. These views are being echoed in the halls of Congress on both sides of the aisle, as House Democrats and Republicans are calling for increased funding for the antitrust agencies in recent months. Among several recommendations for antitrust enforcement in the Digital Competition Report, the House Judiciary Committee recommended “increasing the budgets of the FTC and the Antitrust Division.” Even the Republican Minority Report responded that the “report makes a good case for the need to strengthen our nation’s antitrust agencies with regard to resources. We agree wholeheartedly with this recommendation.” Indeed, the recently-enacted omnibus spending bill increased the FTC budget by 6% and the DOJ Antitrust Division budget by 11% in FY21 compared to FY20, giving both agencies more funds to hire staff and conduct investigations.

#### The US power grid is amazingly stable and resilient

Blumsack, 3/2/17, Seth, associate professor in the Leone Family Department of Energy and Mineral Engineering and director of the program in Energy Business and Finance at Penn State University, “How complexity science can keep the lights on,” Christian Science Monitor, https://www.csmonitor.com/Science/Complexity/2017/0302/How-complexity-science-can-help-keep-the-lights-on

Can disruptive blackouts be prevented? Does the ever-increasing complexity of our electrical supply system all but ensure more frequent and more catastrophic failures? Unicycles and spinning plates Electric power grids are marvelously complicated and intricate systems, comprising many millions of interconnected turbines, conductors, transmission lines, insulators, switches, and people. They tend to be enormous. The whole of the North American continent is served by just four or five regional grids. The reasons for this complexity are perfectly sensible. For more than a century it has been cheaper to produce and distribute on a large scale, and cities and states have linked up their own utility grids with the growing network to increase redundancy (which added to their own systems’ reliabilities) and to make trading in electrons possible. Bit by bit, the most intricate supply system ever created by humans took its form. As a result, the behavior of our power grid is undeniably and irrevocably complex. The electricity that powers the glowing screen on which you are now reading is the result of millions of interconnected devices working together in a highly synchronized way. Each of these elements behaves individually according to laws of physics that are easy to describe and predict. But the system as a whole behaves in ways that are impossible to understand just by adding up the behaviors of these predictable parts. In other words, we know how the power grid works in theory. How it manages to work in practice is, even to trained professionals, often a mystery. This complexity arises from a paradox: power grids are both inherently robust and inherently fragile. Operating a power grid is a bit like that old circus act of balancing spinning plates atop poles while riding a unicycle. Getting it all started is nearly impossible, but once you achieve an equilibrium, with all the plates spinning and the unicycle moving, maintaining that balance is somewhat easier—as long as you keep up the momentums of the various spinning parts. Of course, this seemingly miraculous balance is delicate; the smallest upset can make the rider wobble. An overcorrection can invite disaster. The engineers who designed the power grid know this

and have built a tremendous amount of redundancy into the grid. On the grid, if a single plate falls and shatters, others are there to take its place. This redundancy makes our electricity supply remarkably reliable. Self-reinforcing feedbacks The behavior of the grid is, in its own way, an emergent one, meaning it arises from the interactions of many parts. But it’s different from the collective behaviors of bee colonies or flocks of birds—in those, order seems to arise without the central control of a single decision-maker. Members of the hive or flock, each following simple, programmed instructions, bring about self-organized, often surprising group-scale behaviors like the undulating beauty of a murmuration of starlings.

# 1ar

## CP

#### State enforcement increases litigation cost, causes firms to be legalistic rather than dynamic.

Jacob P. Grosso 21. J.D. Candidate. “The Preemption Of Collective State Antitrust Enforcement In Telecommunications” University of Richmond School of Law. 02-11-21. https://lawreview.richmond.edu/files/2021/04/5-Grosso-552.pdf

Placing control in the hands of more centralized regulators reduces uncertainty for competitors due to the inherent inconsistencies in court proceedings and allows for better market functioning.258 The inability to pursue nonenforcement agendas and reduce litigation will cause unnecessary false positives. **False positives can discourage competition and innovation**.259 **Too many false positives will cause competitors to restrict their behavior** drastically to comply with enforcers at the cost of innovative business practices.260 Overenforcement and the resulting false positives reduce competition, inviting harm to both the consumer and the aggregate social welfare.261 **Reduction in states’ ability to conduct collective antitrust litigation will naturally decrease the overall amount of litigation**, which provides several benefits to competition and to regulators. **These benefits include reduced compliance costs, legal fees, and the redistribution of resources**.262 Reduced costs will benefit administrative costs, particularly those resulting from the coordination of state agencies. **The result is a leaner, specialized enforcement system;** increased market freedom due to clear regulations; and the opportunity for regulators to balance broader policy goals with antitrust.

## PTX

### XTD Wont Pass Now

#### Manchin opposition

#### Infrastructure bill fails

D.J. Gribbin, general counsel of the U.S. Department of Transportation from 2007-2009, founder of Madrus, LLC, a strategic consulting firm focused on infrastructure development, 03/27/2019, Three reasons to think twice about an infrastructure bill, Politico, <https://www.politico.com/agenda/story/2019/03/27/infrastructure-funding-bill-000886/> accessed 3/8/21

In physics, Newton’s Third Law states that for every action there is an equal and opposite reaction. In policy, too, every action creates a reaction, albeit rarely equal or opposite. In fact, the challenge of policy is that reactions, while inevitable, are difficult to predict. When weighing federal expenditures on infrastructure, policymakers need to keep in mind that allocating more federal funds to infrastructure might backfire. Here are three ways that could happen: The “coupon effect” The prospect of federal funding can dampen state and local funding. While voters overwhelmingly support increased infrastructure spending, their strong preference is that someone else pay for it. This dynamic makes it difficult for state and local leaders (who own 90 percent of governmental infrastructure) to turn to their electorate and ask for a tax or fee increase if the federal government is offering “free” funding. This dynamic can be called the “coupon effect.” Imagine if shoppers in the market for a new suit were told that there is a small likelihood they will receive a coupon for 80 percent off their next suit purchase. Consumers will rationally engage in what economists call strategic delay and postpone their purchase in the hope of receiving a coupon, even if the chance of getting the coupon is very small. Every time a consumer considers heading to the store and buying a suit, he will ask, “But what if a coupon arrives tomorrow?” As a result, many will continue to delay until their suits (or our infrastructure) become unacceptably shoddy and worn. In my experience, the prospect of federal funding has this same impact on state and local leaders considering a tax or user fee increase to expand or improve the quality of their infrastructure. This dynamic was clearly apparent in Kentucky in 2014, for instance. That year, a candidate for the U.S. Senate encouraged the communities around the Brent Spence Bridge (connecting Cincinnati and Covington, Ky.) to oppose a toll increase, because if elected, she would get the federal government to pick up the $2.6 billion tab to replace the bridge. Her campaign successfully increased opposition to tolling. Yet five years later, the debate on how to fund the bridge is still unresolved, and the probability of full federal funding is still just about zero (notwithstanding the fact that the state is represented by the Senate majority leader, who is married to the Secretary of Transportation). While further study needs to be done, the coupon effect could actually result in a net decrease in infrastructure funds, especially when coupled with the challenges of substitution; states and local governments receiving an influx of federal dollars frequently substitute the new federal dollars for funds previously allocated to infrastructure and transfer their dollars to other policy priorities. As a result, a dollar in new federal infrastructure spending does not necessarily result in an additional dollar available for infrastructure. The current non-federal to federal ratio of infrastructure spending is 3:1. Thus, if a 30 percent increase in federal spending (along with celebrations that the coupon is in the mail) dampened by 11 percent non-federal spending increases, our nation would be left with a net national decrease in infrastructure funding. The goal of infrastructure policy should be a significant increase in infrastructure funding overall. As counterintuitive as it sounds, an increase in federal funding could work counter to that goal

#### So many thumpers - Antitrust EO thumps – he put the full weight of the federal government behind that order – PC’s already been used.

#### Their enforcement overstretch argument on case PROVES the DA is non-uq. Kahn is already aggressively doing anti-trust policy under the justification of Biden Administration cracking down on anti-competitive practices.

#### Anti-Trust enforcement increasing now

Douglas Tween March 2021 (Partner and Head of U.S. Government Enforcement and Cartel practice, Linklaters, New York and Washington, DC. BACK TO NORMAL? CARTEL ENFORCEMENT UNDER THE BIDEN ADMINISTRATION. <https://www.concurrences.com/en/review/issues/no-1-2021/on-topic/the-new-us-antitrust-administration-en#nh306>

As expected with previous Democratic administrations, we will likely see an uptick in antitrust enforcement under the Biden administration. Criminal antitrust cases, fines, and investigations are all expected to increase, particularly when compared to the low levels of enforcement during the Trump administration. In addition, enforcement is likely to expand in light of the Covid-19 pandemic, as such a crisis can lead to increased incentives for companies to collude. Just how much more aggressive the Biden administration will be with antitrust enforcement is yet to be seen, since Biden is largely considered a centrist and will need to decide how to frame his policies around the competing schools of thought within the Democratic Party itself. [315] As with all new administrations, the intensity of antitrust enforcement under Biden will largely depend on who is appointed to head the DOJ and FTC. Despite the uncertainty, there can be no question that cartel enforcement will intensify under the Biden administration as compared to the lower enforcement levels seen under the Trump administration.

### XTD 2AC 4 – LT - GOP Supports Plan

#### There are currently calls for bipartisan support for additional funding towards the FTC and DOJ- that’s Browdie. That means there doesn’t need to be PC spent. If their arg about pc being necessary is true the XO thumps it and our evidence postdates all theirs.

#### All their link cards are ab big tech no climate.

#### Plan has bipartisan support

Stein, Gregg, and Zakrzewski, 7-9-21 (Jeff, Aaron, and Cat White House Economics and Business reporters. Biden’s bid to take on big business sets off battle over who holds power in U.S. economy. <https://www.washingtonpost.com/business/2021/07/09/biden-executive-order-promoting-competition/>)

Marshall Steinbaum, an economist at the University of Utah, said the executive order reflects growing skepticism of big business. While prominent left-leaning and union-affiliated Democrats have long made campaign talking points out of curbing the abuses of big business, elements within the Republican Party are now increasingly critical of business executives. “The White House is responding to the growing evidence of the overwhelming corporate control of every aspect of the economy,” Steinbaum said. “Since the 1970s, the bipartisan consensus has been that corporate power is not a big problem and monopolies will take care of themselves. … This really reflects an ideological transformation.”

#### Republicans support increased antitrust efforts

Cadelago and McGraw 7-19-21 (Christopher and Meredith. White House Correspondents, Politico. ‘It’s ceding a lot of terrain to us’: Biden goes populist with little pushback. <https://www.politico.com/news/2021/07/19/biden-populist-antimonopoly-500100>)

Some of Biden’s actions came on issues that already had Republican support, including the effort to bring down the price of hearing aids, discouraging agricultural consolidation and limiting so-called noncompete agreements that harm U.S. workers, among others. Twenty-one Republicans backed Khan’s nomination. The cross-partisan appeal around anti-monopoly policies traces back even further. During the 2016 election, Trump ran on promises to combat big mergers and take on massive corporations that he said posed a “huge antitrust problem.” Following Trump’s loss, Sen. Josh Hawley (R-Mo.) and Rep. Ken Buck (R-Colo.) have called for sweeping antitrust reform in Congress that at times echoes Democratic efforts. Fox News’ Tucker Carlson, one of the most influential voices to the right, cheered the choice of Khan to lead the FTC. “There’s an increased recognition that concentration across all corporate sectors is really stifling the economy and hurting people,” said David Segal, executive director of digital rights group Demand Progress and co-chair of the Freedom from Facebook and Google coalition. “In some cases it’s an actual recognition of that and in others there’s a recognition at least of the political salience of the issue.”

#### Republicans support more robust antitrust measures

**Birnbaum**, 5-24-**21** (Emily, “Tech giants' foes open up their wallets to the House’s top antitrust Republican,” accessed 5-24-21, <https://www.politico.com/news/2021/05/24/tech-antitrust-republican-490446>) JFN

**Buck, the top Republican on the House Judiciary antitrust subcommittee**, has raised tens of thousands of dollars from companies such as Microsoft, Oracle and Fox Corp. since June 2019, a POLITICO analysis of campaign finance disclosures shows. Buck **has pushed for laws and rules that could boost the companies' abilities to compete with the likes of Google and Facebook. His increasingly aggressive stance has also won him praise as a trailblazer among GOP trustbusters, part of a notable shift in his party’s attitudes toward reining in corporate monopolies**.

### 1AR – A2 PC Internal

#### PC not key to agenda

Min Kim and DeBonis 5-22-21 (Seung and Mike, “Biden’s big agenda is imperiled as his priorities stall in Congress and a debt fight looms,” WP, accessed 5-23-21, <https://www.washingtonpost.com/politics/biden-agenda/2021/05/22/f686118e-b9af-11eb-a5fe-bb49dc89a248_story.html>)

In contrast, senior officials at the White House and on Capitol Hill say that, on the most sensitive issues, such as guns, immigration and policing, the administration has deliberately chosen to let lawmakers take the lead in negotiations without overt involvement from Biden or his top aides. The overall legislative strategy is one that aides say stems from Biden himself, whose decades in the Senate and eight years as vice president have imbued in him the value of relationships and insight into how successful negotiations unfold on Capitol Hill. There’s an acknowledgment, one senior White House official said, that each negotiation is unique, and Biden gets the balancing act needed in congressional talks while knowing when to act through executive actions and the bully pulpit. Biden is aware of “what is the right way to encourage them and to be engaged,” said the senior official, who spoke on the condition of anonymity to talk candidly about White House strategy. “That kind of deft touch, I think, is very important, and one that is deliberate, careful and considered daily.” On guns, for instance, Justice Department officials have offered technical guidance when asked by senators, and Sen. Chris Murphy (D-Conn.) has kept White House aides in the loop on his talks with Republicans. A similar dynamic exists on policing negotiations, which are led by Rep. Karen Bass (D-Calif.) and Sens. Tim Scott (R-S.C.) and Cory Booker (D-N.J.). Although administration officials have been helpful if called upon during the policing talks, Bass said, “it is 100 percent up to us.” “I really feel like the strategy here **is** very smart, which is to have the White House focused on the next big-ticket item while allowing rank-and-file members, like myself and Booker and others, to try to work out deals on other issues,” said Murphy, who has been meeting with Sen. John Cornyn (R-Tex.) and other Republican senators on a gun deal. “It hasn’t always been that somebody like me gets the wiggle room to try to negotiate something like this.” The hands-off approach is bearing fruit on the measure to beef up technology research and counter China’s rising global influence. The Senate is expected to approve the U.S. Innovation and Competition Act in the coming week, after it was hammered out on Capitol Hill — largely without White House involvement.