# 1NC

### T USFG

#### Our interpretation is the 1AC must include a defense of the federal government prohibiting anti-competitive business practices

#### A – Antirust ‘prohibitions’ are federal and legal and distinct from private action

Boner and Krueger, ‘91 (Roger Alan and Reinald, World Bank, “The Basics of Antitrust Policy”, *World Bank Technical Paper No 160,* <https://documents1.worldbank.org/curated/en/606101468764357774/pdf/multi-page.pdf>, DoA 5/31/2021, DVOG)

Of all nations, none has a longer history of active intervention in marketplace competition through antitrust policy than the United States. The statutory basis of antitrust policy in the U.S. rests on three federal laws--the Sherman Act of 1890, the Clayton Act of 1914, and the Federal Trade Commission Act of 1914. Significant amendments occurred in the Robinson Patman Act of 1936 and the Hart-Scott-Rodino Antitrust Improvements Act of 1976, which provided for pre-merger notification.A1 These antitrust statutes apply to interstate commerce and are enforced at the federal level by two agencies, the Department of Justice, an executive agency, and the Federal Trade Commission.0 In addition, enforcement actions can be brought by the attorneys general of the fifty states and by private parties who have suffered injury owing to violations of the antitrust laws. Approximately 96% of the civil antitrust suits in the U.S. are brought by private parties.YJ The antitrust statutes of the United States, reflecting a pattern often repeated elsewhere, were written into law following a period of marked economic expansion with numerous mergers and consolidations. A variety of restraints on competition, widely employed by large businesses, caused great popular resentment. In response, the Sherman Act was enacted in 1890 to inhibit a variety of practices viewed as injurious restraints on competition. Section 1 of the Act prohibits contracts, combinations, and conspiracies in restraint of trade, section 2 prohibits monopolization, attempts to monopolize, and combinations or conspiracies to monopolize, and section 7 (later superceded by Section 4 of the Clayton Act) permits private parties injured by Sherman Act violations to sue for recovery of three times the amount of damages. The ability of private parties to recover treble damages for antitrust violations is unusual among the surveyed jurisdictions and constitutes a comparatively strong deterrent to violating the antitrust law.9 Though the Sherman Act was designed to enjoin a broad variety of anticompetitive business practices, the Act was not effectively enforced for a number of years. Moreover, the Sherman Act applies strictly to the conduct of business, and the prosecution of violations requires that enforcers meet the high standard of showing that particular conduct was motivated by the restraint of competition or monopolization of a market. To broaden the scope of antitrust legislation, the Clayton Act was passed to cover other potentially anti competitive practices and to prohibit conduct likely to support the restraint of trade. Section 2 of the Clayton Act (later amended by the Robinson Patman Act) prohibits price discrimination in support of the restraint of trade or monopolization of a market, and Section 3 prohibits tying and exclusive dealing contracts in restraint of competition. More important, the Clayton Act serves to discourage the development of certain structural pre-conditions of anticompetitive behavior: Section 7 prohibits mergers tending to substantially lessen competition, and Section 8 prohibits interlocking directorates among competing firms.& The Federal Trade Commission Act was passed in part to streamline the procedures for enforcing the antitrust laws. Whereas the Department of Justice, as the primary federal law enforcement agency, has broad responsibilities to enforce federal law, the Federal Trade Commission Act created the Federal Trade Commission as an administrative agency with special expertise in business and commerce and with quasi-judicial authority to enforce the antitrust laws.!V Section 5 of the FTC Act prohibits "unfair methods of competition," which includes acts illegal under the Sherman and Clayton acts. In addition, judicial decisions have found section 5 to cover practices that offend public policy or cause substantial injury to consumers, potentially extending the applicability of the FTC Act beyond that of the other antitrust statutes. The Department of Justice and Federal Trade Commission have dual responsibility to enforce the federal antitrust laws, a situation unique among the surveyed jurisdictions. Both criminal and civil cases can be brought by the Department of Justice and decided in federal district courts, with appeal to the appellate courts and the Supreme Court. In contrast, the FTC can bring only civil cases and can adjudicate cases through independent administrative law judges, with appeal to the federal courts and the Supreme Court.§9 To some extent, the FTC and the Department of Justice coordinate their activities in areas of overlapping responsibility, as in merger review for which each agency has developed particular areas of expertise. Otherwise, the dual enforcement approach of the U.S. provides for a broad, interventionist application of antitrust laws, since potentially anticompetitive actions can be challenged by either the Department of Justice or the Federal Trade Commission. The 1936 Robinson-Patman Act, written to amend Section 2 of the Clayton Act, is a more complex and comprehensive statute prohibiting resale price maintenance. Section 2 of the Robinson-Patman Act prohibits discriminating in price between different buyers, limits the brokerage and other compensatory fees between a buyer and seller, and prohibits the use of discriminatory advertising or promotional allowances by sellers. Buyers as well as sellers are subject to the prohibitions, and Section 3 of the Act provides criminal sanctions for certain kinds of discriminatory pricing. 1 With respect to other surveyed economies, several features of U.S. antitrust law stand out. The U.S. is the only one maintaining separate government agencies that share parallel authority to enforce the antitrust laws; federal enforcement, shared by the Department of Justice and the Federal Trade Commission, operates alongside enforcement by the attorneys general of the fifty states and is substantially augmented by private enforcement**.** The treble damages available to private litigants constitute a very strong financial deterrent against antitrust violations as well as a strong incentive for private litigation. Finally, though a variety of activities are exempted from antitrust law, the selective granting of exemptions is used very seldom and is not an important feature of antitrust law enforcement in the USA.

#### B – ‘Its’ means possessive

Macmillan Dictionary

[“its”, Macmillan Dictionary, http://www.macmillandictionary.com/us/dictionary/american/its, accessed 8-15-15, AFB]

Its is the possessive form of it.

1 belonging or relating to a thing, idea, place, animal, etc. when it has already been mentioned or when it is obvious which one you are referring to

The chair lay on its side.

We were eager to see Las Vegas and all its many attractions.

The bull had a ring through its nose.

Synonyms and related words

Determiners: a, an, certain...

Explore Thesaurus

#### C – That means the aff must modify federal law

Jon M Ericson 3, Dean Emeritus of the College of Liberal Arts – California Polytechnic U., et al., The Debater’s Guide, Third Edition, p. 4

The Proposition of Policy: Urging Future Action In policy propositions, each topic contains certain key elements, although they have slightly different functions from comparable elements of value-oriented propositions. 1. An agent doing the acting ---“The United States” in “The United States should adopt a policy of free trade.” Like the object of evaluation in a proposition of value, the agent is the subject of the sentence. 2. The verb should—the first part of a verb phrase that urges action. 3. An action verb to follow should in the should-verb combination. For example, should adopt here means to put a program or policy into action through governmental means. 4. A specification of directions or a limitation of the action desired. The phrase free trade, for example, gives direction and limits to the topic, which would, for example, eliminate consideration of increasing tariffs, discussing diplomatic recognition, or discussing interstate commerce. Propositions of policy deal with future action. Nothing has yet occurred. The entire debate is about whether something ought to occur. What you agree to do, then, when you accept the affirmative side in such a debate is to offer sufficient and compelling reasons for an audience to perform the future action that you propose.

#### The affirmative doesn’t propose a hypothetical government action – vote negative –

#### First is clash – stable ground and limits enable contestation and is vital to the neg effectively researching and refuting the 1AC, including by utilizing their 1AC on the negative. That turns any offense they can access because engagement is necessary for actualizing their strategy.

#### There’s no link to most Ks of framework – we are not defending the resolution as a ceiling, end point, or total limit, but as a floor and starting point to ensure the neg knows what to research and disprove.

#### Second is limits:

#### Some predictable limit is the only way to give the neg a chance to win – radical aff choice with no floor puts the aff too far ahead. Pre-tournament negative preparation is structured around disproving the resolution as a point of offense, and obviating that research structurally favors the affirmative.

#### Fairness is an intrinsic good – debate can be more than a game and also a game, and games always requires effective competition expectations – the only way for any benefit to be produced from debate is if the judge can make an objective decision between two sides who have had a relatively equal chance to research.

#### This precedes substance – our ability to refute any argument cannot be disentangled from our inability to research it – be skeptical of whether an argument of was ‘dropped’ or whether it was simply impossible to prepare to defeat.

#### Third is antitrust debates – studying antitrust law via switch-side debate is vital to interdisciplinary skills that both spill up *and* allow us to better understand the historical and social foundations of antitrust

Biester, 11 – Edward, partner in the Philadelphia office of the law firm of Duane Morris LLP, and co-chair of the firm’s Antitrust and Competition Practice Group. “Understanding Antitrust Laws, Competition, the Economy, and Their Impact on Our Everyday Lives,” Social Education 75(2), pp 68–72, <https://www.americanbar.org/content/dam/aba/images/public_education/lookingatthelaw_marapril.pdf> -- Iowa

Looking at the Law: Why should antitrust law and economic regulation be important parts of a high school social studies curriculum?

E.B.: These topics bring together many disciplines and allow students to imagine and experience their application to real world scenarios, at a time when students are learning and questioning just how the world works. Studying antitrust law and economic regulation will introduce students to concepts like the branches of government and how laws are made, enforced, and effect social policy. They allow students to take an historical view and observe how certain economic principles have emerged as economies and markets evolved. Students can decide why one rule or another would be positive or negative in scenarios that deal with their individual economic interests. These concepts also introduce students to the globalization of markets, trade, and legal governance, which will only become more important with time.

#### T is best evaluated under competing interpretations to reduce judge intervention.

#### TVA – the FTC should strengthen enforcement authority to counter algorithmic bias.

#### Solves – three reasons –

#### 1 – It solves the aff – it challenges semio-corporations who work to staticize the grid via compulsive simulation – that’s the 1AC Innocenti evidence – even if it takes some traditional routes with endpoints, it can still quote “reimagine life,” “rediscover togetherness,” and challenge the notion that one FTC action alone is an endpoint

#### 2 – It’s an impact to skills – studying the law and ways for the FTC to beef up penalties are vital to countering algorithmic bias

James V. Fazio 21. Special counsel in the Intellectual Property Practice Group at Sheppard, Mullin, Richter & Hampton LLP, with Liisa M. Thomas, 3/11. “What Is FTC’s Course Under Biden?” https://www.natlawreview.com/article/what-ftc-s-course-under-biden

The new acting FTC chair, Rebecca Kelly Slaughter, recently signaled that the FTC may increase enforcement and penalties in the privacy and data security realm. Slaughter pointed to several areas of focus for the FTC this year, which companies will want to keep in mind: Notifying Consumers About FTC Allegations: Slaughter referred favorably to two recent cases: (1) the Everalbum biometric settlement from earlier this year (which we wrote about at the time); and (2) the Flo Health settlement over alleged deceptive data sharing practices (which we also wrote about at the time). In drawing on these two cases, Slaughter indicated that in future cases the FTC intends to include as part of any settlement a requirement to notify customers of any FTC allegations. This, she said, would allow consumers to “vote with their feet” and help them decide whether to recommend their services to others. FTC Intent to Plead All Relevant Violations: According to Slaughter, another lesson the FTC is taking from the Flo case is to include in the cases it brings all potentially applicable violations of all relevant privacy-related laws. In the Flo case, Slaughter said the FTC should have pleaded a violation of the Health Breach Notification Rule, which requires that vendors of personal health records notify consumers of data breaches. Focus on Ed Tech and COPPA: Given the explosive growth of education technology during COVID-19, the FTC is conducting an industry sweep of the industry. Related to this, the FTC is reviewing its Children’s Online Privacy Protection Act Rule. This goes beyond the refresh the agency did of their FAQs earlier in the pandemic (which we wrote about at the time). For now, Slaughter reminds companies that parental consent is needed before collecting information online from children under the age of 13. Examination of Health Apps: The FTC will take a closer look at health apps, including telehealth and contact tracing apps, as more and more consumers are relying on such apps to manage their health during the pandemic. Overlap Between Competition and Privacy: Slaughter also indicated that it is worth looking at situations where there may be not only privacy concerns, but antitrust as well. Because the FTC has a dual mission (consumer protection and competition) she notes that it has a “structural advantage” over other regulators in that it can look at these issues, especially since -she states- “many of the largest players in digital markets are as powerful as they are because of the breadth of their access to and control over consumer data.” Racial Equality and AI/Biometrics/Geotracking: Slaughter noted that COVID-19 is exacerbating racial inequities. She pointed to the unequal access to technology, as well as algorithmic discrimination (the idea that discrimination offline becomes embedded into algorithmic system logic). The FTC intends to focus on algorithmic discrimination, as well as on the discrimination potentially embedded into facial recognition technologies. (This mirrors concerns that gave rise to the recent Portland facial recognition law, which we recently wrote about). Finally, Slaughter commented on the use of location data to identify characteristics of Black Lives Matter protesters, and said she is concerned about the misuse of location data to track Americans engaged in constitutionally protected speech. Putting it Into Practice: Companies that operate health apps, that are in the education technology space, or that use algorithms or facial recognition tools will want to keep in mind that these are areas of focus for the FTC. And for everyone, keep in mind that the FTC has indicated it will beef up privacy law penalties and will ask for more notification to injured consumers.

#### 3 – Even if some elements of inequality, surveillance, and suffering are inevitable, algorithmic bias makes them much worse

Mike Thomas 20. Quoting AI experts including MIT Physics Professors, Senior Features Writer for BuiltIn. THE FUTURE OF ARTIFICIAL INTELLIGENCE: 7 ways AI can change the world for better ... or worse, Updated: April 20, 2020, <https://builtin.com/artificial-intelligence/artificial-intelligence-future>

Klabjan also puts little stock in extreme scenarios — the type involving, say, murderous cyborgs that turn the earth into a smoldering hellscape. He’s much more concerned with machines — war robots, for instance — being fed faulty “incentives” by nefarious humans. As MIT physics professors and leading AI researcher Max Tegmark put it in a 2018 TED Talk, “The real threat from AI isn’t malice, like in silly Hollywood movies, but competence — AI accomplishing goals that just aren’t aligned with ours.” That’s Laird’s take, too. “I definitely don’t see the scenario where something wakes up and decides it wants to take over the world,” he says. “I think that’s science fiction and not the way it’s going to play out.” What Laird worries most about isn’t evil AI, per se, but “evil humans using AI as a sort of false force multiplier” for things like bank robbery and credit card fraud, among many other crimes. And so, while he’s often frustrated with the pace of progress, AI’s slow burn may actually be a blessing. “Time to understand what we’re creating and how we’re going to incorporate it into society,” Laird says, “might be exactly what we need.” But no one knows for sure. “There are several major breakthroughs that have to occur, and those could come very quickly,” Russell said during his Westminster talk. Referencing the rapid transformational effect of nuclear fission (atom splitting) by British physicist Ernest Rutherford in 1917, he added, “It’s very, very hard to predict when these conceptual breakthroughs are going to happen.” But whenever they do, if they do, he emphasized the importance of preparation. That means starting or continuing discussions about the ethical use of A.G.I. and whether it should be regulated. That means working to eliminate data bias, which has a corrupting effect on algorithms and is currently a fat fly in the AI ointment. That means working to invent and augment security measures capable of keeping the technology in check. And it means having the humility to realize that just because we can doesn’t mean we should. “Our situation with technology is complicated, but the big picture is rather simple,” Tegmark said during his TED Talk. “Most AGI researchers expect AGI within decades, and if we just bumble into this unprepared, it will probably be the biggest mistake in human history. It could enable brutal global dictatorship with unprecedented inequality, surveillance, suffering and maybe even human extinction. But if we steer carefully, we could end up in a fantastic future where everybody’s better off—the poor are richer, the rich are richer, everybody’s healthy and free to live out their dreams.”

#### TVA – the FTC should aggressively challenge fraud by monopolies which targets racialized groups.

#### The 1AC begins by asking “What is the point? What are we all doing here?” and calls the resolution a half-hearted attempt to respond to the present – the TVA clearly answers both questions – why do it? Because using the FTC to aggressively prosecute **big business which disproportionately preys on Black and Latino communities CAN disrupt racialized material configurations that defraud people of their life savings. In regards to the resolution being half-hearted attempts, that’s the point – the FTC has an ethical duty to ramp up surveys, outreach, data, and enforcement**

Rich, 21 – Jessica, Distinguished Fellow - Institute for Technology Law and Policy, Georgetown University Law Center. "Five reforms the FTC can undertake now to strengthen the agency," Brookings, <https://www.brookings.edu/blog/techtank/2021/03/01/five-reforms-the-ftc-can-undertake-now-to-strengthen-the-agency/> -- Iowa

Fraud can have a disproportionate effect on certain communities, such as seniors, veterans, African Americans, and Latinos. As a result, during my tenure at the FTC, we created and scaled up an ambitious project called Every Community, the goal of which was to ensure that the agency was reaching and protecting the diverse communities victimized by fraud.

The project included consumer surveys, outreach to community organizations, and data analysis by BE. Among BE’s findings was that Black and Latino communities experienced fraud at higher rates than white communities but reported fraud to the FTC at lower rates—in other words, they were underreporting fraud, highlighting a key challenge for the FTC in reaching and protecting these communities. In making its findings, BE staff had to perform a detailed analysis of fraud and census data, since the FTC’s complaint database contained very limited demographic data.

The FTC should expand this program, especially in light of the recent Executive Order on racial equity and underserved communities, Acting Chairwoman Rebecca Slaughter’s commitment to these issues, and the enhanced data protection mission proposed above. As part of this expanded program, the FTC should collect more demographic data (with appropriate safeguards) to enable the type of analysis discussed above, and task BE with additional studies of the FTC’s reach and impact on different communities. The FTC also should consider hiring experts on racial equity and inclusion to assist with this important work.

### DA

#### Growth thriving now---reimagining life from scratch, rediscovering togetherness, and becoming bricoleur decks it

Wright and Rybnicek 21 (Joshua D. Wright, University Professor of Law at the Antonin Scalia Law School at George Mason University; J.D. and PhD in Economics from the University of California, Los Angeles; Executive Director of the Global Antitrust Institute and former FTC Official, and Jan M. Rybnicek, Adjunct Professor at the Antonin Scalia Law School at George Mason University; JD, magna cum laude, Antonin Scalia Law School at George Mason University; member of the American Bar Association Section of Antitrust Law and Editor of the Antitrust Law Journal, Summer 2021, "A Time for Choosing: The Conservative Case Against Weaponizing Antitrust," National Affairs, <https://nationalaffairs.com/time-choosing-conservative-case-against-weaponizing-antitrust>)

It has long been vogue among liberal advocates to champion expansion of government control over firms, their decisions, and internal workings. Perhaps no better present example can be found than in the area of antitrust, where the policy landscape looks eerily similar to the progressive view articulated 60 years ago, littered with a hodgepodge of proposals to “break up” large firms, prohibit all mergers and acquisitions, assign burdens of proof to the accused, and control the design of products. Today’s progressives offer much of the same medicine for what allegedly ails the modern economy. Senator Warren has proposed, for example, to “break up big tech” platforms such as Amazon, Apple, Facebook, and Google, and to make technology companies criminally liable for misinformation presented on their platforms.[ii] While the large and successful American tech firms—the envy of the global economy—make a convenient target for these proposals, do not be fooled. This wolf comes as a wolf. The modern progressive antitrust agenda is part of a broader, more radical program—self-described as Neo-Brandeisian Antitrust—to turn antitrust law upside down so that it may be weaponized to shape and plan all sectors of the economy.

These proposals, while unfortunate and misguided, draw heavily upon standard liberal orthodoxy that has tended to be largely suspect of markets and the agency of individuals. One can hardly be surprised to see a staunch progressive like Senator Warren or Bernie Sanders advocate greater government control over private life. Perhaps one even grows to expect it.

What is more surprising, however, is the company Senator Warren and the Neo-Brandeisian Antitrust movement have attracted with the siren call of using the antitrust laws to centrally plan the tech sector (among others things), and to achieve greater government control of the interactions between individuals and the technology we use in our daily lives. Stalwart conservatives like Senator Hawley, for example, among others, have offered policy proposals to “deal” with “Big Tech” that eerily mimic those of Senator Warren and the command and control left. Senator Hawley has proposed legislation that would rewrite Section 230 of the Communications Decency Act and usher in a quasi-Conservative Fairness Doctrine for the internet.[iii] Indeed, Hawley’s proposal would place the Federal Trade Commission in the Big Brother position of determining when a social media platform’s moderation decision was “designed to” or “motivated by an intent to” negatively impact a political party. Attorney General Barr has offered a similar refrain, announcing that antitrust is an appropriate tool to police political bias.[iv] And President Trump recently signed an executive order that directs the Federal Trade Commission to explore using its consumer protection authority to sue social media platforms for content moderation decisions.[v]

Without question, the emotional appeal undergirding these actions is understandable. Conservative voices and opinions too often face a stacked deck when dealing with technology companies and social media, in particular. And this bias against conservative voices has taken on new life in the Trump era. But the hallmark of conservative values has been to rightfully eschew government control over economic life and to value principle over expediency. What is at stake, however, with the current proposals to upend modern antitrust to address tech markets is more important than whatever fleeting satisfaction is gained from exacting policy revenge on firms perceived to squelch conservative voices and ideas. At stake are conservative commitments to the rule of law and the role of the judiciary—newly stocked with immense talent by the Trump administration—in preventing government expansion and overreach. And if we resign ourselves to transient political wins, and debase the belief that entrepreneurs rather than bureaucrats should shape technology markets, we risk not only undermining these great causes conservatives have championed for decades but also the enormous economic gains to Americans that arise in our highly competitive tech markets.

Readers less familiar with antitrust law may not understand its critical role in the conservative legal movement. Modern antitrust law—and its consumer welfare standard—is a complex product of powerful ideas, extant economic evidence, and jurists like Bork, Thomas, Scalia, Easterbrook, and Doug Ginsburg taking on the wobbly intellectual foundations of 1960s competition law. That their efforts were so successful in persuading their liberal counterparts on the Supreme Court and lesser federal courts to join in the dismantling of the stale and obsolete antitrust that was then the law of the land is powerful evidence of the force of their ideas. It is difficult to find an area of law where the conservative legal movement enjoyed as much success as quickly and with such resounding results.

No doubt it helped that yesteryear’s antitrust was intellectually bankrupt and an insult to the rule of law. It pursued an unfortunate amalgamation of contradictory doctrines, including undefined notions of populism, protection of individual industries, and reducing firm size, that could be used to justify nearly any result. For instance, antitrust law allowed the market-leading frozen pie manufacturer in Utah to successfully sue its three national-brand competitors for eroding its high market share through a series of price cuts—thereby preventing precisely the type of competition the law was intended to protect. Antitrust law was so unprincipled and incoherent at the time that it led Justice Potter Stewart to observe while reviewing a government suit to block a merger between two grocery stores with a combined market share of 7.5% that, “The sole consistency that I can find is that, in litigation under [the merger laws], the Government always wins.”[vi]

The conservative legal movement, powered by the intersection of economic analysis and law, brought the rule of law to the wild and untamed progressive antitrust vision of the 1960s. Grounding antitrust law in a disciplined and tractable framework not only promotes the rule of law while preventing arbitrary and capricious enforcement, it also creates a stable and predictable environment for private actors and firms to invest and innovate. Of course, no doctrine is perfect and today’s antitrust is not without its own flaws. But it is tethered to robust economic evidence and common-law developments that promote competitive outcomes and, like the common law, has built-in mechanisms to improve and evolve in response to empirical evidence. But the coherent and principled makeup of antitrust should not and cannot be taken for granted.

Proposals today that are attracting conservatives and liberals alike aim to unwind these gains in exchange for granting those who happen to have power in the government a dominant hand in controlling tech firms on the fleeting hope that the power will be deployed for the greater social good. We have experience with this approach to antitrust in the United States. It is what we used to do. And we know better. Shifting power from judges to regulators, and then allowing those regulators to pick winners and losers to achieve political and social goals, is a recipe for abandoning conservative commitment to the rule of law while simultaneously sacrificing economic growth and innovation. The price is too high, with little or nothing to offer those who value individual liberty, the rule of law, and economic growth. While progressive ideology is contiguous with increasing government control over economic and social interactions in technology markets for its own sake, conservative principles are not. The proposed bargain is also remarkably short-sighted. It should go without saying that empowering partisan regulators to enforce a Fairness Doctrine for conservatives is not likely to work out so well when the other side is in control.

Conservatives traditionally have been wary of proposals by liberals and other big government proponents seeking to substitute the judgment of regulators and bureaucrats for those of entrepreneurs and innovators. And rightfully so. Such proposals, even when well intentioned, risk making Americans worse off. Progressives and populists now seek to commandeer antitrust to usher in a new era of central planning in order to achieve social policy objectives that they could not accomplish otherwise. But at what cost? The risks are not trivial. Using antitrust to redesign tech companies and their products will undermine the competitive dynamics that have brought Americans countless modern benefits, including smartphones, fast and easy online shopping, on-demand ride hailing, easy-to-access streaming media, and a bevy of free services including email, maps, and video conferencing. It also will threaten the incredible economic growth and job creation that these companies have brought to America’s shores. And while politicians surely will make promises akin to, “if you like the digital platform you have, you’ll get to keep it,” it is all too clear that when you expand government discretion and limit judicial oversight, those in positions of power will increasingly impose their preferences on the broader society. Ask yourself, do you really want the government designing the iPhone?

The reality is that the U.S. digital economy is highly competitive and serves Americans well. Fueled by investment, innovation, and entrepreneurship, the digital economy has contributed substantially to America’s economic growth. According to the Bureau of Economic Analysis, the digital economy accounted for 6.9 percent of gross domestic product in 2017, growing at an annual rate of 9.9 percent since 1998 as compared to 2.3 percent for the economy overall.[vii] That economic growth has been driven by some of the world’s most successful tech companies, such as Amazon, Apple, Facebook, Intel, Google, and Microsoft, each of which calls the United States home. These firms are investing ever-increasing amounts on research and development to innovate new products and stay competitive. In fact, the United States leads the world in research and development spending, and tech companies lead in the United States—representing the nation’s top five spenders with investments totaling more than $75 billion in 2018.[viii] Tech companies rank second (behind the telecom sector) in U.S. capital expenditures, with Alphabet (Google’s parent company), Amazon, Apple, Facebook, Intel, and Microsoft together spending more than $45 billion in 2017.[ix] And these investment figures are only expected to continue to grow. These are hardly the actions of monopolists resting on their laurels, secure in belief that they are untouchable by competition.

And there is more good news. Tech has only touched a portion of the U.S. economy to date, meaning that there still are opportunities for tech companies to foster economic growth by transforming stagnant industries such as housing, transportation, manufacturing, and health care for the better. And where are the next generation of innovators and tech entrepreneurs calling home? The United States. Recognizing an economy that is dynamic and rewards creativity, venture capital investing has soared to record levels in the United States—surpassing $140 billion in 2018—providing startups with the capital necessary to innovate, compete, and grow.[x] Today the United States is home to half of all startups valued at more than $1 billion—so-called “unicorns”—outpacing every other country in the world by a wide margin.[xi]

Now, some conservatives chafe at recitations of facts and claim that technology companies exclusively benefit only the privileged. But this economic growth and investment have led to substantial benefits to ordinary American consumers and workers. You need only look to the numerous free services that tech has brought to consumers. Americans place significant value on these free services. One peer-reviewed study published by the National Academy of Sciences found that consumers would need to receive a yearly payment of $3,600 to give up free internet maps, $8,400 to give up free email, and $17,500 to give up free search engines.[xii]

Tech firms also have spurred change in long stagnant industries by developing new products that spark competition across quality, price, and other dimensions. Take for instance ride-sharing apps. Local cab companies long had a stranglehold on taxi services and saw little need to innovate or evolve. Ride-sharing apps like US-based Uber and Lyft disrupted the livery service industry by offering lower-cost and more convenient services. Cab companies have been forced to respond by offering easier payment methods and other innovative services that enhance the consumer experience. Proponents of using antitrust to restructure or even break up tech companies are unable to explain how their sweeping plans, however carefully scripted, would not undo the business models that made these services and their associated benefits possible. The burden should be on those seeking to use antitrust to remake the digital economy to demonstrate that the risk is justified. It is hard to believe how it could be.

The digital economy also has been an important source of job creation. According to one estimate, nearly 12 million people held tech jobs in the United States in 2018.[xiii] Today the largest U.S. tech companies have replaced the major American employers of the past. In just under two decades, Amazon, Apple, Facebook, Alphabet, and Microsoft have employed more than one million workers.[xiv] In 2016, Amazon became the fastest company to employ 300,000 Americans—surpassing Walmart and General Motors.[xv] Moreover, while the share of economic output going to workers has been declining steadily overall for many years both in the U.S. and globally, in the tech and telecom sectors the labor share has been steady and even has increased, suggesting improved worker welfare.[xvi]

But that is only part of the story. These major tech firms not only directly employ Americans, but through their investment and innovation, they have created entirely new markets that also have created millions of jobs. Take for instance the app economy—a more than $1 trillion global industry—that has created millions of U.S. jobs since Apple’s iPhone launched in 2007. According to one estimate, the U.S. had more than two million app-related jobs as of April 2019.[[xvii]](https://nationalaffairs.com/time-choosing-conservative-case-against-weaponizing-antitrust#_edn17) America’s large tech companies also benefit small businesses in yet another way: by connecting them to new markets that they could not access before. Today small businesses are able to take advantage of the major tech firms’ size and scale to grow domestically and compete globally with affordable and secure services.  
  
None of this is lost on Americans. While politicians in Washington have used the tech industry as a punching bag, most Americans would prefer that legislators focus on other industries, including most prominently health care, an industry in which competition suffers despite (or because of) significant government involvement.[[xviii]](https://nationalaffairs.com/time-choosing-conservative-case-against-weaponizing-antitrust#_edn18) In fact, a mere 17 percent of registered voters think that Congress should make regulating tech a top priority, placing it last among issues surveyed.[[xix]](https://nationalaffairs.com/time-choosing-conservative-case-against-weaponizing-antitrust#_edn19) That is likely in part because Americans generally trust tech firms and acknowledge the benefits they have brought to U.S. workers and consumers. One study found that Amazon, Google, and Netflix ranked as the most loved brands in the United States.[[xx]](https://nationalaffairs.com/time-choosing-conservative-case-against-weaponizing-antitrust#_edn20) Another study found that nearly 40 percent of Americans trusted Amazon and Google, which is striking given that only a mere 7 percent of Americans said they trusted the government.[[xxi]](https://nationalaffairs.com/time-choosing-conservative-case-against-weaponizing-antitrust#_edn21) It is no wonder that a majority of Americans oppose breaking up the largest tech companies: the result would be putting faith in the unlikely proposition that the government can do better.  
  
None of this means that the tech sector should be immune from antitrust scrutiny, that there are not serious economic issues facing American businesses and workers, or that certain tech platforms have shown an unmistakable bias against conservative viewpoints. Where anticompetitive conduct exists, it can and should be challenged under the existing antitrust laws and legal doctrines, which are more than capable of protecting competition in the digital economy. And the antitrust agencies are right to be vigilant against potential anticompetitive behavior by the major U.S. tech companies given their significant presence across key parts of the US economy.

But conservatives should be skeptical of attempts by politicians and bureaucrats to reorder economies simply to appease current animosity against tech firms and put at risk the substantial benefits they have brought to American consumers and workers. And that is precisely what recent radical proposals would do. These proposals include abandoning the consumer welfare standard that has helped make antitrust a coherent and principled body of law. Liberals instead seek to untether antitrust from the rule of law and return it to its Stone Age by reintroducing vague new “public interest” tests with multiple conflicting goals or by reestablishing arbitrary and obsolete market share thresholds—either of which would serve only to increase government discretion. Others have called to overturn unanimous and supermajority judicial precedent that are the foundations of the modern economic approach to antitrust. Still others seek to abandon the principle that it is the government and not business firms that bears the burden of proof of demonstrating the legality of free enterprise. These proposals require businesses to affirmatively prove to regulatory bodies that commercial conduct is not only not harmful but also that it is beneficial—beneficial to whom exactly is still unclear. And, of course, there have been calls to ban nearly all mergers, even those like Amazon’s acquisition of Whole Foods, which did not consolidate two rival companies and has brought customers lower prices and better services. These efforts inevitably will only be the starting point; and with no limiting principle will increase the government's authority to substitute its own judgement for those of entrepreneurs.

Conservatives long have believed in competition, markets, and the rule of law. The late Justice Scalia famously noted that antitrust’s signature statute, the Sherman Act, is “indeed the ‘Magna Carta of free enterprise’ … but it does not give judges carte blanche to insist that a monopolist alter its way of doing business whenever some other approach might yield greater competition.” The force of Justice Scalia’s admonition that the antitrust laws are not an appropriate vehicle for tinkering with the inner workings of private firms is even stronger when the tinkering is not even in furtherance of greater competition, but for political ends. Those core principles should not hastily be sacrificed now to achieve transient political satisfaction against America’s largest tech companies.

The tech sector is a centerpiece of the modern U.S. economy. America’s tech firms have innovated countless new products, created millions of U.S. jobs, and now are simultaneously envied and attacked by our counterparts abroad. As Ronald Reagan observed in 1964, the government rarely does anything as well or as economically as the private sector. And when the government does seek to control the economy it invariably does so through force or coercion of the people. An invitation to allow politicians and bureaucrats to use antitrust law to break up tech companies, to redesign digital products, or to moderate content for the “greater good” will end like most attempts at introducing just a little bit of liberal orthodoxy: the government’s discretion will grow and the people’s ability to check it will fade overtime until it is a figment of its former self. It is the camel’s nose under the tent. Now is the time for conservatives to choose whether they have a newfound faith in central planning or if they will recommit to principles of limited government and free markets.

#### Growth solves numerous existential threats.

Zoë **Baird 20**, A.B. Phi Beta Kappa and J.D. from the University of California, Berkeley, Member of the Aspen Strategy Group, CEO and President of the Markle Foundation, Former Trustee at the Council on Foreign Relations and Partner in the law firm of O’Melveny & Myers, “Equitable Economic Recovery Is a National Security Imperative”, in Domestic and International (Dis)Order: A Strategic Response, Ed. Bitounis and King, October 2020, p. 89-90

Broadly shared economic prosperity is a bedrock of America’s economic and political strength—both domestically and in the international arena. A strong and equitable recovery from the economic crisis created by COVID-19 would be a powerful testament to the resilience of the American system and its ability to create prosperity at a time of seismic change and persistent global crisis. Such a recovery could attack the profound economic inequities that have developed over the past several decades. Without bold action to help all workers access good jobs as the economy returns, the United States risks undermining the legitimacy of its institutions and its international standing. The outcome will be a key determinant of America’s national security for years to come.

An equitable recovery requires a national commitment to help all workers obtain good jobs—particularly the two-thirds of adults without a bachelor’s degree and people of color who have been most affected by the crisis and were denied opportunity before it. As the nation engages in a historic debate about how to accelerate economic recovery, ambitious public investment is necessary to put Americans back to work with dignity and opportunity. We need an intentional effort to make sure that the jobs that come back are good jobs with decent wages, benefits, and mobility and to empower workers to access these opportunities in a profoundly changed labor market.

To achieve these goals, American policy makers need to establish job growth strategies that address urgent public needs through major programs in green energy, infrastructure, and health. Alongside these job growth strategies, we need to recognize and develop the talents of workers by creating an adult learning system that meets workers’ needs and develops skills for the digital economy. The national security community must lend its support to this cause. And as it does so, it can bring home the lessons from the advances made in these areas in other countries, particularly our European allies, and consider this a realm of international cooperation and international engagement.

Shared Economic Prosperity Is a National Security Asset

A strong economy is essential to America’s security and diplomatic strategy. Economic strength increases our influence on the global stage, expands markets, and funds a strong and agile military and national defense. Yet it is not enough for America’s economy to be strong for some—prosperity must be broadly shared. Widespread belief in the ability of the American economic system to create economic security and mobility for all—the American Dream— creates credibility and legitimacy for America’s values, governance, and alliances around the world.

After World War II, the United States grew the middle class to historic size and strength. This achievement made America the model of the free world—setting the stage for decades of American political and economic leadership. Domestically, broad participation in the economy is core to the legitimacy of our democracy and the strength of our political institutions. A belief that the economic system works for millions is an important part of creating trust in a democratic government’s ability to meet the needs of the people.

The COVID-19 Crisis Puts Millions of American Workers at Risk

For the last several decades, the American Dream has been on the wane. Opportunity has been increasingly concentrated in the hands of a small share of workers able to access the knowledge economy. Too many Americans, particularly those without four-year degrees, experienced stagnant wages, less stability, and fewer opportunities for advancement.

Since COVID-19 hit, millions have lost their jobs or income and are struggling to meet their basic needs—including food, housing, and medical care.1 The crisis has impacted sectors like hospitality, leisure, and retail, which employ a large share of America’s most economically vulnerable workers, resulting in alarming disparities in unemployment rates along education and racial lines. In August, the unemployment rate for those with a high school degree or less was more than double the rate for those with a bachelor’s degree.2 Black and Hispanic Americans are experiencing disproportionately high unemployment, with the gulf widening as the crisis continues.3

The experience of the Great Recession shows that without intentional effort to drive an inclusive recovery, inequality may get worse: while workers with a high school education or less experienced the majority of job losses, nearly all new jobs went to workers with postsecondary education. Inequalities across racial lines also increased as workers of color worked in the hardest-hit sectors and were slower to recover earnings and income than White workers.4

The Case for an Inclusive Recovery

A recovery that promotes broad economic participation, renewed opportunity, and equity will strengthen American moral and political authority around the world. It will send a strong message about the strength and resilience of democratic government and the American people’s ability to adapt to a changing global economic landscape. An inclusive recovery will reaffirm American leadership as core to the success of our most critical international alliances, which are rooted in the notion of shared destiny and interdependence. For example, NATO, which has been a cornerstone of U.S. foreign policy and a force of global stability for decades, has suffered from American disengagement in recent years. A strong American recovery—coupled with a renewed openness to international collaboration—is core to NATO’s ability to solve shared geopolitical and security challenges. A renewed partnership with our European allies from a position of economic strength will enable us to address global crises such as climate change, global pandemics, and refugees. Together, the United States and Europe can pursue a commitment to investing in workers for shared economic competitiveness, innovation, and long-term prosperity.

The U.S. has unique advantages that give it the tools to emerge from the crisis with tremendous economic strength— including an entrepreneurial spirit and the technological and scientific infrastructure to lead global efforts in developing industries like green energy and biosciences that will shape the international economy for decades to come.

### PIK

#### We affirm the reading of the 1AC minus Bo Burnham.

Kim Renfro, 6-18-2021, "Bo Burnham's growth shows the painfully low bar for white men," Insider, https://www.insider.com/bo-burnham-low-bar-for-white-men-in-hollywood-2021-6

When Bo Burnham speaks about [social media,](https://www.youtube.com/watch?v=_XHRJJe2Kl0&t=5s) or [anxiety](https://www.youtube.com/watch?v=GbS-7jUBJGY&t=92s), or [the casual predatory behavior of men](https://www.huffpost.com/entry/bo-burnham-promising-young-woman_n_5fda50f9c5b6094c0fee9f42), or [his own privilege](https://www.youtube.com/watch?v=WLMgbV3uaz8&t=50s), I can't help but smile.

His persona is drenched in a mix of charming self-awareness and self-loathing, because he seems to know it's wise to get ahead of criticism that will inevitably be lobbed at him.

Burnham's comedy career has included a fair share of offensive jokes. But people (like me) tend to not only give Burnham a "pass," but praise him for acknowledging his past failings.

The success of Burnham's introspective approach to comedy shows just how low the bar is for white male comedians when it comes to problematic jokes, and how easy it is for men to hold themselves accountable.

In his 2021 special 'Inside,' Burnham sings a whole parody song about his past problematic jokes

Burnham's comedy flowchart in "Inside" says that if a joke targets "those who have been disenfranchised in a historical, political, social, economic, and/or psychological context" then it's "not funny." Netflix

"Inside" is a comedy musical, where Burnham oscillates between different characters in parody songs and seemingly genuine expressions of his experience with mental disorders like anxiety.

In the song "Comedy," Burnham adopts a white-savior persona to parody both himself and other white comedians, deciding that he should heal the world with comedy instead of giving away his money. (The real Burnham [posted twice on Instagram last June](https://www.instagram.com/p/CA9jy7QFGGN/) encouraging his one million followers to donate money to various funds that support racial justice.)

Burnham sings about how he's "a special kinda white guy" who will use his privilege for good, and then seconds later admits that "American white guys [have] had the floor for at least 400 years, so maybe I should just shut the f--- up."

The irony is front and center because of course he's not shutting the f--- up. We're watching him in a [Netflix](https://www.businessinsider.com/how-to-use-netflix-tips-and-tricks) special.

And that meta-commentary only deepens when Burnham addresses his past in a parody song titled "Problematic."

Burnham performing "Problematic" in his new Netflix special, "Inside." Netflix

"I wrote offensive s--- and I said it," he sings. "Father, please forgive me, for I did not realize what I did or that I'd live to regret it."

"Times are changing and I'm getting old," he continues. "Are you gonna hold me accountable?"

The final shot of the song is him with a cross projected over his body, parodying white people who think that by crucifying themselves first they're somehow freed from the consequences of their actions.

At the same time, there's an earnestness beneath the vapid surface of the song, like he really is wondering if people are going to try and hold him accountable for his past.

Burnham has been criticized about his offensive jokes in the past

Burnham watching his own YouTube video in "Inside." Netflix

Before the song "Problematic" starts in the special, Burnham shows himself watching his first viral YouTube video on a projector.

The song from that video, "My Whole Family," [was written in 2006. It's about how his whole family thinks he's gay](https://www.youtube.com/channel/UC81hVmI5eEBIt3s3HQpJd_w?feature=emb_ch_name_ex).

Burnham's earlier comedy songs, seemingly designed to shock his listeners into laughing, were full of wordplay and wit.

"Burnham is an equal-opportunity offender," a [news report from 2009 said](https://www.columbiatribune.com/article/20090304/News/303049607). "Jokes about abortion clinics are told back-to-back with jokes about civil rights leaders Martin Luther King Jr. and Rosa Parks. For the religious crowd, he packed in jokes about pleasuring himself while reading the Bible. He, of course, is playing characters throughout his performance, but for some the irony is thin."

At the time, some students protested Burnham's appearances at their colleges. But others believed his style was effective at exposing ["the hypocrisies inherent in contemporary life" and called his comedy "not vitriolic but satirical,"](https://cornellsun.com/2010/10/04/politically-incorrect-politically/) as Emily Greenberg of Cornell Daily Sun described it in 2010.

Bo Burnham performing in the 2016 Netflix special "Make Happy." KC Bailey/Netflix

His later comedy specials like 2013's "what." and 2016's "Make Happy" are peppered with the f-slur, in the context of Burnham hearing that word lobbed at him by bullies. He also had a whole bit about racism among white people where [he lured the white members of his audience into saying the n-word](https://www.youtube.com/watch?v=AI4AC50n6cU) by doing a series of call and response prompts about things white people like.

"Our favorite chips, salt and vi—" he says, inviting the crowd to finish his sentence.

After people finished the word "vinegar," Burnham has the auditorium house lights go up so he can shame everyone.

"Wow, who said it?" he said. "Get the cameras on them. Your grandkids are gonna see this one and know what kind of a bigot their grandfather or grandmother were."

Burnham in a 2006 YouTube video, and his in newest Netflix special "Inside." YouTube and Netflix

In a [2018 interview](https://www.youtube.com/watch?v=RUaslCv-f64&t=148s), Burnham said he was "happy to be an example" of someone who once used edgy humor that was a "little homophobic" and "racially insensitive," but then learned better.

When he appeared on NPR's "Fresh Air" in 2018, the host played a clip of "My Whole Family." Burnham took his headphones off because hearing that old material literally made him sweat.

"The cultural standards of what is appropriate comedy and also the inner standards of my own mind have changed rapidly since I was 16," Burnham said at the time.

Gross asked Burnham if people "misinterpreted" the song and thought it was homophobic.

"I don't know that it's not," he said. "I don't defend my 16-year-old comedy at all ... I have a lot of material from back then that I'm not proud of and I think is offensive and I think is not helpful. I do not think my intention was homophobic, but what is the implicit comedy of that song if you chase it all the way down? I don't think it's perfectly morally defendable [sic]."

Burnham's ability to largely evade criticism by acknowledging it first is the bare minimum celebrities in his position could do, and yet it's clearly working in his favor.

Burnham. Matt Winkelmeyer/Getty Images for GQ

In his 2016 "Make Happy" special, Burnham sings a song called "Straight White Male" that gives a parody spin on the way straight white men will try to deny their privilege and reject pleas to cede some of their power for the betterment of society.

"Can't you just leave us alone, and also 'no' to the things you ask for," he sings.

The songs ends with a simple, hilarious final jab: "We used to have all the money and land, and we still do but it's not as fun now."

I used to watch this video and sit in awe of Burnham's ability to satirize the clear power dynamics of our country well before most of his white peers had caught onto the conversation. He wrote that song before the election of Donald Trump and the #MeToo movement, and was able to needle patriarchal standards.

But is simply being aware of one's privilege enough?

In the "Inside" special, Burnham shows his hand and explains why he stays ahead of criticism in a layered reaction video.

"I'm criticizing my initial reaction for being pretentious, which is honestly a defense mechanism," he says. "I'm so worried that criticism will be levied against me that I levy it against myself before anyone else can."

He continues: "I think that, 'Oh if I'm self-aware about being a douchebag it'll somehow make me less of a douchebag.' But it doesn't. Self-awareness does not absolve anybody of anything."

If it doesn't, then why are we so fast to absolve Burnham?

Bo Burnham in his new Netflix special, "Inside." Netflix

Relatively few celebrities, let alone white men, do the work of interrogating their own privilege publicly. So when Burnham comes along, we're eager to reward him.

In virtually every interview Burnham has given in the past few years, it feels clear (to me, at least) that he's not just paying lip service to being "woke," but genuinely thinking about his role in the entertainment world and the privileges he's afforded.

It's an admirable thing to watch happen with an artist you love, and his actions have deepened my appreciation of his latest works like the movie "Eighth Grade" and his new 2021 Netflix special. Both works show that he's capable of creating nuanced, thoughtful comedy and art that no longer punches down but up.

At the same time, I sometimes sit back and realize that my internal praise for that behavior shows just how low the bar is for men like Burnham.

We should be able to recognize and support genuine growth and self-reflection when we see it from the people who make up our entertainment industry, but also keep in mind which standards are being applied to which types of celebrities.

How can we get to a point where women in the same industry, particularly women of color, get handed the same sets of opportunities and repeat Netflix specials even after people have decided they've made career mistakes? You only need to look at entertainers like [Mo'Nique](https://www.insider.com/monique-and-whoopi-goldberg-talk-on-the-view-about-netflix-boycott-2018-2) and [Kathy Griffin](https://www.insider.com/cnn-dropped-kathy-griffin-new-years-eve-trump-photo-2017-5) to see the double standard that exists.

I don't have answers right now. But the questions are worth asking.

### K

#### The aff commodifies their academic theory, trading it for the ballot --- the alternative is a rejection of their call for the ballot

Bryant 13—philosophy prof at Collin College (Levi, The Paradox of Emancipatory Political Theory, <http://larvalsubjects.wordpress.com/2013/05/31/the-paradox-of-emancipatory-political-theory/>)

There’s a sort of Hegelian contradiction at the heart of all academic political theory that has pretensions of being emancipatory. In a nutshell, the question is that of how this theory can avoid being a sort of commodity. Using Hegel as a model, this contradiction goes something like this: emancipatory political theory says it’s undertaken for the sake of emancipation from x. Yet with rare exceptions, it is only published in academicjournals that few have access to, in a jargon that only other academics or the highly literate can understand, and presented only at conferencesthat only other academics generally attend. Thus, academic emancipatory political theory reveals itself in its truth as something that isn’t aimed at political change or intervention at all, but rather only as a move or moment in the ongoing autopoiesis of academia. That is, itfunctions as another line on the CVand is one strategy through which the university system carries outits autopoiesis or self-reproduction across time. It thus functions– the issue isn’t here one of the beliefs or intentions of academics, but how things function –as something like a commodity within the academic system. The function is not to intervene in the broader political system– despite what all of us doing political theory say and how we think about our work –but rather to carry out yet another iteration of the academic discourse (there are other ways that this is done, this has just been a particularly effective rhetorical strategy for the autopoiesis of academia in the humanities). Were the aim political change, then the discourse would have to find a way to reach outside the academy, but this is precisely what academic politicaltheory cannot do due to the publication and presentation structure, publish or perish logic, the CV, and so on. To produce political change, the academic political theorist would have to sacrifice his or her erudition or scholarship, because they would have to presume an audience that doesn’t have a high falutin intellectual background in Hegel, Adorno, Badiou, set theory, Deleuze, Lacan, Zizek, Foucault (who is one of the few that was a breakaway figure), etc. They would also have to adopt a different platform of communication. Why? Because they would have to address an audience beyond the confines of the academy, which means something other than academic presses, conferences, journals, etc. (And here I would say that us Marxists are often the worst of the worst. We engage in a discourse bordering on medieval scholasticism that only schoolmen can appreciate, which presents a fundamental contradiction between the form of their discourse– only other experts can understand it –and the content; they want to produce change). But the academic emancipatory political theorist can’t do either of these things. If they surrender their erudition and the baroque nature of their discourse, they surrender their place in the academy (notice the way in which Naomi Klein is sneered at in political theory circles despite the appreciable impact of her work). If they adopt other platforms of communication– and this touches on my last post and the way philosophers sneer at the idea that there’s a necessity to investigating extra-philosophical conditions of their discourse –then they surrender their labor requirements as people working within academia. Both options are foreclosed by the sociological conditions of their discourse. The paradox of emancipatory academic political discourse is thus that it is formally and functionally apolitical. At the level of its intention or what it says it aims to effect political change and intervention, but at the level of what it does, it simply reproduces its own discourse and labor conditions without intervening in broader social fields (and no, the classroom doesn’t count). Unconscious recognition of this paradox might be why, in some corners, we’re seeing the execrable call to re-stablish “the party”. The party is the academic fantasy of a philosopher-king or an academic avant gard that simultaneously gets to be an academic and produce political change for all those “dopes and illiterate” that characterize the people (somehow the issue of how the party eventually becomes an end in itself, aimed solely at perpetuating itself, thereby divorcing itself from the people never gets addressed by these neo-totalitarians). The idea of the party and of the intellectual avant gard is a symptom of unconscious recognition of the paradox I’ve recognized here and of the political theorist that genuinely wants to produce change while also recognizing that the sociological structure of the academy can’t meet those requirements. Given these reflections, one wishes that the academic that’s learned the rhetoric of politics as an autopoieticstrategy for reproducing the university discourse would be a little less pompous and self-righteous, but everyone has to feel important and like their the best thing since sliced bread, I guess.

## Case

### AT: Bifo

#### The aff leads to a violent transition – that turns both their racial fascism and environment impacts

Bifo 11 - professor of social history of communication at the academia di belle arti of Milan (franco bifo berardi, after the future,)

The proliferation of singularities (the withdrawal and building of NonTemporary Autonomous Zones) will be a pacific process, but the conformist majority will react violently, and this is already happening. The conformist majority is frightened by the fleeing away of intelligent energy and simultaneously is attacking the expression of intelligent activity. The situation can be described as a fight between the mass ignorance produced by mediatotalitarianism and the shared intelligence of the general intellect. We cannot predict what the outcome of this process will be. Our task is to extend and protect the field of autonomy, and to avoid as much as possible any violent contact with the field of aggressive mass ignorance. This strategy of 119 non-confrontational withdrawal will not always succeed. Sometimes confrontation will be made inevitable by racism and fascism. It is impossible to predict what has to be done in the case of unwanted conflict. Non-violent reaction is obviously the best choice, but it will not always be possible. The identification of wellbeing with private property is so deeply rooted that a barbarization of the human environment cannot be completely ruled out. But the task of the general intellect is exactly this: fleeing from paranoia, creating zones of human resistance, experimenting autonomous forms of production based on high-tech-low-energy production – whilst avoiding confrontation with the criminal class and the conformist population. Politics and therapy will be one and the same activity in the coming time. People will feel hopeless and depressed and panicking, because they are unable to deal with the post-growth economy, and because they will miss the dissolving modern identity. Our cultural task will be attending to those people and taking care of their insanity, showing them the way of a happy adaptation at hand. Our task will be the creation of social zones of human resistance that act like zones of therapeutic contagion. The process of autonomization has not to be seen as Aufhebung, but as therapy. In this sense it is not totalizing and intended to destroy and abolish the past. Like psychoanalytic therapy it is rather to be considered as an unending process.

#### Empirics disprove Bifo’s argument—there has never been a sustained decline in capitalism—300 years of history proves capitalism always bounces back and adapts

### Presumption

#### Double bind – either

#### a.) Their impacts are inevitable, and you vote neg on presumption

Bifo 11 - professor of social history of communication at the academia di belle arti of Milan (franco bifo berardi, after the future,)

Actually, I do not have a happy end for my fabulation. I do not see in the foreseeable future any discernable subjectivation, resurrection of consciousness, or emancipatory form. And I do not like to cheat at this game, I do not like the empty words of self-reassurance, and the rhetoric of the multitude. So I prefer to tell the truth, at least, the limited truth as I see it: there is no way out, social civilization is over, the neoliberal precarization of labor and the mediadictatorship have destroyed the cultural antibodies that in the past made resistance possible. As far as I know But what I know is only what I can see from my limited point of observation, of course. During the 20th century the moral revolt against exploitation was based on the realistic prospect of the autonomy of society from the cultural and economic domination of capitalist rule. This prospect was based on a realistic approach to the analysis of the actual condition. Then something changed: during the last decades I have witnessed the mutation induced by the capitalist economy, and I have come to think that this mutation is irreversible: it has not only affected the social sphere, but also the semiotic, biological and psychic sphere. Therefore my knowledge and my understanding disown the possibility of an alternative, of an escape from the hell emerging as the legacy of thirty years of unfettered capitalist rule.

#### b.) They aren’t inevitable, but “Re-discovering togetherness” and singing kumbaya does nothing, cedes the political, recreates the problems of capital – collective political contestation within the state is key to redressing the harms of the aff

Lear 12 (Ben, Shift editor, researcher, “ Lifeboat Communism – A Review of Franco “Bifo” Berardi’s After the Future” May 18, 2012 https://viewpointmag.com/2012/05/18/lifeboat-communism-a-review-of-franco-bifo-berardis-after-the-future/)//kyan

What does the end of the future mean for rad­i­cal pol­i­tics? It is at this point that Bifo’s argu­ment becomes prob­lem­atic. In an argu­ment that inter­sects with groups such as Tiqqun, Bifo argues that we must see “Com­mu­nism as a neces­sity in the col­lapse of cap­i­tal.” Dis­tant from the vol­un­tarism of pre­vi­ous forms of Com­mu­nist pol­i­tics, this “post-growth Com­mu­nism” will be best under­stood as a nec­es­sary response to capital’s refusal of labour. Cut adrift from the “oppor­tu­nity” to work, with wel­fare sys­tems dis­man­tled, Bifo argues that we will wit­ness the pro­lif­er­a­tion of zones of auton­omy respond­ing to the needs of an increas­ingly pre­car­i­ous and super­flu­ous social body. Com­mu­nist pol­i­tics will emerge from an exo­dus, both vol­un­tary and com­pul­sory, from a stag­nat­ing and increas­ingly preda­tory state-capital nexus. This exo­dus is both social, in the devel­op­ment of an alter­na­tive infra­struc­ture, and per­sonal, in the with­drawal from the hyper-stimulation of the semi­otic econ­omy. Bifo aban­dons hope in col­lec­tive con­tes­ta­tion at the level of the political. Bifo’s pol­i­tics could be described as a kind of “lifeboat com­mu­nism.” As the cri­sis rip­ples, mutates, and deep­ens, Bifo sees the role of com­mu­nism as the cre­ation of spaces of sol­i­dar­ity to blunt the worst effects of the cri­sis of social repro­duc­tion. Gone is the demand for a bet­ter world for all, the lib­er­a­tion of our col­lec­tive social wealth, or the unlock­ing of the social poten­tials of tech­nol­ogy. Rather, Bifo’s pol­i­tics are based around insu­lat­ing a nec­es­sar­ily small por­tion of soci­ety from the dic­tates of cap­i­tal. By with­draw­ing from the polit­i­cal sphere, we accept the like­li­hood of los­ing the final scraps of the wel­fare state and con­cede the ter­rain of the polit­i­cal to zom­bie pol­i­tics and preda­tory cap­i­tal. Rather than seek­ing new forms of orga­ni­za­tion to re-enter the polit­i­cal stage, Bifo seems to sug­gest that we seek shel­ter beneath it as best we can. This shy­ing away from the polit­i­cal stage is the weak­ness at the heart of the book. Recent erup­tions of polit­i­cal strug­gle have cap­tured the col­lec­tive imag­i­na­tion because they demon­strate that polit­i­cal con­tes­ta­tion is still pos­si­ble today, in spite of the obsta­cles Bifo has described. The Occupy move­ment and the upris­ings in the Mid­dle East and North Africa have res­onated with all those who still have hope in col­lec­tive strug­gle. Although these move­ments have encoun­tered vary­ing prob­lems, to which we must develop solu­tions, they dis­pel the idea of an unchange­able present. The cur­rent block­ages to suc­cess­ful organ­is­ing have been shown to be strate­gic and tac­ti­cal, not ter­mi­nal. Mis­di­ag­nos­ing the cur­rent iner­tia of post-political pub­lic life as a ter­mi­nal con­di­tion leads the left towards an evac­u­a­tion of the polit­i­cal, while we should instead reassert its pri­macy. If we aban­don any hope of fight­ing in, against, and beyond the exist­ing archi­tec­ture of the state and cap­i­tal, and instead seek refuge in small com­munes, and go-slow prac­tices, we aban­don all real hope of a gen­er­al­ized, or gen­er­al­iz­able, eman­ci­pa­tory pol­i­tics

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. Although Bifo’s analy­sis of the dif­fi­cul­ties of col­lec­tive action res­onates with all of us who have attempted to orga­nize strug­gles in the past few decades, the pro­posal for a sim­ple with­drawal from cap­i­tal­ism is a bleak pol­i­tics indeed – which, at its most opti­mistic, calls for an orderly default by por­tions of the pro­le­tariat. The hori­zons of com­mu­nist pol­i­tics appear much nar­rower when cap­i­tal­ism is no longer seen as the repos­i­tory of a vast store of social wealth await­ing col­lec­tive redis­tri­b­u­tion, but rather rede­fined as an unas­sail­able site of uni­ver­sal and per­ma­nent aus­ter­ity com­bined with widen­ing social redundancy. It is hard to imag­ine a net­work of self-organized projects and sys­tems sup­port­ing the major­ity of the pop­u­la­tion in the con­text of an increas­ingly preda­tory cap­i­tal­ism. Emerg­ing from the and iso­lated left­ist scenes, this lifeboat com­mu­nism will by its very nature have a lim­ited car­ry­ing capac­ity, as the anar­chist expe­ri­ence in post-Katrina New Orleans attests. The lifeboats that Bifo calls for will undoubt­edly be too small and makeshift to har­bor us all. The cri­sis is twofold. It is a cri­sis of cap­i­tal­ist prof­itabil­ity, and of an increas­ingly pre­car­i­ous and sur­plus global pro­le­tariat whose repro­duc­tion (as both labour and body) is under threat. It is unlikely that the pro­lif­er­a­tion of com­munes, squats, food co-ops, file shar­ers, urban gar­den­ers, and vol­un­tary health ser­vices will bring forth a new, bet­ter world. But while the cur­rent seem­ingly post-political sit­u­a­tion throws up mas­sive obsta­cles to orga­niz­ing, there is still a poten­tial for col­lec­tive con­tes­ta­tion. The cap­i­tal­ist state, racked by its own legit­i­macy cri­sis and weekly polit­i­cal scan­dals, is more vul­ner­a­ble than it appears. We need only recall the period of unex­pected hope built by stu­dents in Britain, occu­piers in Oak­land, and vast swathes of North Africa and the Mid­dle East dur­ing the past two years. These move­ments were mobilised through the betrayal of a vision of the future – but along­side their rage, they put forth a hope which can guide our politics. The task at hand is to unlearn old behav­iour and to forge new tac­ti­cal and organ­i­sa­tional weapons for strug­gle. Bifo’s con­tri­bu­tion is a timely and chal­leng­ing one, but it ulti­mately leads us back towards a DIY cul­ture and “out­reach” pol­i­tics. As our move­ments come to terms with these lim­its, we must also hold onto the belief that lux­ury for all is pos­si­ble. The social poten­tial of unfilled blocks of flats, emerg­ing tech­nolo­gies like [3D-printing](http://www.open-designism.com/profiles/blogs/finally-it-has-happened-the-pirate-bay-goes-product-bay), and the desires of the mil­lions of under­em­ployed, should remind us of this. This will not be pos­si­ble with­out a col­lec­tive strug­gle against the state and the demands of cap­i­tal, one which simul­ta­ne­ously defends what we have and attempts to move beyond it. A retreat to lifeboat pol­i­tics is both pre­ma­ture and a self-fulfilling prophecy. While Bifo cor­rectly analy­ses the cur­rent con­junc­ture – clearly iden­ti­fy­ing the post-political state, the weak­ness of the Left, the cri­sis of prof­itabil­ity and new forms of labour, and their impact on the sub­ject – his polit­i­cal pre­scrip­tions lead us in the wrong direc­tion. Just as Bifo does, we place the strug­gle against work at the cen­ter; but we can also seek to lib­er­ate social wealth, rather than insu­late a lucky few from the rav­ages of cap­i­tal. Rather than “No Future,” we must raise a dif­fer­ent ban­ner: “The future’s here, it just needs reorganizing.”

### Cap Turn

#### Cap is sustainable, inevitable, and key to solve the environmental crisis – alternatives fail and ensure environmental collapse

-at: timeframe, thermodynamics, rebound effects

Bosch and Schmidt 19 (Stephan, Institute of Geography, Chair for Human Geography, University of Augsburg, and Matthias, Institute of Geography, Chair for Human Geography, University of Augsburg, “Is the post-fossil era necessarily post-capitalistic? – The robustness and capabilities of green capitalism”, Ecological Economics, Vol. 161, July) DB

Concerning the second dimension of criticism, Section 4 illustrates how the rejection of green capitalism overlooks promising approaches to surmounting the environmental crisis. On the one hand, we argue that in face of the given narrow time slot as well as the prevailing political strategies, it is more realistic and pragmatic to primarily assess the efficiency of market-oriented solutions. Even though in principle we take sufficiency to have the best effectiveness regarding the solution of ecological and social problems, we still do not count on people's willingness to live in greater moderation within due time. On the other hand, we therefore presume that there are no other suitable economic frame conditions for surmounting the crisis than those offered by the capitalist social order. This perspective is based on the assumption that innovations, which above all emanate from thriving economies (Wangler, 2013), are highly relevant for overcoming the environmental crisis. As growth, innovation, and the development of new industries are to be seen as directly related to the export sector as well as the utilisation of comparative advantages (Bathelt and Glückler, 2012), we therefore also strictly object to the concept of autonomy. Moreover, we take innovation and the aspects of growth, entrepreneurship, and democratic processes of negotiation related to it (cf. Gailing et al., 2013; Walter and Gutscher, 2013; Raven et al., 2016), to be essential for the implementation of regenerative energy systems and social welfare (Iversen, 2005; Nasirov et al., 2017). Our presumption that innovations occur more likely and more frequently within a capitalist, than in alternative social orders (e.g. Harris, 2013: socialist markets), is derived from Schumpeter's notion of competitive capitalism, which he distinctly sets apart from trustified capitalism. Competitive capitalism is about fertile destructive impulses emanating from enthusiastic entrepreneurs who are ready to take risks, and act solution-oriented. These impulses may revolutionise the economic process: “This process of Creative Destruction is the essential fact about capitalism” (Schumpeter, 2009). Based on Schumpeter's ‘theory of economic development’ (cf. Herzog and Honneth, 2016; Schumpeter, 1994; Schumpeter, 2009) – which, according to Marques (2008), represents the original idea of innovation-driven capitalism – we analyse capitalism's robustness to the downfall of fossil energy; moreover, we investigate its potential contributions to ecologic sustainability. Yet we want to go beyond Schumpeter's perspective, which fixes on the entrepreneur, and take a closer look at the role of state policy in Section 5. Our argument is that creative entrepreneurs and markets alone will not suffice to specifically and quickly initiate the change of the energy system driven by innovation. We state the thesis that an active role of the state is needed which relies on political continuity when it comes to promoting environmental innovation and creates stable institutional frame conditions. In a last step, we will show that during the deployment of regenerative energy systems, social aspects have hitherto been given too little attention by actors of state and politics and that national objectives were uncoupled from local contexts. To achieve a successful low-carbon transition, these deficits need to be corrected. In principle, this seems possible, as market-economically oriented regenerative energy systems have often been the result of open-minded democratic negotiations. In Section 6, the findings of the study will be summarised. 2. The crisis of fossil energies and capitalism Energy sources are a central element of humankind's materialistic history and elementary changes in the relevance of energy carriers have always led to extensive economic and societal transformations (Bridge et al., 2013). Exemplarily, the drastic increase in productivity during industrialisation cannot be explained without the revolutionary change of the energy system towards fossil fuels (Osterhammel, 2011). Ever since, economic growth is accompanied by an increasing consumption of finite energy resources and non-energetic primary materials (Altvater, 2005). Accordingly, questions of economic development must always be regarded in the context of the energy system, as well as the circulation of energetic and non-energetic crude materials within it (Meadows et al., 2004). Altvater (2007) takes the relationship between humans and nature to be crisis-laden because a limited stock of energy resources within the Earth's thin crust forms the basis of the present economic system. This limitation implied grave consequences for the global ecology. The apparently crisis-laden interrelation of nature and economy is also highlighted in ‘Anthropocene or Capitolocene?’ edited by Moore (2016), in which the impacts of capitalism are regarded as significant enough to be marked as their own geochronological era. The main point of criticism is capitalism's orientation to industrial scaling and quantitative growth (Mathews, 2011), which likely will end abruptly once Earth's limited capacities will have been depleted by the exponential growth of population and economy (Daly, 1995). Yet not only the finiteness of energy carriers, but also the accumulation of extreme meteorological incidents, mass mortality of species, and sea level rise represent impediments of stable economic growth (McCarthy, 2015). The scenarios concerning trends of the world's condition developed by the Club of Rome illustrate that keeping a high wealth level can only be accomplished if a radical change in societal attitude concerning the valuation of growth will take effect (Meadows et al., 2004). Stopping environmental destruction while maintaining the present economic system appears to be impossible, since fossil energy carriers provide globally acting companies with the opportunity to spatially separate production and consumption as well as to externalise the manifold ecological expenses (Chisholm, 1990). Bridge (2010) rates the heated debates about Peak Oil as ecologically motivated forebodings of a new energy order in which the modern industrial nations are going to free themselves of their dependence on oil. For Neomarxist groups, the end of the age of mineral oil even represents an apocalyptic turn of eras during which nature were going to take vengeance on the ecological arrogance of capitalism. According to Bettini and Karaliotas (2013), the narration of Peak Oil thereby attains a symbolism that reaches far beyond mathematical calculations of the scarcity of fossil energy sources, being extended to a general criticism of a system that is exclusively oriented on growth. McCarthy (2015) sees the chance of a post-fossil capitalism especially in the commodification of wind, sunlight, geothermal heat, and waves. This way, nature would again be introduced into the cycle of capital. Van den Bergh (2011) presumes that this may be a practicable approach, perceiving criticism of market economy and capitalism as too radical and warns of one-sidedly problematising growth without simultaneously pointing out realisable alternative ways. He therefore prefers the ‘a-growth-concept’, which assumes a neutral position on growth, trying to create social as well as ecological sustainability by means of pricing policy, environmental agreements, and education initiatives. The commodification of nature, however, is rejected by the degrowth movement, as the comparison of the Montreal Protocol, which is based on regulations (ozone) with the Kyoto Protocol based on trade had shown a greater effectiveness of regulative measures (Kallis, 2011). Concerning the market's capabilities, North (2010) additionally speaks of the neoliberal enthusiasts' mindless faith in technology, who were mistakenly convinced that creative destruction is sufficient to face the societal challenges posed by Peak Oil and the climate crisis. Sarkar and Kern (2008) limit the possibilities of the global community's further development to the two options ‘eco socialism’ or ‘barbarism’. This rhetoric stylises capitalism as the image of the enemy: on the one hand, it represents the cause of the global ecological crisis due to the exploitation of natural resources – and for that reason alone were not to be maintained (Daly, 2005) – while on the other hand not offering a suitable social framework for mastering the crisis (Kallis et al., 2009). Hence, the development of a symbiotic economy (Garcia-Olivares and Sole, 2015) rooted beyond obsessive economic growth (Buch-Hansen, 2018) is promoted. Renewable energies were apt to meet these requirements since they can be developed through collaborative bottom-up mechanisms on a communal level, therefore enabling the decentralisation and democratisation of energy supply (Rifkin, 2013). In fact, this may be an option. However, in the following, we want to demonstrate that capitalism is not only very robust to crises, but is also able to contribute to the solution of the environmental crisis. 3. Robustness of capitalism 3.1. Space-time compression We will now show that the possibility of increasing productivity does not end with the transition to a regenerative energy system, but only needs to be embedded into new logistic-infrastructural contexts. In this, we contradict Altvater (2007), Huber (2009) and North (2010), who claim that capitalism could expand only on the basis of fossil fuels, since, due to the global transportability of oil, gas, and coal, entrepreneurial actions are no longer bound to the local availability of energy resources, but range globally. Furthermore, the usage of fossil energy carriers is not subject to daily or seasonal fluctuations. Transportability and baseload capacity hence lead to space-time compression (Harvey, 1996), as products can be generated in ever shorter intervals of time. Following this logic, the limitation of the fossil resource basis inevitably brings about the end of the capitalistic system. It remains undisputed that energy flow within a solar-based energy system is hard to control (Georgescu-Roegen, 1971). Most forms of renewable energies are intermittent sources, whose contribution to the energy mix are subject to the rhythms of sun, wind, precipitation, and tides (Fares, 2015). Adapting energy production to demand, a fundamental prerequisite of continuous economic growth, thus becomes a major challenge. What Altvater (2007), Huber (2009) and North (2010) actually do not include in their considerations, are the numerous technological innovations for the stabilisation of regenerative energy systems. After all, with biomass and geothermal power, two energy carriers capable of providing base load are at hand (Matek and Gawell, 2015), which may, in the form of regenerative combined power plants, support the weather-dependent energy sources sun and wind (Palensky and Dietrich, 2011; Ramchurn et al., 2011). The numerous energy storage technologies are also important, albeit only few of these have reached industrial maturity. In principle, mechanical, chemical, electrical, or thermal kinds of storage are being discerned (Hadjipaschalis et al., 2009). Compressed air and pumped storage power plants with efficiency levels of up to 80% are especially promising (Anagnostopoulos and Papantonis, 2008). Research is also conducted on the conversion of surplus regenerative power into methane or hydrogen (Jensen et al., 2007), by which the bidirectional operation of the power and gas network is made possible, allowing for transportability as well as baseload capacity within large spatial units. Space-time availability may also be augmented by the development and capacity expansion of high-voltage transmission lines (Walter and Bosch, 2013). Harriss-White and Harriss (2007) have pointed out at an early point, that the existent grids, having been developed following a monopolistic logic, are outdated and incapable of integrating decentrally-produced electricity with strong fluctuations. These deficits, however, are successively being corrected. E.g., Germany's South, which is poor in wind but strong in terms of industry is being provided with direct access to the big wind energy off-shore potentials in the North as well as to the storage power plants in Scandinavia (cf. Fig. 1). The possibilities of intercontinental power transport from regenerative sources have been thoroughly investigated by DLR (2006) and Grossmann et al. (2014). Both energy storage and the development of the power grid thus will successively reverse the present space-time limitations of regenerative energy systems. The two domains, however, are not isolated from one another, but are coordinated via smart grids. Solomon and Krishna (2011) emphasise that smart grids are superbly suitable for the implementation of market-based approaches, so that an innovation-driven mass market for energy efficiency technologies could be anticipated. Smart grids also provide the possibility of no longer designing the mass production of renewable energy technologies on a fossil basis, but by the usage of renewable energy. While the production of the first generation of regenerative technologies was based on fossil energy, in future, the possibilities of energy storage, the almost unlimited energy potential of a solar-based economy, and the combination of both aspects through smart grids will ensure the flexible provision of regenerative energy at every production site without limits of time. Yet in order to optimise the flows of energy and material in smart grids, concepts of closed crude material cycles are needed, which, in the sense of the cradle-to-cradle approach (cf. Section 4), allow the reintroduction of used materials (e.g. old wind power plants made of renewable resources) to the biosphere. Thus, the problem of externalisation of ecological costs can be minimised. Summing up, the increase of productivity and stable economic growth within regenerative energy systems seems possible. Still, it remains to be emphasised that large-scale energy projects also entail negative social consequences. E.g., Yenneti et al. (2016) have shown that the Charanka solar park in Gujarat, India, was erected on areas that the local population's livelihood had depended on for decades. The refuse of access to these areas, as well as the inhabitants' successive dispossession through state measures thus are direct results of the Indian economy's ecological modernisation (Levien, 2013). In this context, Baka (2013) speaks of “energy dispossessions”, a phenomenon which has also been observed with large-scale wind energy parks (Avila, 2018; Cowell, 2010). The socio-material impact of economic modernisation on the local population, whose lives strongly depend on agricultural land use, are often insufficiently respected (Yenneti et al., 2016), so that the dubious impression was given that environmental protection and economic growth based on efficient technologies, competition, and state measures could go with one another without social side effects. Remarkably, the controversial energy mega-projects especially in the global South, are not the cause of the development of new power asymmetries and conflicts, but rather reproduce and harden long-standing social disparities and injustices (Avila, 2018). According to Bradley and Hedrén (2014), a low-carbon transition hence misses its aims if it is only about modernising the energy system without likewise transforming the underlying social structures. 3.2. Crisis as an element of capitalist social order We hold the view that the occurrence of crises in capitalism is not due to it being an ailing, doomed economic order; nor is it a proof of capitalism's ineptitude for meeting ecological challenges. Instead, we deem that crisis is a fundamental element of the capitalist social order that actually provides a chance for readjusting economic processes. Harvey (2011) explains that anything blocking the circulation and accumulation of capital may pose a threat to the capitalist system and induce a fundamental crisis. The finiteness of fossil fuels is a crisis of this kind (McCarthy, 2015). Altvater (2007) is convinced that capitalism will not be able to overcome this crisis; therefore, future technologic progress had to be embedded in a non-fossil, non-capitalist framework. Kallis (2011) also emphasises that the approach to a steady state (cf. Daly, 1991, Daly, 2005) will transform the institutional preconditions of property, work, banking, and distribution to such an extent that in the end, it will be impossible to still identify them as capitalistic. With regard to Kallis' doubts concerning the institutional robustness of capitalism, Schumpeter points out that precisely the ups and downs of industrial development, which are the outcomes of successful innovations' intensifying competition, enable progress (Herzog and Honneth, 2016). As crises therefore represent an immanent part of the capitalist system, an environmental and resources-related crisis caused by the capitalistic process does not provide sufficient evidence to suggest a possible downfall of the capitalistic social order. The crisis might even be taken as proof of an economic cycle, if it is regarded as a period of depression between the dwindling fossil and the emerging regenerative age. Böhm et al. (2012) and McCarthy (2015) confirm that capitalism is capable of overcoming even fundamental crises, actually using these as starting points of its further expansion. Concerning the environmental crisis, Harriss-White and Harriss (2007) also concede that the deployment of renewable energies holds the potential of founding a new form of capitalism that is characterised by a much lower degree of materialistic lavishness. Bettini and Karaliotas (2013) emphasise that from a neo-liberal point of view, the accusation of capitalism bringing about a resources-related and environmental crisis does not at all provoke self-doubts. Rather, it caused the profitable marketing of adequate approaches to solutions in the field of resource depletion and environmental impacts to move into economic focus. Even Altvater (2007) points out that the externalised effects of production and consumption on nature become relevant for companies once they jeopardise profitability and accumulation. In that case, environmental problems and their solutions can actually be made part of capitalist logic. Solomon and Krishna (2011) are convinced that in order to solve the environmental crisis, it were not even necessary to achieve further technologic breakthroughs, as the technologies needed for the remodeling of society towards energy efficiency were already mature and cost-efficient. Even if capitalism might be sufficiently robust, Kallis (2011) still takes the crisis as a chance to break up obstructive social and political lock-ins that have hitherto seemed unalterable and have lead into the crisis. Yet he does not regard the ability of social and political transformation to be inherent in the traits of market, but as a characteristic of a social order orientated towards degrowth. Certainly, Kallis is right in saying that the market is hard to control, making a concerted transformation towards sustainability difficult. Still his criticism only refers to that form of capitalism which Schumpeter characterised as trustified capitalism and which does lead to ecologically problematic lock-in effects. The criticism cannot, however, be applied to competitive capitalism, which generates those basic innovations giving rise to the revolutionary crises described as so fertile by Kallis (2011). Thus, an opportunity is provided for alternative social conditions to be brought about – but within the capitalist social order – and for substantiating these new conditions through further innovations. Innovations may emerge outside of competition and market economy, but will then lack the required frequency and force, as growth represents the most important incentive of innovation (Wangler, 2013). On the other hand, a continuous process of innovation again leads to growth, which may revolutionise the present social conditions, as Schumpeter states (Herzog and Honneth, 2016). Thereby, a new combination of the given means of production within new sites of production emerges, generating new goods, methods, and markets. Productive resources are applied to hitherto untested usages while being withdrawn from those usages they served before (Geels, 2011). What Kallis (2011) terms technological optimism with regard to the ecological innovative power of capitalism, is therefore technological realism in the context of Schumpeter's competitive capitalism. Without doubt, innovative boosts on the part of already established companies are also conceivable and may give rise to the possibility of maintaining trustified capitalism with its ecologically precarious structures. An example hereof is the innovation ‘Carbon Dioxide Capture and Storage’, by which the ecological impact of the emission intensive electrical conversion of coal is being reduced (Benson and Orr, 2008). Technological progress may hence stabilise the existent system of economy and policy that is accountable for the environmental crisis (Bettini and Karaliotas, 2013). In Schumpeter's view, however, the decisive economic order is competitive capitalism, which is characterised by the aggressive economic demeanour of new, innovative enterprises economically challenging the establishment (Herzog and Honneth, 2016). The start-ups of new companies, which are inseparably connected with the processes of innovation, withdraw production goods from the present capitalist system by underbidding, disturbing the former economic balance that is so destructive for nature. Competition is therefore essential for overcoming the environmental crisis. In that respect, the concept of ‘solidary economics’ and its precept of surmounting the allegedly ruthless principle of competition and emancipating oneself from the logic of the markets (Embshoff and Giegold, 2008), is counterproductive, as the renunciation of competition impedes the breakup of crusted economic structures, which thus continue to harm the environment. After all, the big energy providers' strategy was and is to hold on to the fossil-nuclear power plant pool for as long as possible, suppressing alternative concepts of energy supply (Gawel et al., 2012). A radical transformation of the energy system therefore cannot emerge from the existent structures, as Schumpeter assesses (Herzog and Honneth, 2016). Instead, innovative processes emerge outside of the old major companies until proceeding to attack the incumbent regime through the rededication of means of production (Geels, 2011). Innovative marketing strategies of small and middle scale businesses supplanting cumbersome large companies play an essential part especially in the field of renewable energies (Walsh, 2012). In this, competition is a decisive element that cannot easily be superseded. 4. Capabilities of green capitalism A competitive green capitalism develops great creativity by its high rate of innovation, which may also reinvent the relationship between humans and nature. We now want to exemplify how this might be brought about. Schumpeter holds the view that innovation is the result of the capitalistic entrepreneurial spirit, not the other way round (Herzog and Honneth, 2016). Technological and social progress hence are no independent variables materialising out of thin air, but arise from the logic of the capitalist process. Meadows et al. (2004) accept that innovations may relocate the limits of growth, making it possible to maintain the living standard by continuously reducing the consumption of crude materials and energy. However, one of the energy system's prevailing deficits is that depleted or not yet tapped resources are being (re-)obtained based on non-regenerative energy (Schwartzman, 2008), causing capitalistic production to be increasingly energetically inefficient (Murphy and Hall, 2011). Overcoming the energy crisis hence calls for the consideration of thermodynamic principles (Georgescu-Roegen, 1971, Georgescu-Roegen, 1986; Martinez-Alier, 1987). Harriss-White and Harriss (2007) see the deployment of renewable energies as a possibility of limiting the creation of entropy. Kaberger and Mansson (2001) have shown that innovative resources-saving material cycles may be possible and economical if they are based on the usage of the inexhaustible energy of irradiance. What is promising about this approach is that, due to research and development, the utilisation of solar energy becomes more and more efficient and lucrative (Schmid, 2016). Moreover, its inexhaustible potential allows for the exploitation of material resources even from deposits with extremely low crude material density. On a local level, the utilisation of solar energy may actually lead to a reduction of entropy (Ebeling et al., 1998; Kranert and Cord-Landwehr, 2010), as it is the case with the usage of waste heat of solar thermal power plants for the desalination of sea water (DLR, 2007). The integration of these capacities into smart grids and the associated remodeling of every production process to purely regenerative sources have been detailed in Section 3. We further argue that innovation surpasses conceivability. Even Harris (2010) sees a particularly high potential in unpredictable technological innovations to break through economic routine, thus encouraging further entrepreneurs in issuing their own innovations. Capitalism might thereby be provided with the chance to reduce its ecological exploitation. But innovation exceeds strictly technological aspects and may as well comprise social and institutional aspects (Arentsen and Bellekom, 2014). E.g., in the mobility sector, whose pollutant emissions have significantly contributed to the environmental crisis, innovations have led to new features of cargo and passenger transportation. This is illustrated by the example of car sharing as an innovative life style (Prettenthaler and Steininger, 1999) or bicycle-sharing schemes in urban areas (Midgley, 2011). Another representative case is the history of the ozone hole, which Meadows et al. (2004) describe as a history of civil success regarding the correction of a severe overshoot. Quite in the sense of Schumpeter, Meadows et al. (2004) name the ‘industry's creative heads’ as the crucial problem-solving determinant. Through the three innovative boosts ‘better insulation’, ‘reduced toxic substitute materials’, and ‘emission-free alternative substances’, it will be possible to rebuild the original density of the ozone layer by the mid-21st century. Remarkably, this is realised without abandoning the existent economic system. Furthermore, we argue that it is realistic to assume growth-oriented, competitive markets in the future, rather than socio-material conditions beyond them, which, as stated by Van den Bergh (2011) are completely uncertain as of now (e.g. Harris, 2013: socialist markets). We therefore hold the view that it is more pragmatic to design future mass markets in an eco-friendly way. Kallis (2011) rejects the possibility that the wonder of a dematerialised economy might occur, as improvements of efficiency were overcompensated by growing consumption. While dematerialisation may be tantamount to a wonder, researchers still do put effort into adjusting the materialised economy to ecological compatibility. One aspect is the thorough redefinition of nature protection, because nowadays, nature protection is reduced to the attempt of limiting the harmfulness of processes and products (Mulhall and Braungart, 2010). However, due to the potential creation of new mass markets for more eco-friendly and efficient processes or products, this strategy holds the danger of actually augmenting unwanted effects through rebound effects. In this regard, Alcott (2005) points to the Jevon's Paradox which says it is a great error to think that technologic innovations were going to reduce the consumption of resources. Polimeni et al. (2015) name the example of the Green Revolution: the remarkable increase of food production's area efficiency was not at all able to abate the problems of hunger and area consumption, as consequently, the population greatly increased. Likewise, a mass market of efficient and eco-friendly products would again lead to a massive amount of poison and waste, with disposed crude materials hardly being recycled. The ecological costs then would have to be externalised, which Sturm and Vogt (2011) regard as strong evidence of the failure of the market. The core problem hence lies in the fact that products are being produced exclusively for the technosphere (McDonough and Braungart, 2013). E.g., copper is almost universally applicable to and beneficial for technological systems, while in biological systems, this material is extremely poisonous. Thus, the aim must be to design products in a way that makes them equally usable in biosphere, i.e. subsequent to their technical usage. This calls for the development of a combined management of nutrients for techno- and biosphere. Human ways of living, the processes and products they are based on, may thereby be employed for the benefit of nature. The focus must therefore be put on those innovations that break up the present paradigm of environmental protection by realising products that create a useful material connection between techno- and biosphere. An example of this kind of creative destruction is the Austrian company Gugler, the first print shop worldwide that produces printing products free from harmful ingredients and exclusively with substances that can be biologically recycled (Gugler GmbH, 2018). E.g., the accruing sludge is returned to biosphere and the ash of burned printing products can be reused as a fertilizer. These conditions provide the possibility of designing economic activities to be ecologically compatible despite a high resource throughput.

#### Aff method stops space colonization

Kovic '19 [Marko; March 2019; co--founder president of the Zurich Institute of Public Affairs Research; "The future of energy," https://osf.io/preprints/socarxiv/aswz9/download]

Ideally, the mitigation of climate risks will coincide with and contribute to the development of improved or even entirely novel sources of energy that will increase the long--term chances of humankind’s survival by means of space colonization. This is not an unrealistic expectation, given that the mitigation of climate risks consists, to a large degree, of replacing fossil fuels with other, less harmful sources of energy. However, some climate change mitigation strategies might actually harm the long--term prospects of humankind.

First, it is possible that dominant climate change mitigation strategies will actively exclude any form of nuclear energy from the repertoire of climate--friendly energy sources. Existing and experimental (molten salt) fission reactors could play a significant role in replacing carbon--heavy energy sources, but pro--environmental attitudes often overlap with anti--nuclear sentiments [65]. As a result, and in combination with other problems such as large--scale market failures of existing fission reactors (one of the reasons being that generating electricity from fossil fuels is cheaper) [66], nuclear fission does not currently have significant standing as a “cleantech” contribution to climate change mitigation. From a long--term perspective, an unfavorable view of nuclear energy in the context of climate change might mean that technological progress in the areas of nuclear fission and fusion might come to a halt (for example, due to explicit bans or implicit disincentives). If such a scenario came to be, our attempts at colonizing space would almost certainly fail: There are currently no alternatives to fission and fusion, and it is highly improbable that Solar power alone could suffice for sustaining extraterrestrial habitats.

Second, there is some probability that climate change mitigation strategies will change the social order towards a degrowth philosophy. Degrowth is a vague socio--economic concept and social movement that, in general, calls for a contraction of the global and national economies by means of lower production and consumption rates, and, to some degree, to more profound changes to the “capitalist” system of economic production [67]. Degrowth or degrowth--like approaches are being actively considered as climate risk mitigation strategies [68, 69], and degrowth would almost certainly be a highly effective measure for mitigating climate change. After all, if we were to drastically reduce or even completely eliminate the (industrial) sources of greenhouse gases, the amount of greenhouse gases that are being emitted would accordingly drastically sink. From the long--term perspective of humankind’s survival, degrowth is problematic in at least two ways. First, there is a risk that the general contraction of economic activity would also slow or eliminate progress in the domain of energy, which would, in turn, reduce the probability of successful space colonization due to an absence of suitable energy sources. Second, and more fundamental: If degrowth were to become a dominant societal paradigm, it is uncertain whether the long--term survival of humankind by means of space colonization would be regarded a desirable goal. In a literal sense, establishing extraterrestrial colonies would mean growth; the size of the total human population would grow, and the area of space--time that humans occupy would grow.

In a more philosophical sense, degrowth might even be antithetical to space colonization. Even though both degrowth and space colonization have a similar moral goal -- increasing wellbeing -- , the ends to that goal are very different. Within degrowth philosophy, the goal is, metaphorically speaking, not to “live beyond our means”: We should strive for “ecological balance”, and such a state should increase the average wellbeing. But the frame of reference is the status quo; Earth and humankind as we know it today. Space colonization, on the other hand, operates with a much larger frame of reference: All the future generations of humans (and other sentient beings) who could enjoy wellbeing if we succeed in colonizing space -- and who will categorically be denied that wellbeing if we fail to colonize space [70]. The goal of space colonization as a moral project is not to live beyond our means, but to actively redefine and expand what our means are through scientific and technological progress.

#### Extinction

Kovic '19 [Marko; March 2019; co--founder president of the Zurich Institute of Public Affairs Research; "The future of energy," https://osf.io/preprints/socarxiv/aswz9/download]

Existential risks **are risks that might** lead to theextinction of humankind **[1].** Natural existential risks **(**such asasteroids **that** might crash into Earth**)** are basicallyconstant**.** The risks of agiant asteroidcrashing into Earth today is the same as it was 500 years ago. Anthropogenic, man--made existential risks**, on the other hand,** are growing **in number and severity.** They are a side--effect of technological progress**:** The more we develop technologically, the greater man--made existential risks become.Nuclear weapons**, to name only one example,** are a direct consequence of scientific and technological progress**.**

There are different approaches to existential risk mitigation. One approach is to developtargeted strategiesfor specific existential risks**. If we want to reduce the existential risk posed by nuclear weapons, then we can and should develop specific** **strategies for that risk.**

Another approach is to develop and pursue what can be calledmeta--strategiesthat target all existential risksat once. One of most effectivemeta--strategies for tackling existential risks in general isspace colonization: If we manage to establish permanentandself--sustainable **human** habitats beyond Earth, then our proverbial existential eggs are not all in one basket anymore**. For example,** if disaster strikes on Earth, but there are billions of humans living on VenusandMars, humankind would continue to existeven with Earth--humans gone.

Because of existential risks, a long--term futurein which humankind still exists almost certainly has to be a future in which humankind has succeeded in colonizing space**. Today, even though we regularly venture into space, we do not yet have space colonization capabilities.** There are a number oftechnological challengesthat we need to overcomein order to become capable of space colonization**. One of those challenges is energy. There are several reasons why.**

#### Capitalism is sustainable and improves life---recent data proves we’re entering the golden age

Hausfather 21 – a climate scientist and energy systems analyst whose research focuses on observational temperature records, climate models, and mitigation technologies. He spent 10 years working as a data scientist and entrepreneur in the cleantech sector, where he was the lead data scientist at Essess, the chief scientist at C3.ai, and the cofounder and chief scientist of Efficiency 2.0. He also worked as a research scientist with Berkeley Earth, was the senior climate analyst at Project Drawdown, and the US analyst for Carbon Brief. He has masters degrees in environmental science from Yale University and Vrije Universiteit Amsterdam and a PhD in climate science from the University of California, Berkeley. (Zeke, "Absolute Decoupling of Economic Growth and Emissions in 32 Countries," Breakthrough Institute, 4-6-2021, https://thebreakthrough.org/issues/energy/absolute-decoupling-of-economic-growth-and-emissions-in-32-countries, Accessed 4-11-2021, LASA-SC)

**The** past 30 years have seen immense progress in improving the quality of life for much of humanity. **Extreme** poverty **— the number of people living on less than $1.90 per day —** has fallen by nearly two-thirds, from 1.9 billion to around 650 million**.** Life expectancy has risen **in most of the world,** along with literacy and access to education**,** while infant mortality has fallen**. Despite perceptions to the contrary,** the average person born today is likely to have access to more opportunities and have a better quality of life than at any other point in human history**.** Much of this increase in human wellbeing has been propelled by rapid economic growth driven largely by state-led industrial policy, particularly in poor-to-middle income countries. **However,** this growth has come at a cost**:** between 1990 and 2019**, global** emissions of CO2 increased by 56%.Historically, economic growth has been closely linked to increased energy consumption **— and increased CO2 emissions in particular — leading some to argue that a more prosperous world is one that necessarily has more impacts on our natural environment and climate. There is a lively academic debate about our ability to “absolutely decouple” emissions and growth — that is, the extent to which the adoption of clean energy technology can allow emissions to decline while economic growth continues.** Over the past 15 years, however, something has begun to change. **Rather than a 21st century dominated by coal that energy modelers foresaw,** global coal use peaked in 2013 and is now in structural decline**.** We have succeeded in making clean energy cheap, with solar power and battery storage costs falling 10-fold since 2009**. The world produced more electricity from clean energy —** solar, wind, hydro, and nuclear — than from coal over the past two years**. And, according to some major oil companies,** peak oil is upon us **— not because we have run out of cheap oil to produce, but because** demand is falling and companies expect further decline as consumers increasingly shift to electric vehicles. **The** world has long been experiencing a relative decouplingbetween economic growth and CO2 emissions**,** with the emissions per unit of GDP falling for the past 60 years**.** This is the case even in countries likeIndia and China **that** have been undergoing rapid **economic** growth. **But relative decoupling alone is inadequate in a world where global CO2 emissions need to peak and decline in the next decade to give us any chance at limiting warming to well below 2℃, in line with Paris Agreement targets. Thankfully, there is increasing evidence that** the world is on track to absolutely decouple CO2 emissions and economic growth **— with global** CO2 emissions **potentially having** peaked in 2019and unlikely to increase substantially in the coming decade**. While an emissions peak is just the first and easiest step towards eventually reaching the net-zero emissions required to stop the world from continuing to warm, it** demonstrates that linkages between emissions and economic activity are not an immutable law, but rather simply a result of our current means of energy production. **In recent years we have seen more and more examples of absolute decoupling — economic growth accompanied by falling CO2 emissions.** Since 2005,32 countries with a population of at least one million people have absolutely decoupled **emissions from economic growth, both for terrestrial emissions (those within national borders) and consumption emissions (emissions embodied in the goods consumed in a country). This includes the** U**nited** S**tates,** Japan, Mexico, Germany, U**nited** K**ingdom,** France, Spain, Poland, Romania, Netherlands, Belgium, Portugal, Sweden, Hungary, Belarus, Austria, Bulgaria, El Salvador, Singapore, Denmark, Finland, Slovakia, Norway, Ireland, New Zealand, Croatia, Jamaica, Lithuania, Slovenia, Latvia, Estonia, and Cyprus. **Figure 1, below, shows the declines in territorial emissions (blue) and increases in GDP (red). To qualify as having experienced absolute decoupling, we require countries included in this analysis to pass four separate filters: a population of at least one million (to focus the analysis on more representative cases),** declining territorial emissions over the 2005-2019 period (based on a linear regression), declining consumption emissions, and increasing real GDP (on a purchasing power parity basis, using constant 2017 international $USD). **We chose not to include 2020 in this analysis because it is not particularly representative of longer-term trends, and consumption and territorial emissions estimates are not yet available for many countries. There is a wide range of rates of economic growth between 2005-2019 among countries experiencing absolute decoupling. Somewhat counterintuitively, there is no significant relationship between the rate of economic growth and the magnitude of emissions reductions within the group.** While it is unlikely that there is not at least some linkage between the two factors, there are plenty of examples of countries (e.g., Singapore, Romania, and Ireland) experiencing both extremely rapid economic growth and large reductions in CO2 emissions. **One of the** primary criticisms of **some prior analyses of absolute** decoupling is **that they ignore** leakage**. Specifically, the offshoring of manufacturing from high-income countries over the past three decades to countries like China has led to “illusory” drops in emissions, where the emissions associated with high-income country consumption are simply shipped overseas and no longer show up in territorial emissions accounting. There is some truth in this critique, as there was a large increase in emissions embodied in imports from developing countries between 1990 and 2005. After 2005, however,** structural changes in China and a growing domestic market led to a reversal of these trends; the amount of emissions “exported” from developed countries to developing countries has actually declined over the past 15 years. **This means that, for many countries,** both territorial emissions and consumption emissions **(which include any emissions “exported” to other countries)** have jointly declined**. In fact, on average, consumption emissions have been declining slightly faster than territorial emissions since 2005 in the 32 countries we identify as experiencing absolute decoupling. Figure 2, below, shows the change in consumption emissions (teal) and GDP (red) between 2005 and 2019. There is a pretty wide variation in the extent to which these countries have reduced their territorial and consumption emissions since 2005. Some countries — such as the UK, Denmark, Finland, and Singapore – have seen territorial emissions fall faster than consumption emissions, while the US, Japan, Germany, and Spain (among others) have seen consumption emissions fall faster. Figure 3 shows reductions in consumption and territorial emissions for each country, with the size of the dot representing the size of the population in 2019.** Absolute decoupling is possible.There is no physical law requiring economic growth — and broader increases in human wellbeing — to necessarily be linked to CO2 emissions**. All of the** services that we rely on today that emit fossil fuels **— electricity, transportation, heating, food —** can **in principle** be replaced by near-zero carbon alternatives**, though these are more mature**

#### Transition causes an immediate spike in warming – only capitalism solves – otherwise, extinction

Crownshaw et al 18 (Timothy Crownshaw, Department of Natural Resource Sciences, McGill University, Caitlin Morgan, Food Systems Graduate Program, University of Vermont, Alison Adams, Rubenstein School of the Environment, University of Vermont, Martin Sers, Faculty of Environmental Studies, York University, Natália Britto dos Santos, Faculty of Environmental Studies, York University, Alice Damiano, Department of Natural Resource Sciences, McGill University, Laura Gilbert, Department of Natural Resource Sciences, McGill University, Gabriel Yahya Haage, Department of Natural Resource Sciences, McGill University, and Daniel Horen Greenford, Department of Geography, Planning and Environment, Concordia University, “Over the horizon: Exploring the conditions of a post-growth world”, The Anthropocene Review) DB

Near-term impacts to the climate system originating from macroeconomic disruptions remains a relatively unexplored topic, as the climate change research community typically assumes a continuation of economic growth and stability in their scenarios (for example, IPCC, 2014b, and UNEP, 2014b). However, industrial emissions will be significantly diminished during a period of economic contraction following the end of growth. This will bring local environmental benefits in the form of reduced air pollution but also a partial loss of the aerosol-induced cooling effect.3 The IPCC’s best estimate of the magnitude of aerosol cooling is approximately half that of the warming from carbon dioxide in the atmosphere (IPCC, 2013); clearly a significant counterbalance to the warming potential of GHGs. Contraction and deindustrialization of the global economy will curtail these cooling emissions, and thus complicate climate change policy and mitigation efforts. Owing to the short residence time of aerosols in the atmosphere (Textor et al., 2006), an increase in warming could manifest rapidly following a decline in industrial activity. Changes in the rate and global distribution of industrial aerosol emissions have already caused significant shifts in localized cooling effects (IPCC, 2013; Kühn et al., 2014). Several studies have highlighted a potential increase in global warming as aerosol emissions are gradually reduced via pollution control measures, finding that average temperatures will rise approximately an additional 1°C by 2100 as a consequence (Smith and Bond, 2014; Westervelt et al., 2015). While the magnitude is uncertain (Lewis and Curry, 2015; Rosenfeld et al., 2013), this additional warming may occur earlier and at a much faster rate than expected due to falling emissions from industrial activities resulting from the end of growth and subsequent economic contraction. This outcome could enhance climate impacts non-linearly, as human and natural systems would have little time to adapt to a rapid change in the rate of warming (Smith et al., 2015). As such, a relatively sudden increase in the pace of climate change and associated impacts followed by a gradual long-term reduction may be a more realistic prospect than current assumptions of a rising emissions trend in line with economic growth, partially mitigated by technological innovation and declining emissions intensity of the global economy. Post-growth climate mitigation and systemic feedbacks A transient increase in warming following the end of growth has the potential to affect multiple components of the climate system, including albedo dynamics and natural GHG sources. Additional short-term warming will induce greater albedo changes in the climate system due to melting of more ice and snow cover, reducing the reflection of sunlight (IPCC, 2014c). This is significant as greater near-term warming increases risks of runaway feedback between albedo reduction and increased warming (Curry et al., 1995; Hall, 2004). An increase in short-term warming may also exacerbate the release of terrestrial and oceanic sources of GHG emissions, such as the permafrost in high-latitude and high-altitude regions around the world (IPCC, 2013; Schuur et al., 2015), and emissions from aquatic ecosystems and methane clathrate deposits (Hamdan and Wickland, 2016). Consideration of these climate system feedbacks enhances expectations of post-growth warming and invalidates prevailing estimations of the underlying risks associated with self-reinforcing processes. As such, the near-term risks associated with climate feedbacks in scenarios assuming continued economic growth, already underestimated as noted by Bloch-Johnson et al. (2015), will be further exacerbated in a post-growth context. The climate system will also be affected by changing patterns of economic activity and GHG emissions stemming from trade and transportation. Long-distance transportation is a key emitter (Karl et al., 2009); a decline in international trade stemming from economic contraction will diminish GHG emissions. Additionally, increased disruption of long-distance trade routes from weather-related climate change impacts (WTO and UNEP, 2009) will further reduce GHG emissions from transportation (Heinberg and Fridley, 2016). This effectively forms a stabilizing feedback loop as future warming and associated impacts on trade will partially limit future emissions. Climate mitigation and adaptation presents an unwieldy problem for capital-constrained, contracting societies, and may in fact be a major component of the contraction process because of the redirection of investment away from productive capital, as mentioned in the introduction. The IPCC (2014c) estimates that the necessary investments per year in low-carbon technology and infrastructure will rise by several hundreds of billions of dollars each year before 2030. As the assumptions used to calculate these investment estimates are not consistent with a scenario of long-term economic contraction, they must be treated critically in the context of a post-growth world. However, mitigation efforts will remain a prerequisite for remaining within acceptable climate conditions. Current approaches to climate change mitigation relying on capital-intensive technological solutions, including a global transition from fossil fuels to renewable energy, continued development and deployment of carbon capture and storage (CCS), and geoengineering projects, may be untenable in this context. Climate change mitigation through a large-scale switch to biofuels, or bioenergy with carbon capture and storage (BECCS) technology, will be additionally constrained by a limited supply of agricultural land subject to rising food demand in the near-term (Kraxner et al., 2013). Instead, feasible climate mitigation options may be practically limited to low-capital, demand-side behavioral responses and lifestyle changes. A decrease in energy demand, associated with a decline in aggregate demand, will be complicated both by declining EROI of our major fuels (Hall, 2017; Lambert et al., 2014; Murphy, 2014) and the issue of capital constraints. As energy demand falls, extraction of costly unconventional hydrocarbon resources with higher emissions intensities (NRDC, 2010) will become increasingly uneconomic. However, declining investment capacity implies that an ongoing conversion to lowcarbon renewables may be similarly constrained due to the vast material, energy and capital requirements involved, as described by Trainer (2010). As energy demand falls, economies may be forced to return to conventional low-cost fuels with acceptable EROI, such as remaining coal reserves (Hall et al., 2014), which are attractive because of compatibility with existing energy infrastructure but have detrimental consequences for GHG emissions. The net effect of the above factors on the climate system will depend on their relative magnitudes and the respective time lags involved. Provided the effects of stabilizing feedbacks outweigh reinforcing feedbacks, the end of growth may ultimately reduce human perturbance of the climate system. Conversely, if stabilizing economy–climate feedbacks are insufficient to counteract the consequences of a near-term spike in warming, the world may face significantly worse climate stress than is currently anticipated.

# 1NR

### 1NR

#### Cap’s sustainable thanks to dematerialization and the alt’s transition fails.

McAfee, 20—cofounder and codirector of the MIT Initiative on the Digital Economy at the MIT Sloan School of Management, former professor at Harvard Business School and fellow at Harvard’s Berkman Center for Internet and Society (Andrew, “Why Degrowth Is the Worst Idea on the Planet,” <https://www.wired.com/story/opinion-why-degrowth-is-the-worst-idea-on-the-planet/>, dml)

Over that same span, an unexpected and encouraging pattern has emerged: The world's richest countries have learned how to reduce their footprint on Earth. They're polluting less, using less land and water, consuming smaller amounts of important natural resources, and doing better in many other ways. Some of these trends are also now visible in less affluent countries.

However, many in the degrowth movement seem to have trouble taking yes for an answer. The claims I just made are widely resisted or ignored. Some say they’ve been debunked. Of course, debate over empirical claims like these is normal and healthy. Our impact on our planet is hugely important. But something less healthy is at work here. As Upton Sinclair put it, “It is difficult to get a man to understand something when his salary depends upon his not understanding it.” Some voices in the conversation about the environment seem wedded to the idea that degrowth is necessary, and they are unwilling or unable to walk away from it, no matter the evidence.

But evidence remains a powerful way to persuade the persuadable. The one thing everyone agrees on is that the last 50 years have been a period of growth, not degrowth. In fact, growth has never been faster, except for the 25-year rebuilding period after World War II. The population and economic growth rates of the past half-century are remarkably fast by historical standards. Between 1800 and 1945, for example, the world’s economy grew less than 1.5 percent per year, on average. Between 1970 and 2019, that average increased to almost 3.5 percent.

It's natural to assume that, as this growth continued, every nation’s planetary footprint would only increase. After all, as people become more numerous and prosperous they consume more, and producing all the goods and services they consume uses up resources, takes over ecosystems, and generates pollution. The logic seems ironclad that our gains have to be the environment’s losses.

Easing Pollution, Not Exporting It

In some important areas, however, a very different pattern emerged after 1970: Growth continued, but environmental harm decreased. This decoupling occurred first with pollution, and first in the rich world. In the US, for example, aggregate levels of six common air pollutants have declined by 77 percent, even as gross domestic product increased by 285 percent and population by 60 percent. In the UK, annual tonnage of particulate emissions dropped by more than 75 percent between 1970 and 2016, and of the main polluting chemicals by about 85 percent. Similar gains are common across the highest-income countries.

How were these reductions achieved? The two possibilities are cleanup and offshoring. Either rich countries figured out how to reduce their “air pollution per dollar” so much that overall pollution went down even as their economies grew, or they sent so much of their dirty production overseas that the air at home got cleaner. The first of these paths reduces the total burden of human-caused pollution; the second just rearranges it.

The evidence is overwhelming that rich countries cleaned up their air pollution much more than they outsourced it. For one, a great deal of air pollution comes from highway vehicles and power plants, and rich countries haven’t outsourced driving and generating electricity to low-income ones. In fact, high-income countries haven't even offshored most of their industry. The US and UK both manufacture more than they did 50 years ago (at least until the Covid-19 pandemic sharply reduced output), and Germany has been a net exporter since 2000 while continuing to drive down air pollution. The rest of the world has been exporting its manufacturing pollution to Germany (to use degrowthers’ phrasing), yet Germans are breathing cleaner air than they were 20 years ago.

Rich countries have reduced their air pollution not by embracing degrowth or offshoring, but instead by enacting and enforcing smart regulation. As economists Joseph Shapiro and Reed Walker concluded in a 2018 study about the US, “changes in environmental regulation, rather than changes in productivity and trade, account for most of the emissions reductions.” Research about the cleanup of US waters also concludes that well-designed and enforced regulations have successfully reduced pollution.

It is true that the US and other rich countries now import lots of products from China and other nations with higher pollution levels. But if there were no international trade at all, and rich countries had to rely exclusively on their domestic industries to make everything they consume, they’d still have much cleaner air and water than they did 50 years ago. As a 2004 Advances in Economic Analysis and Policy study summarized: “We find no evidence that domestic production of pollution-intensive goods in the US is being replaced by imports from overseas.”

The rich world’s success at decoupling growth from pollution is an inconvenient fact for degrowthers. Even more inconvenient is China's recent success at doing the same. China’s export-led, manufacturing-heavy economy has been growing at meteoric rates, but between 2013 and 2017 air pollution in densely populated areas declined by more than 30 percent. Here again the government mandated and monitored pollution declines and so decoupled growth from an important category of environmental harm.

Prosperity Bends the Curve

China's progress with air pollution is heartening, but it's not surprising to most economists. It's a clear example of the environmental Kuznets curve (EKC) in action. Named for the economist Simon Kuznets, EKC posits a relationship between a country's affluence and the condition of its environment. As GDP per capita rises from an initial low level, so too does environmental damage; but as affluence continues to increase, the harms level off and then start to decline. The EKC is clearly visible in the pollution histories of today's rich countries, and it's now taking shape in China and elsewhere.

Also consider air pollution death rates around the world. As the invaluable website Our World in Data puts it, “Rates have typically fallen across high-income countries: almost everywhere in Europe, but also in Canada, the United States, Australia, New Zealand, Japan, Israel and South Korea and other countries. But rates have also fallen across upper-middle income countries too, including China and Brazil. In low and lower-middle income countries, rates have increased over this period.”

The EKC is a direct refutation of a core idea of degrowth: that environmental harms must always rise as populations and economies do. It's not surprising that today's degrowth advocates rarely discuss the large reductions in air and water pollution that have accompanied higher prosperity in so many places around the world. Instead, degrowthers now focus heavily on one kind of pollution: greenhouse gas emissions.

The claims made are familiar ones: that any apparent reductions in greenhouse gas emissions in rich countries are due to offshoring rather than actual decarbonization. Thanks to the Global Carbon Project, we can see if this is the case. GCP has calculated “consumption-based emissions” for many countries going back to 1990, taking into account imports and exports, yielding the greenhouse gas emissions embodied in all the goods and services consumed in each country each year.

For several of the world's richest countries, including Germany, Italy, France, the UK, and the US, graphs of consumption-based carbon emissions follow the familiar EKC. The US, for example, has 22reduced its total (not per capita) consumption-based CO2 emissions by more than 13 percent since 2007.

These reductions are not mainly due to enhanced regulation. Instead, they've come about because of a combination of tech progress and market forces. Solar and wind power have become much cheaper in recent years and have displaced coal for electricity generation. Natural gas, which when burned emits fewer greenhouse gases per unit of energy than does coal (even after taking methane leakage into account), has also become much cheaper and more abundant in the US as a result of the fracking revolution.

To ensure that these greenhouse gas declines continue to spread and accelerate, we should apply the lessons we've learned from previous pollution reduction success. In particular, we should make it expensive to emit carbon, then watch the emitters work hard to reduce this expense. The best way to do this is with a carbon dividend, which is a tax on carbon emissions where the revenues are not kept by the government but instead are rebated to people as a dividend. William Nordhaus won the 2018 Nobel Prize in economics in part for his work on the carbon dividend, and an open letter advocating its implementation in the US has been signed by more than 3,500 economists. It's an idea whose time has come.

How We Learned to Lighten Up

Tech progress and price pressure aren't just leading to the demise of coal. They're also causing us to exploit the planet less in many other important ways, even as growth continues. In other words, EKCs are not just about pollution any more.

A good place to start examining this broad phenomenon of getting more from less is US agriculture, where we have decades of data on both outputs—crop tonnage—and the key inputs of cropland, water, and fertilizer. Domestic crop tonnage has risen steadily over the years and in 2015 was more than 55 percent higher than in 1980. Over that same period, though, total water used for irrigation declined by 18 percent, total cropland by more than 7 percent. That is, over that 35-year period, US crop agriculture increased its output by more than half while giving an area of land larger than Indiana back to nature and eventually using a Lake Champlain less water each year. This was not accomplished by increasing fertilizer use; total US fertilizer consumption in 2014 (the most recent year for which data are available) was within 2 percent of its 1980 level.

The three main fertilizers of nitrogen, potassium, and phosphorus (NKP) are an interesting case study. Their total US consumption (once other uses in addition to agriculture are taken into account) has declined by 23 percent since 1980, according to the United States Geological Survey. Yet some within the degrowth movement find ways to argue that these declines are also an illusion. These materials thus serve to clearly illustrate the differences in methodology, evidence, and worldview between ecomodernists like myself and degrowthers.

The USGS tracks annual domestic production, imports, and exports of NKP and uses these figures to calculate “apparent consumption” each year. Consumption of each of the three resources has declined by 16 percent or more from their peaks, which occurred no later than 1998. This seems like a clear and convincing example of dematerialization—getting more output from fewer material inputs.

As I argue in my book More From Less, dematerialization doesn’t happen for any complicated or idiosyncratic reason. It happens because resources cost money that companies would rather not spend, and tech progress keeps opening up new ways to produce more output (like crops) while spending less on material inputs (like fertilizers). Modern digital technologies are so good at helping producers get more from less that they're now allowing the US and other technologically sophisticated countries to use less in total of important materials like NKP.

Forest products provide another clear example of dematerialization in the US. Total annual domestic consumption of paper and paperboard peaked in 1999, and of timber in 2002. Both totals have since declined by more than 20 percent. Could these be mirages caused by offshoring that’s not properly captured? That’s highly unlikely, as the country is now onshoring more than it’s offshoring. The US has been a net exporter of forest products since 2009 and is now the world’s largest exporter of these materials.

Is the US economy also dematerializing its use of metals? Probably, but it’s hard to say for sure. The USGS tallies do show dematerialization in steel, aluminum, copper, and other important metals. But these figures don’t include the metals contained in imports of finished goods like cars and computers. America is a net importer of manufactured goods, so it could be that we’re using more metal year after year, but that much of this consumption is “hidden” from official statistics because of imports of heavy, complex products. However, my estimates indicate that this is extremely unlikely and that the country is in fact now reducing its overall consumption of metals.

Constructing a Weak Argument

Degrowth exponent Jason Hickel responds to this broad evidence of dematerialization by making once again the shopworn argument that there are no real environmental gains; there’s only globalization of harms. Hickel has argued repeatedly that once offshoring is properly taken into account, dematerialization vanishes. How can this be, when tallies take into account imports and exports of raw materials like NKP, timber, and paper? Because, he contends, they don't take into account the true “material footprint” of production around the world.

At this point the degrowth argument departs from reality. I mean literally. As “The Material Footprint of Nations” (the main paper Hickel cites) states, material footprint measures do “not record the actual physical movement of materials within and among countries.” Instead, they’re derived from a “calculation framework [that] … enumerates the link between the beginning of a production chain (where raw materials are extracted from the natural environment) and its end.”

Material footprint models estimate the total weight of all the materials disturbed by humans around the world as they produce the goods they eventually consume. All of the ores mined to make metal, the rock quarried to make gravel, the sand scooped up to make glass and microchips—all of these are estimated by country by year in the material footprint calculation framework.

A nation’s material footprint, then, is always higher than its direct material consumption (DMC). This is straightforward enough. What’s puzzling is that according to “The Material Footprint of Nations,” some rich countries are seeing their footprint go up even as their consumption goes down. The paper shows that many countries are now dematerializing. DMC has been trending downward for some time in the US, UK, and Japan and may recently have peaked for the European Union and OECD as a whole. Yet in all these cases, the material footprint continues to rise.

How can this be? It’s not because the material footprint models do a better job than the USGS of accounting for the metals and other materials in finished goods imports. The technical annex for the global material flows database notes that, as is the case with the USGS tallies, “complex manufactured items are largely excluded.” Instead, the paper notes, “the main reason in most cases was increased indirect use of (dependency on) construction materials.”

This is problematic, because those materials are so poorly tracked. As the appendix states, “Many countries have no data on extraction of non-metallic minerals primarily used for construction … When they are available, they are often unreliable, partial, and underreported.” It’s a poor strategy to use sparse, low-quality data to overturn conclusions based on uniform, high-quality data, yet this is what Hickel is doing when he argues that material footprint calculations show dematerialization is an illusion.

There’s one other serious problem with this argument. It’s based largely on the estimated “raw material equivalents” of Chinese exports of construction minerals, yet China is not at all a big exporter of these minerals. Instead, China’s main exports are electrical and mechanical machinery, plastics, furniture, apparel, and vehicles. None of these contain a lot of sand, gravel, stone, or clay.

So then how do such huge quantities of these and other construction minerals end up somehow being counted among China’s exports? Because China is building a lot of factories, railroads, highways, and other industrial infrastructure each year. The materials footprint calculation framework estimates how much tonnage of construction minerals all this building requires, then allocates about one third of this tonnage to exports. So by this logic, the smartphones and solar panels the US imported from China in, say, 2018 “contain” some of the stone and gravel used to build up China that year. By that same logic, if my neighbors bring me a cake the same year they renovate their house, then my consumption of lumber, drywall, and copper pipe goes up as soon as I have a slice.

Hickel doesn’t stand on any firmer ground when he moves from conclusions to recommendations. He has often claimed that 50 billion tons is the maximum weight of global resource extraction that Earth can sustainably handle and that we’re already well past this limit. In the face of this alleged crisis, he maintains that “the only fail-safe strategy is to impose legally binding caps on resource use and gradually ratchet it back down to safe levels.” However, the paper he cites to support his views contains a frank admission: “There is still no hard scientific evidence of causal relationship between human-induced resource flows and the possible breakdown of life-supporting functions at continental or global scale from which … targets [like a 50 billion ton limit] could directly be derived.” Before taking the unprecedented step of setting up a central resource planning bureaucracy, it doesn’t seem like too much to ask for hard scientific evidence that it’s actually necessary.

Let’s Keep Climbing

Throughout our history, we humans have been climbing a difficult path toward longer, healthier, more prosperous lives. As we climbed that path, we turned the environment around it brown and gray. Our mania for growth was in many ways bad news for the planet we all live on.

Recently, however, we have figured out how to make our path a green one, how to continue to grow while reducing our impact on Earth. The world’s richest countries are also putting more land and water under conservation, reintroducing native species into ecosystems from which they had been hunted into oblivion, and improving Earth in many other ways.

For reasons that I don't understand well, and that I understand less the more evidence I look at, degrowthers want to make us turn around and start walking back down the path, away from higher prosperity. Their vision seems to be one of a centrally planned, ever-deepening recession throughout the rich world for the sake of the environment.

Thanks to Covid-19, we have an inkling of how this would feel. A “degrowth recession” wouldn't have the virus’ deaths and sickness, and it wouldn't require us to practice social distancing. But it would have all the economic contractions’ job losses, business closures, mortgage defaults, and other hardships and uncertainties. And it would have them without end—after all, growth can't be allowed to restart. Corporate and government revenue would decrease permanently, and therefore so would innovation and R&D.

How many of us would be willing to accept all of this in exchange for somewhat less pollution and resource use? To sharpen the question, how many of us would be willing to accept this recession if it wasn’t necessary—if it were clear that we could get environmental improvements while continuing to grow and prosper?

The ecomodernist argument is that that is in fact clear. Unlike the degrowth argument, it's supported by a great deal of evidence. What's at least important is that it will be supported by a great deal of the world's people, who will eagerly sign up to climb our new green path to prosperity.

#### Growth increases stability and disincentivizes conflict and expansionism---decline causes war.

Szayna et al 17, Research department director of the Defense and Political Sciences Department and a senior political scientist at the RAND Corporation. He has over 30 years of experience in national security policy and defense analysis. From 1997 to 2011 he served as associate director of the Strategy, Doctrine, and Resources Program in RAND's Army Research Division. His research has focused on aspects of strategic planning for the U.S. armed forces, post-conflict stability and reconstruction operations, and coalition interoperability. He gave testimony for the U.S. House of Representatives and has been a keynote speaker at a number of defense conferences. Szayna received a B.A. in history and philosophy from Villanova University and an M.A. in international relations from Claremont Graduate School. Also Angela O’Mahony, Jennifer Kavanagh, Stephen Watts, Bryan Frederick, Tova C. Norlen, Phoenix Voorhies. (“Conflict Trends and Conflict Drivers: An Empirical Assessment of Historical Conflict Patterns and Future Conflict Projections”. 2017. https://www.rand.org/pubs/research\_reports/RR1063.html)

There are a number of factors that could lead to discontinuous changes in this metric. For example, a global economic downturn could lead to sharp reductions in development aid that could threaten any improvements in governance that had been made with the benefit of that assistance. Alternatively, a major jump in global energy costs could induce widespread fiscal crises similar to those of the 1970s and 1980s, ultimately leading to reduced state capacity. The branch scenario in red projects essentially no improvements in state capacity over the period in question, so larger changes would entail the rapid erosion of the capacity of states that are already relatively capable. Such changes are certainly possible, but they would constitute an example of nonlinear disruptive change. On balance, our projection is that state capacity is likely to continue to improve, which will tend to exert a downward pressure on the likelihood of intrastate conflict. Prevalence of Consolidated Democracies Consolidated democracies are less likely to fight one another and to be involved in internal conflict. While this correlation is clear, the mechanism by which democracies reduce conflict is more contested. The literature on interstate conflict has focused on the greater transparency and consistency of democratic regimes that allow them to credibly commit to peaceful solutions to disputes and the possibility that domestic norms and greater political accountability may make democratic states less likely to pursue violent conflicts.8 There are fewer arguments that the greater ability of consolidated democracies to resolve grievances within the political system leads to less intrastate conflict.9 We note, however, that partial democracies or the process of democratization itself may not be particularly peaceful and may even be associated with an increase in conflict.10 Given the importance of consolidated democracy in the literature on conflict, there is already a great deal of work in the academic literature on measurement of democracy. Several aggregate measures of democracy have been developed that include the competitiveness of elections; the state’s respect for civil, political, and minority rights; and freedoms of the press and religion. The most widely used measure of consolidated democracy, and the one we employ, comes from the Polity project. By coding a wide range of regime characteristics, such as political 8 Arend Lijphart, Democracies: Patterns of Majoritarian and Consensus Government in Twenty-One Countries, New Haven, Conn., and London: Yale University Press, 1984; Peter Liberman, Does Conquest Pay? The Exploitation of Occupied Industrial Societies, Princeton, N.J.: Princeton University Press, 1996; Charles Lipson, Reliable Partners: How Democracies Have Made a Separate Peace, Princeton, N.J.: Princeton University Press, 2003. 9 Håvard Hegre, Tanja Ellingsen, Scott Gates, and Nils Petter Gleditsch, “Toward a Democratic Civil Peace? Democracy, Political Change, and Civil War, 1816–1992,” American Political Science Review, Vol. 95, No. 1, March 2001, pp. 33–48; Christian Davenport, State Repression and the Domestic Democratic Peace, New York, N.Y.: Cambridge University Press, 2007. 10 Hegre et al., 2001; Lars-Erik Cederman, Kristian Skrede Gleditsch, and Simon Hug, “Elections and Ethnic Civil War,” Comparative Political Studies, Vol. 46, No. 3, 2012, pp. 387–417. 49 competition and constraints on the executive, an aggregate “Polity score” is produced, ranging from –10 to 10. Values of 6 or higher are typically used to identify the presence of a democracy, with a more conservative measurement of 8 or higher often used to identify consolidated democracies. We use this metric to calculate the percentage of all states that are consolidated democracies, with the historical values denoted by the black line in Figure 3.2. Figure 3.2. Prevalence of Consolidated Democracies SOURCE: Historical data: Monty G. Marshall and Keith Jaggers, Polity IV Data Set [Computer file; version p4v2012], College Park, Md.: Center for International Development and Conflict Management, University of Maryland, 2002; projections calculated by authors. We projected the baseline scenario by fitting a trend line to the historical data and calculating the future values.11 This projection is represented in the figure by the gray line. We calculated the two branch scenarios as one standard deviation above and below the baseline projection; they are shown in the figure by the blue and red lines, respectively. Discontinuous growth in the prevalence of democracies could result from various tippingpoint effects. If a high percentage of the world’s population were governed through democracy, other forms of government may come to be seen as illegitimate, and greater international pressure may be brought to bear to remove them. Within the time frame of our study, a dramatic reversal in the prevalence of consolidated democracies appears to be less likely. The reversion of 11 The trend line was fit using a generalized linear model linked to a binomial logit function. The resulting projections are therefore bounded between 0 and 1 (in this case, 0 and 100 percent). The model used in Figure 3.2 has a Pearson statistic (1/df) of .0037, suggesting a high degree of fit with the data. 50 consolidated democracies to autocracies historically has been extremely rare and is unlikely in the absence of extreme economic decline, the conquest of democracies by more powerful autocracies, or both. Either of these potential paths is likely to lead directly to increases in future conflict levels as well. Degree of Ethnic and Sectarian Polarization The academic literature generally agrees that a high level of ethnic and sectarian polarization is not sufficient by itself to cause conflict either within or between states. However, there is also agreement that in the intrastate context, where group mobilization occurs along ethnic lines, identity can become a significant contributing factor for violence, especially when strengthened by socioeconomic and sociopolitical grievances. Consequently, we identified the degree of ethnic and sectarian polarization as one of the primary factors likely to affect the level of intrastate conflict in the future. Evidence also shows that while ethnicity may not lead to conflict by itself, it may work to prolong conflicts and increase the intensity of violence in those conflicts that are already occurring.12 Such effects will most likely be strengthened if ethnic groups are deliberately disadvantaged by the state or if they are territorially based and have secessionist or separatist demands.13 Scholars tend to agree that ethnic and sectarian polarization, while a strong predictor for increased levels of intrastate conflict, is not a strong driver for conflicts between states. However, if regional and international actors become involved in intrastate conflicts, or if conflicts spread across borders, such polarization could also affect levels of interstate conflict. Such a scenario is especially likely where ethnic kin-groups in neighboring states become involved with secessionist movements.14 Quantifying ethnic and sectarian polarization is inherently difficult. While various measures have been tried, such as linguistic differences (e.g., ethno-linguistic fractionalization) or religious preferences, they are often criticized for not capturing the cleavage that gives rise to political mobilization. For example, different ethnic groups may share the same religion, and one ethnic group may speak multiple languages. It can also be difficult to determine when certain identities in a society are increasing in salience, and when they are becoming less relevant. One prominent 12 Rajat Ganguly and Raymond Taras, Understanding Ethnic Conflict: The International Dimension, Longman Publishers, 2002; Fearon and Laitin, 2003; and Daniel Bar-Tal, “Sociopsychological Foundations of Intractable Conflicts,” American Behavioral Scientist, Vol. 50, No. 11, 2007. 13 Gurr, 1970; Stephen M. Saideman, and William R. Ayres, “Determining the Causes of Irredentism: Logit Analyses of Minorities at Risk Data from the 1980s and 1990s,” Journal of Politics, Vol. 62, No. 4, November 2000, pp. 1126–1144; Monica Duffy Toft, The Geography of Ethnic Violence: Identity, Interests, and the Indivisibility of Territory, Princeton, N.J.: Princeton University Press, 2003. 14 John A. Vasquez, and Brendan Valeriano, “Territory as a Source of Conflict and a Road to Peace,” in Jacob Bercovitch, Viktor Kremenyuk, and I. William Zartman, eds., The Sage Handbook of Conflict Resolution, Los Angeles, Calif.: SAGE, 2009, pp. 193–209. 51 attempt to quantify relevant ethnic identities is the Minorities at Risk data set at the University of Maryland, which identifies minority groups by their “at risk” status—that is, by the extent to which they are disadvantaged in their relationships with other groups in the state in which they reside. However, the Minorities at Risk data identify such “at risk” groups somewhat subjectively, and the project does not claim to be comprehensive. An alternative, objective measure is to look for the degree of formal discrimination against ethnic, religious, or linguistic groups. The creation or removal of official laws providing for formal discrimination can help to identify states where identity-based grievances may become more or less salient. For capturing the degree of ethnic and sectarian polarization, therefore, we looked at the percentage of states with formal discrimination against minorities, where such minority groups make up at least 5 percent of the state’s population. We used the Ethnic Power Relations data set (EPR), which tracks the extent of access to state power for all politically relevant ethnic groups in every country of the world from 1946 to 2013. It includes annual data on more than 733 groups and codes the degree to which their representatives held executive-level state power—from total control of the government to being formally barred from holding political office. While the disadvantage of such a proxy may be that it potentially fails to capture some of the unofficial social discrimination that can lead to group mobilization, the advantage is that it allows for a more objective measure of sectarian tension. The overall levels of ethnic or sectarian polarization in the figure below may therefore be understated, but we can have more confidence in the general trend line than we could with more subjective data sources. We projected the baseline scenario by fitting an exponential trend line to the available historical data and calculating the future values.15 The projection is shown by a gray line in Figure 3.3. We calculated the two branch scenarios as one standard deviation above and below the baseline projection; they are shown by a red and blue line, respectively. 15 The exponential trend line fit to the data has the equation: y = 0.3098e-0.012x. The trend line has a high degree of fit with the data, with an R² of 0.85. 52 Figure 3.3. Percentage of States with Discriminated Minorities SOURCE: Historical data: Andreas Wimmer, Lars-Erik Cederman, and Brian Min, “Ethnic Politics and Armed Conflict: A Configurational Analysis of a New Global Data set,” American Sociological Review, Vol. 74, No. 2, 2009, pp. 316–337; projections calculated by authors. Discontinuous change in this variable may occur as a result of several factors. Historically, ethnic and sectarian factors often have increased in relevance after the breakup of larger states and empires, including the breakup of the Soviet Union in the early 1990s, or the end of colonialism in the 1960s. The breakup of other large, multiethnic states in the future could result in a similar outcome. Extremely high levels of resource stress because of population pressures also could prompt increased ethnically based conflict within states. Ethnic and sectarian polarization and grievances are latent in many societies, and may become politically important in order to mobilize groups to violence under conditions of severe resource or economic privation. Rate of Economic Growth Economic growth affects the prevalence of conflict in several ways. While territorial expansion traditionally has been a major cause of interstate war, states with higher levels of economic development may be less motivated to pursue such expansion because of the lower relative value of land inputs in an industrialized economy. Moreover, their reliance on international capital markets may increase the potential costs of disruptions from serious 53 international crises.16 At the intrastate level, economic growth (if broadly shared) reduces grievances, bolsters the capacity of the state to handle security challenges, and increases the population’s opportunities for licit employment, thus raising the opportunity costs of participating in rebellions or insurgencies.17 Growth benefits that accrue along ethnic or sectarian lines, however, might increase the potential for intrastate conflict, as discussed in the previous section, and sharp declines in the rate of economic growth could be associated with an increased risk of internal conflict as well.18 Therefore, there are at least two different concepts that any operationalization of this factor should attempt to capture: the overall level of economic development and changes in the rate of economic growth. Over the short term, wealthy countries tend to remain wealthy and poor countries tend to remain poor, and their degree of wealth may have a strong effect on their overall likelihood of being involved in conflict. In addition, sharp declines in the rate of growth for a range of states may increase their likelihood of intrastate conflict in particular.

#### A plethora of indicators demonstrate that catastrophic climate change can be averted. The momentum exists, but capitalizing on it is key.

Wallace-Wells 21, \*David Wallace-Wells is deputy editor of New York magazine, where he also writes frequently about climate change and the near future of science and technology; (January 18th, 2021, “After Alarmism”, https://nymag.com/intelligencer/article/climate-change-after-pandemic.html)

The change is much bigger than the turnover of American leadership. By the time the Biden presidency finds its footing in a vaccinated world, the bounds of climate possibility will have been remade. Just a half-decade ago, it was widely believed that a “business as usual” emissions path would bring the planet four or five degrees of warming — enough to make large parts of Earth effectively uninhabitable. Now, thanks to the rapid death of coal, the revolution in the price of renewable energy, and a global climate politics forged by a generational awakening, the [expectation](https://climateactiontracker.org/global/temperatures/) is for about three degrees. Recent pledges [could bring us closer to two](https://climateactiontracker.org/publications/global-update-paris-agreement-turning-point/). All of these projections sketch a hazardous and unequal future, and all are clouded with uncertainties — about the climate system, about technology, about the dexterity and intensity of human response, about how inequitably the most punishing impacts will be distributed. Yet if each half-degree of warming marks an entirely different level of suffering, we appear to have shaved a few of them off our likeliest end stage in not much time at all.

The next half-degrees will be harder to shave off, and the most crucial increment — getting from two degrees to 1.5 — perhaps impossible, dashing the dream of avoiding what was long described as “catastrophic” change. But for a climate alarmist like me, seeing clearly the state of the planet’s future now requires a conspicuous kind of double vision, in which a guarded optimism seems perhaps as reasonable as panic. Given how long we’ve waited to move, what counts now as a best-case outcome remains grim. It also appears, miraculously, within reach.

In December, a month after Biden was elected promising to return the U.S. to the Paris agreement, the U.N. celebrated five years since the signing of those accords. They were five of the six hottest on record. (The sixth was 2015, the year the agreement was signed.) They were also the years with the highest levels of carbon output in the history of humanity — with emissions equivalent to what was produced by all human and industrial activity from the speciation of Homo sapiens to the start of World War II.

They have also been the five years in which the nations of the world — and cities and regions, individuals and institutions, corporations and central banks — have made the most ambitious pledges of future climate action. Most of them were made in the past 12 months, in the face of the pandemic. Or, perhaps, to some degree, because of it — because the pandemic demanded a full-body jolt to the global political economy, provoking much more aggressive government spending, a much more accommodating perspective on debt, and a much greater openness to large-scale actions and investments of the kind that might plausibly reshape the world. And because decarbonization has come to seem, even to those economists and policy-makers blinded for decades to the moral and humanitarian cases for reform, a rational investment. “When I think about climate change,” Biden is fond of saying, “the word I think of is jobs.”

There are two ways of looking at these seemingly contradictory sets of facts. The first is that the distance between what is being done and what needs to be done is only growing. This is the finding of, among others, the U.N.’s comprehensive [“Emissions Gap” report](https://www.unenvironment.org/emissions-gap-report-2020), issued in December, which found that staying below two degrees of warming would require a tripling of stated ambitions. To bring the planet in reach of the 1.5-degree target — favored by activists, most scientists, and really anyone reading their work with open eyes — would require a quintupling. It is also the perspective of Greta Thunberg, who has spent the pandemic year castigating global leaders for paying mere lip service to far-off decarbonization targets and who called the E.U.’s new net-zero emissions law “surrender.”

The second is that all of the relevant curves are bending — too slowly but nevertheless in the right direction. The International Energy Agency, a notoriously conservative forecaster, recently [called](https://www.carbonbrief.org/solar-is-now-cheapest-electricity-in-history-confirms-iea#:~:text=Source%3A%20IEA%20World%20Energy%20Outlook%202020.&text=Together%2C%20low%2Dcarbon%20sources%20would,up%20from%2019%25%20in%202019.) solar power “the cheapest electricity in history” and projected that India will build 86 percent less new coal power capacity than it thought just one year ago. Today, business as usual no longer means a fivefold increase of coal use this century, as was once expected. It means pretty rapid decarbonization, at least by the standards of history, in which hardly any has ever taken place before.

Both of these perspectives are true. The gap is real, and the world risks tumbling into it, subjecting much of the global South to unconscionable punishments all the way down. But in the months since the pandemic wiped climate strikers off the streets, their concerns have seeped into not just public-opinion surveys but parliaments and presidencies, trade deals and the advertising business, finance and insurance — in short, all the citadels presiding over the ancien régime of fossil capital.

This is not exactly a climate revolution; the strikers and their allies didn’t win in the way they wanted to, at least not yet. But they did win something. Environmental anxieties haven’t toppled neoliberalism. Instead, to an unprecedented degree, they infiltrated it. (Or perhaps they were appropriated by it. It’s an open question.) Climate change isn’t an issue just for die-hards anymore — it’s for normies, sellouts, and anyone with their finger in the wind. It will take time, of course, for voters to see empty rhetoric for what it is, and for consumers to learn to distinguish, say, between the claims of guiltless airline tickets, or between carbon-free foods in the supermarket aisle. Harder still will be sorting through the differences between real corporate commitments like Microsoft’s and more evasive ones, like BP’s. Already, there is considerable consternation among climate activists that the public doesn’t understand the tricky math of “net-zero” on which so many of these commitments have been made—it is not a promise of ending emissions, but of offsetting some amount of them, in the future, with “negative emissions,” sometimes called “carbon dioxide removal,” though no approach of that kind is ready to go at anything like the necessary scale. And while some amount of skepticism about those commitments is surely warranted, it is also the case that, according to [a recent Bloomberg review](https://www.bloomberg.com/graphics/2020-company-emissions-pledges/), of 187 corporate climate pledges made for 2020 in 2015, 138 will be met. (Many of those promises were quite modest, but it is a much better performance than has been managed by the 189 parties to the Paris agreement, of which only two — Morocco and Gambia — are today [judged](https://climateactiontracker.org/countries/) fully “compatible” with the 1.5-degree goal, and only six more with the 2-degree target).

In the political sphere, the uneasy alliance between activists and those in power will be tested, producing new conflicts, or new equilibria, or both. Consider, though, that Varshini Prakash, whose [Sunrise Movement](https://www.sunrisemovement.org/) gave Biden’s primary candidacy an F, later helped write his climate plan along with Alexandria Ocasio-Cortez. Climate expertise has been distributed throughout the incoming administration, as was promised during a campaign that closed, remarkably, with a climate-focused advertising blitz. During the transition, Biden’s pick for director of the National Economic Council, Brian Deese, was targeted by the environmental left for his time with BlackRock, but even this purported stooge had been married by Bill McKibben, one of the godfathers of modern climate activism.

Elsewhere in the world, where 85 percent of global emissions are produced, the great infiltration of climate concerns represents what the British environmental [writer](https://www.businessgreen.com/blog-post/4025199/2020-crisis-crossroads-alternative-histories) James Murray has called “an alternative history to 2020” and what the scientist turned journalist Akshat Rathi [has declared](https://www.bloomberg.com/news/articles/2021-01-05/climate-action-is-embedding-into-how-the-world-works) “a strong sign that climate action is starting to be ‘institutionalized’ — that is, getting deeply embedded into how the world works.” This is not about coronavirus lockdowns producing emissions drops or “nature healing.” It is instead about long-standing trajectories passing obvious tipping points in coal use and political salience; promises and posturing by powerful if compromised institutions; and policy progress almost smuggled into place, all over the world, under cover of pandemic night. In the U.S., in the second coronavirus stimulus, [$35 billion in clean-energy spending](https://nymag.com/intelligencer/2020/12/what-is-in-covid-stimulus-omnibus-climate-pell-grants-medical-billing.html) passed in the Senate 92-6 — an effective down payment, energy researcher Varun Sivaram has estimated, on the innovation spending needed for a full electrification of the country. Did you even notice?

Biden’s climate plan now faces the challenge of a filibuster, a skeptical Supreme Court, and the mood of Senator Joe Manchin of West Virginia, which means American climate action over the next four years is probably more likely to be delivered piecemeal — through appropriations and stimulus, executive action, and regulation — than through a landmark Green New Deal–style piece of legislation. That does limit what can be achieved, but it also means avoiding a protracted battle over climate as a referendum on the identity of the nation. And at least nominally, having been pressured by activists to do so, Biden is promising to multiply the green spending in that recent stimulus by a factor of 60.

The numbers are numbingly large — reminders that in the midst of pandemic turmoil, the rules of state spending have been dramatically revised and perhaps even suspended. Is this global free-spending binge the beginning of a new era or merely a crisis interregnum to be followed by a new new austerity? “We don’t know what the recovery packages of COVID are going to be,” Christiana Figueres, one of the central architects of the Paris accords, told me this summer. “And honestly, the depth of decarbonization is going to largely depend on the characteristics of those recovery packages more than on anything else, because of their scale. We’re already at $12 trillion; we could go up to $20 trillion over the next 18 months. We have never seen — the world has never seen — $20 trillion go into the economy over such a short period of time. That is going to determine the logic, the structures, and certainly the carbon intensity of the global economy at least for a decade, if not more.”

For those dreaming of a climate recovery, the first round of spending was not so encouraging. The E.U. was the gold standard, promising that 30 percent of its stimulus would be earmarked for climate. The U.S. and China each pledged only a fraction of that (and in each case, there was fossil stimulus, too). But in October, a team of researchers including Joeri Rogelj of the Imperial College of London [calculated](https://www.reuters.com/article/climate-change-stimulus/tenth-of-pandemic-stimulus-spend-could-help-world-reach-climate-goals-study-idUSKBN271098) that just one-tenth of the COVID-19 stimulus spending already committed around the world, directed toward decarbonization during each of the next five years, would be sufficient to deliver the goals of the Paris agreement and stop global warming well below two degrees. That analysis may be a touch optimistic, but the level of spending seems, now, doable.

When Donald Trump was elected, trashing Paris, climate hawks were left hoping that the world would hang on for the length of his administration — insisting that, in the long term, the crisis couldn’t be solved without America at the helm. But the past four years of missing leadership have produced astonishing gains.

The price of solar energy has fallen ninefold over the past decade, as has the price of lithium batteries, critical to the growth of electric cars. The costs of utility-scale batteries, which could solve the “intermittency” (i.e., cloudy day) problem of renewables and help power whole cities in relatively short order, have fallen 70 percent since just 2015. Wind power is 40 percent cheaper than it was a decade ago, with offshore wind experiencing an even steeper decline. Overall, renewable energy is less expensive than dirty energy almost everywhere on the planet, and in many places it is simply cheaper to build new renewable capacity than to continue running the old fossil-fuel infrastructure. Oil demand and carbon emissions may both have peaked this year. Eighty percent of coal plants planned in Asia’s developing countries have been shelved.

This summer, I heard the Australian scientist and entrepreneur Saul Griffith talk about what it would take to get the U.S. within range of a 1.5 degree world. He said it would mean that beginning in 2021, this year, every single person buying a new car would have to be buying an electric one. That seems unrealistic, I thought, making a note of it as a useful benchmark illustrating just how far we have to go.

Then, in the fall, the U.K. pledged to ban nonelectrics by 2030—a once-unthinkable law coming both too slow and much more quickly than seemed possible not very long ago. Similar plans are now in place in 16 other countries, plus Massachusetts and California. Canada recently raised its tax on carbon sixfold. Italy cut its power-sector emissions 65 percent between 2012 and 2019, and Denmark is now aiming to reduce its overall emissions 70 percent by 2030. “We set ourselves challenges that on paper looked almost impossible,” the country’s minister for the environment, Dan Jørgensen, told me recently. “And I think experts in many countries said, when looking at Denmark, ‘This is going to be too expensive, this is going to lower their living standards, this is going to hurt their ability to compete.’ But actually I’m proud to say that the opposite has happened. Now, of course, we have set even higher standards.”

In the midst of the pandemic, new net-zero pledges, far more ambitious than those offered at Paris, were independently made by Japan, South Korea, the E.U., and, most significant, China, the world’s biggest emitter, which promised to reach an emissions peak by 2030 and get all the way to zero by 2060. China’s promise is so ambitious it has inspired one wave of debate among experts about whether it is even feasible — given that it would require, for instance, roughly twice as much renewable power to be installed every year for the next decade as Germany has operating nationwide today — and another debate about whether it has revived the possibility of that 1.5-degree target, with economic historian Adam Tooze writing, just after Xi Jinping’s surprise announcement in September, that it single-handedly “redefined the future prospects for humanity.” Together, the new net-zero pledges may have subtracted a full half-degree from ultimate warming. Add Biden’s campaign pledge of net zero by 2050, and you’ve got about two-thirds of global emissions at least nominally committed to firm, aggressive timelines to zero.

These are all just paper promises, of course, and the history of climate action is littered with the receipts of similar ones uncashed. Plot the growth of carbon concentration in the atmosphere against the sequence of climate-action conferences and a distressing pattern emerges: the World Meteorological Conference of 1979, the U.N. framework of 1992, the Kyoto protocol of 1997, the Copenhagen accord of 2009, and the 2015 Paris accords, all tracking an uninterrupted trajectory upward for carbon from a “safe” level under 350 parts per million, past 400, to 414 today, and pointing upward from there. Before the industrial revolution, humans had never known an atmosphere with even 300 parts per million. Inevitably now, within a few years, the concentration will reach levels not seen since 3.3 million years ago, when sea levels were 60 feet higher. For all their momentum, renewables still only make up 10 percent of global electricity production.

But alarmists have to take the good news where they find it. And while mood affiliation is not always the best guide to the state of the world, in 2020, for me, there were three main sources of hope.

The first is the fact that the age of climate denial is over thanks to extreme weather and the march of science and the historic labor of activists — climate strikers, Sunrise, Extinction Rebellion — whose success in raising alarm may have been so sudden that they brought an end to the age of climate Jeremiahs as well. Their voices now echo in some unlikely places. Exxon was booted from the S&P 500 within months of Tesla making Elon Musk the world’s richest man. The cultural cachet of oil companies is quickly approaching that of tobacco companies. Jair Bolsonaro of Brazil aside, practically every leader of every country and every major figure in every corporate and industrial sector now feels obligated — because of protest and social pressure, economic realities, and cultural expectation — to at least make a show of support for climate action. It would be nice not to have to count that as progress, but it is. The questions are: How much does it matter? And what will follow? Disinformation and human disregard are not the only instruments of delay, and the age of climate denial is likely to yield first not to an age of straightforward climate deliverance but to one characterized by climate hypocrisy, greenwashing, and gaslighting. But those things, ugly and maddening and even criminal as they are, have always been with us. It is the other thing that is new.

The second source of good news is the arrival on the global stage of climate self-interest. By this I don’t mean the profiteering logic of BlackRock, which opportunistically announced some half-hearted climate commitments last year, but rather the growing consensus in almost every part of the globe, and at almost every level of society and governance, that the world will be made better through decarbonization. A decade ago, many of the more ruthless capitalists to analyze that project deemed it too expensive to undertake. Today, it suddenly appears almost too good a deal to pass up. (A recent McKinsey [report](https://www.mckinsey.com/business-functions/sustainability/our-insights/how-the-european-union-could-achieve-net-zero-emissions-at-net-zero-cost): “Net-Zero Emissions at Net-Zero Cost.”)

The logic may be clearest in considering the effects of air pollution, which kills an estimated 9 million people per year. In India, where more than 8 percent of GDP is lost to pollution, poor air quality is also responsible for 350,000 miscarriages and stillbirths every year. Globally, coal kills one person for every thousand people it provides power to, and even in the U.S., with its enviably clean air, total decarbonization would be entirely paid for, Duke’s Drew Shindell [recently testified](https://www.vox.com/energy-and-environment/2020/8/12/21361498/climate-change-air-pollution-us-india-china-deaths) before Congress, just through the public-health benefits of cutting out fossil fuels. You don’t even have to calculate any of the other returns — more jobs, cheaper energy, new infrastructure. Of course, countries all around the world are incorporating those considerations too, turning the page on a generation of economic analysis that said decarbonization was too costly and its benefits too small to sell to the public as upside.

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What is perhaps most striking about all the new climate pledges is not just that they were made in the absence of American leadership but that they were made outside the boundaries of the Paris framework. They are not the result of geopolitical strong-arming or “Kumbaya” consensus. They are, instead, plans arrived at internally, in some cases secretly. This has been eye-opening for the many skeptics who worried for decades about climate’s collective-action problem — who warned that because the benefits of decarbonization were distributed globally while the costs were concentrated locally, nations would move only if all of their peers did too. But a [recent paper](https://www.mitpressjournals.org/doi/full/10.1162/glep_a_00578) by Matto Mildenberger and Michaël Alkin suggests this shouldn’t be a surprise. In their retrospective analysis, they found that, despite much consternation about designing climate policy to prevent countries from “cheating,” there was basically no evidence of any country ever pulling back from mitigation efforts to take a free ride on the good-faith efforts of others. There was, in other words, no collective-action problem on climate after all. For a generation, the argument for climate action was made on a moral basis. That case has only grown stronger. And now there are other powerful, more mercenary arguments to offer.

The third cause for optimism is that, while the timelines to tolerably disruptive climate outcomes have already evaporated, the timelines to the next set of benchmarks is much more forgiving. This is why Glen Peters, the research director at the Cicero Center for International Climate Research, often jokes that while keeping warming below two degrees is very hard, perhaps even impossible, keeping it below 2.5 degrees now looks like a walk in the park.

This isn’t to say we’re on a glide path to safety. At current emissions levels, the planet will entirely exhaust the carbon budget for 1.5 degrees in just seven years — stay merely level, in other words, and we’ll burn through the possibility of a relatively comfortable endgame within the decade. We could buy ourselves a little more time by starting to move quickly, but not that much more. To decarbonize fast enough to give the planet a decent chance of hitting that 1.5-degree target without any negative emissions would require getting all the way to net-zero emissions by around 2035. Simply running the cars and furnaces and fossil-fuel infrastructure that already exists to its expected retirement date would push the world past 1.5 degrees—without a single new gasoline SUV hitting the road, or a single new oil-heated home being built, or a single new coal plant opened.

A two-degree target, by contrast, yields a much longer timeline, requiring the world to achieve net-zero by 2070 or 2080 — without even the help of negative emissions. We’d have to cut carbon production in half in about three decades, rather than one. That pathway will almost certainly prove harder than it looks. The good news is that we seem to be beginning, at least, to try.