# Democracy AC

## AC

### Plan

#### Plan: The United States should recognize an unconditional right of workers to strike.

### Advantage 1 — Workforce

#### Advantage one is the workforce

#### Labor unrest is increasing and there is momentum to strike, but current laws leave workers powerless.

Semuels 10/8 [(Alana, Journalist and currently senior economics correspondent at TIME magazine, previously The Atlantic, The Los Angeles Times, The Boston Globe.) “U.S. Workers Are Realizing It’s the Perfect Time to Go on Strike,” TIME, 10/8/21. <https://time.com/6105109/workers-strike-unemployment/>] RR

Thousands of workers have gone on strike across the country, showing their growing power in a tightening economy. The leverage U.S. employees have over the people signing their paychecks was amplified in Friday’s jobs report, which showed that employers added workers at a much slower-than-expected pace in September. The unemployment rate fell 0.4 percentage points during the month, to 4.8 percent, the government said Friday, and wages are continuing to tick up across industries as employers become more desperate to hire and retain workers. In the first five days of October alone, there were 10 strikes in the U.S., including workers at Kellogg plants in Nebraska, Michigan, Pennsylvania, and Tennessee; school bus drivers in Annapolis, Md.; and janitors at the Denver airport. That doesn’t include the nearly 60,000 union members in film and television production who nearly unanimously voted to grant their union’s president the authority to call a strike.

Jess Deyo is one of nearly 700 nurses who have been on strike as part of the longest healthcare strike in Massachusetts history. For the past seven months, Deyo has reported for duty at the hospital in Worcester, Mass. where she worked as a nurse for more than 15 years, sometimes bringing her daughters, and standing outside through the chills of spring and the heat of summer. The nurses are demanding higher nurse-to-patient ratios after a harrowing 19 months of working during a pandemic. “There’s no choice to give up on the strike,” she says. “It’s bigger than us—it’s for everyone.”

Most of these strikes aren’t counted by the federal government, which in the 1980s started only tracking strikes that involved 1,000 or more workers and that lasted one full shift or longer. There have only been 11 of those so far this year, according to government data, at places like Volvo Trucks and Nabisco.

But academics at Cornell University launched a strike database on May 1 that uses social media and Google alerts to keep track of all the strikes and protests happening in the U.S., even if they involve just a few workers. The database shows a picture of growing worker activism, of small actions that tell a story of how people at workplaces small and large are feeling after 19 months of a global pandemic, says Johnnie Kallas, a PhD student who is the director of Cornell’s Labor Action Tracker. It has documented 169 strikes so far in 2021. “Workers are fed up with low pay and understaffing, and they have more labor market leverage with employers needing to hire right now,” he says. “You are seeing a little bit more labor unrest.”

Of course, compared to half a century ago, there still aren’t many strikes in the U.S. There were 5,716 strikes in 1971 alone, according to government data from when the government tracked smaller strikes. And the share of unionized workers in the U.S. is near an all-time low, with just 12.1% of workers represented by unions last year.

But the activism comes at a time when approval of labor unions—even among Republicans—is trending upwards—and when a low unemployment rate is giving leverage to workers who have long put up with poor conditions and pay. A Gallup poll released in the beginning of July showed that 68% of Americans approve of labor unions, higher than it had been in years and up significantly from the 48% approval in 2009 during the throes of the Great Recession. The poll also showed that 47% of Republicans said they approved of unions—the highest share since 2003—and that 90% of Democrats did.

Greater income inequality, more strikes

Part of the support of unions and organizing may come from Americans’ discontent with growing inequality, much as inequality a century ago galvanized a labor movement then, says Tom Kochan, a professor of work and employment research at MIT. There are a growing number of billionaires in America–708 as of August—with a net worth of $4.7 trillion as of August 17. That’s more than the total net worth of the bottom 50% of Americans.

“I think the accumulated effects of the loss of good jobs in manufacturing, stagnant wages, growing inequality, and the growing disparity between executives and managers and the workforce—all of that is fueling increases in organizing,” he says.

Some of this labor activism was happening before the pandemic, Kochan says, when even the government’s strike tracker showed an uptick in unrest. Teachers in states like Arizona and Oklahoma started striking in 2018 because of low pay and a lack of public funding. In 2020, NBA athletes walked out of a playoff game to protest the shooting of Jacob Blake in Kenosha, Wisc.

The year 2019 saw 25 work stoppages involving 1,000 or more workers, the most since 2001. In 2017, 48% of non-unionized workers said they would vote to join a union if given the chance, higher than the share who said that in 1995 (32%) and 1977 (33%), according to Kochan’s research.

The pandemic worsened working conditions for thousands of workers like Deyo. Kellogg workers at a plant in Battle Creek, Mich., told the local news that they were lauded as heroes for working 16 hour days, seven days a week during the pandemic, and rather than reward them, the company recently decided to offshore some of their jobs. They went on strike on Oct. 5. Musicians at the San Antonio Symphony say they voluntarily accepted an 80% pay cut last season, and that the symphony then proposed first to permanently cut their pay by 50% and then to cut the number of full-time members from 72 to 42. They went on strike on Sept. 27.

Do strikes work?

For their part, employers say that they’re being fair, and that workers are being unreasonable. Kellogg provides workers with benefits and compensation that are among the industry’s best, a company spokesman, Kris Bahner, said in a statement. The company says it has not proposed moving any jobs from the Ready to Eat Cereal plants, which are the plants where the workers are striking, as part of negotiations.

The San Antonio Symphony said, in a statement, that the union and the symphony agreed to a 25% reduction in weekly salary for the 2020-2021 season, but that because there were fewer performances and because fewer musicians could fit on stage because of social distancing guidelines, some musicians did make 80% less than they would have made in a normal season. The symphony needs to make “fundamental changes,” a spokesperson said, and it cannot afford to spend more than it makes through ticket sales and donations.

Carolyn Jackson, the CEO of St. Vincent’s, where Deyo and hundreds of other nurses are striking, says that the nurses are trying to push a 1:4 nurse to patient ratio that Massachusetts voters rejected by a large margin in 2018. The hospital has done research and decided its staffing is appropriate, and that its staffing ratios are in fact better than most other hospitals in the state, she says. Ryan says the hospital announced it was hiring 100 permanent replacement nurses in May during a COVID-19 surge, and that the striking nurses are insisting on getting their old positions back.

That the hospital is not budging speaks to the fact that despite this increase in worker activism, workers may not gain much more power in the long run. Over the last 40 years, the government has made it much more difficult for workers to both form unions and to strike, says Heidi Shierholz, the president of the Economic Policy Institute, a progressive think tank. Amazon was able to effectively interfere in a union vote among its workers this spring, she says, preventing the union from succeeding.

Of course, a hearing officer at the National Labor Relations Board has recommended that the board throw out the results of the Amazon election and do it over, which speaks to a resurgence of government support for labor. President Joe Biden said he wanted to be “the most pro-union President leading the most pro-union administration in American history.” Labor has support at the state and local levels too: California Gov. Gavin Newsom recently signed a packet of pro-worker bills, including one that prohibits companies from imposing quotas on warehouse workers that prevent them from following health and safety law, and another that prohibits employers from paying workers with disabilities less than the state’s minimum wage. And in January, New York City Mayor Bill de Blasio signed a bill that forbids fast food restaurants from firing workers unless the employer has just cause, making New York City the first jurisdiction in the country that essentially ended at-will employment.

But even that support may not be enough to force a widespread change of working conditions in an economy where employees haven’t had much leverage since before the Great Recession, or earlier. Even some of the recent strikes haven’t led to workers’ desired outcomes. A five-week Nabisco strike recently ended with many of workers’ demands met, for instance, but the company still won the ability to pay weekend workers less than they do currently.

As for Jess Deyo and the Worcester nurses, many have been forced to move on. After Deyo’s unemployment benefits ended and her health insurance premiums spiked, she decided she needed to find another job so that she could support her family. She’s a single mother. She found a job working as a nurse at a doctor’s office, where she says she feels more appreciated than she’s ever felt at work. The hours are better and she finally feels respected. But she makes $13 less an hour.

#### Strikes are key to revitalizing labor unions and challenging monopolies power

Bahn 19 [(Kate, the director of labor market policy and interim chief economist at the Washington Center for Equitable Growth) “The once and future role of strikes in ensuring U.S. worker power” Washington Center for Equitable Growth, 8/29/19. https://equitablegrowth.org/the-once-and-future-role-of-strikes-in-ensuring-u-s-worker-power/] RR

At the same time, there is an increasing consensus today that unions are a positive force for increasing worker power and balancing against economic inequality. In polling of support for unions and specific aspects of collective bargaining, Equitable Growth grantee Alex Hertel-Fernandez of Columbia University, along with William Kimball and Thomas Kochan of the Massachusetts Institute of Technology, find that support for unions has grown overall, with nearly half of U.S. workers in 2018 saying they would vote for a union if given the opportunity. This is a significant increase from one-third of workers supporting unionization in 1995. According to their research, workers primarily value unions’ role in collective bargaining and ensuring access to benefits such as healthcare, retirement, and unemployment insurance.

Strikes have historically been one of the strongest tools used by unions to ensure they have power to engage in collective bargaining. But striking was viewed as a negative attribute in the survey done by Hertel-Fernandez, Kimball, and Kochan. Yet, when they presented workers with the hypothetical choice of a union exercising strike power with other attributes of unions, such as collective bargaining, support increased.

But strikes, of course, do not take place in a bubble. The wider climate of worker bargaining power and institutions that support labor organizing plays a role in making this historically crucial tool effective again. So, too, does the power of employers to resist these organizing efforts when the labor market lacks competition that would increase worker bargaining power.

#### Labor shortages now are because of low wages— unions reverse that by allowing for bargaining.

Lopezlira & Jacobs 9/3 [(Enrique, is the director of the Low-Wage Work program at the UC Berkeley Labor Center. He is a labor economist, directing and conducting research on how policies affect working families, with a particular focus on how these policies impact racial and gender equity. Doctorate in Economics from Howard University) (Ken, the chair of the University of California, Berkeley Center for Labor Research and Education, where he has been a labor specialist since 2002.) “Don’t Mistake the Disappointing Jobs Numbers for a Labor Shortage,” Barron’s, 9/3/21. <https://www.barrons.com/articles/dont-mistake-the-disappointing-jobs-numbers-for-a-labor-shortage-51630698151>] RR

Today’s jobs report shows a complicated picture for workers. The economy added only 235,000 jobs in August, despite near-record vacancies, while hourly wages grew faster than expected. But hold off a moment before calling it a labor shortage.

Yes, some employers are experiencing difficulty filling jobs as the economy begins to recover from the effects of the pandemic. But this alone is just one part of the picture. A labor shortage means there aren’t enough workers, and that is simply not the current case. While there are plenty of workers available, there are far fewer available, willing, and able to work at the current wages being offered. In other words, it isn’t that demand for workers is too high, it’s that wages are too low.

While it is true that wages have increased recently for some workers, it would be incorrect to believe that all workers now enjoy higher wages and greater bargaining power with employers. Unfortunately, the truth is millions of workers continue to earn low wages that make it nearly impossible for them to make ends meet.

The pandemic has made the economic situation for low-wage workers more dire, but typical workers’ pay has been growing very slowly over the last 40 years. Economic theory states wages are tied to productivity, but this is only in theory. The reality is that since 1979 the gap between pay and worker productivity has widened significantly, with productivity growing 62% over this period, while wages only grew by 18%. But if workers are more productive than ever before, why have they received few of the benefits of this increased productivity? The answer is that a greater share of the gains are going to those at the top—through higher salaries at the high end of the income distribution, as well as ever-larger corporate profits. And this has been made even worse by the pandemic, during which the net worth of billionaires in the U.S. increased by $1 trillion at the same time that 20 million workers lost their jobs.

Summer 2021 has seen some welcomed wage growth at the middle and bottom of the wage distribution. In terms of industries, the highest wage growth has been in leisure and hospitality (in restaurants and bars, for instance), which traditionally pays some of the lowest wages, and which saw the largest wage drops when Covid-19 hit.

Even with these wage increases, real wages for these service-sector workers have rebounded only to prepandemic trends. For workers in these sectors to experience real improvements in earnings, wages need to grow even further. However, there is no guarantee that the recent wage growth will last, let alone that further increases will materialize.

One way to help ensure a strong wage floor is by increasing the federal minimum wage, which has been stuck at $7.25 an hour since 2009. Twenty-nine states and the District of Columbia have higher minimum wages than the federal level, but that means there are 21 other states that do not. Increasing the federal minimum wage to $15 an hour, and indexing it to inflation, would help make sure all workers, regardless of where they live, receive decent pay—and that the value of their wages does not again erode over time.

While the minimum wage raises the floor, more is needed to improve wages and working conditions for the rest of America’s workers. Central to achieving a broad-based improvement in pay is enabling workers who wish to do so to form unions and engage in collective bargaining. Unions have been shown to improve not just wages and benefits, but also to reduce socioeconomic disparities. Unions raise wages and increase access to benefits for all workers, with the largest gains for those who earn the least in nonunion workplaces: women and workers of color. Unions don’t only benefit their members. When more workers in an industry are unionized, pay rises across the industry.

Unions also play an important role in promoting worker health and safety. As the Covid-19 crisis began, unionized workers were more likely to have access to personal protective equipment and paid sick days. Throughout the crisis, unions fought for strong worker protections on the job to reduce the spread of Covid-19 and to get the economy going again.

While support for unions is high, America’s labor laws make it extremely difficult for workers to organize and win collective bargaining. In just one egregious example, currently if an employer violates the National Labor Relations Act, there are no financial penalties. The Protecting the Right to Organize Act (PRO Act), which has now passed the House of Representatives and is waiting to be heard in the Senate, would change that. The PRO Act would create stronger remedies, expand bargaining rights, and put the decision over whether or not to join a union in the hands of the workers, where it belongs.

Many workers at the bottom have received raises over the last year. A growing body of evidence finds that policies which improve wages and family incomes help reduce racial disparities while having long-term, positive effects on a wide range of societal outcomes–from child and adult health to civic participation.

These structural and legal factors provide an important roadmap for us to ensure a robust and sustainable recovery that works for all Americans. Whether wage increases for the majority of workers continue depends on the decisions we make as a society.

#### Industrial workforce shortages are happening now— Covid and inability to compete.

Scull and Stone 8/28 [(John, an associate in the Philadelphia, Pennsylvania, office of Jackson Lewis P.C. His practice focuses on representing employers in workplace law matters, including preventive advice and counseling.) (James, a principal of the Cleveland, Ohio, office of Jackson Lewis P.C. From the opening of the office in 2006 until early 2020, Jim served as office managing principal in Cleveland. At that time, he stepped down to focus on his busy practice and increased task force activities within practice groups and serving as co-leader of the firm’s Manufacturing industry group.) “Manufacturing Labor Shortage: Cultivating Skilled Labor By Engaging Local Communities,” JDSupra, 8/28/21. <https://www.jdsupra.com/legalnews/manufacturing-labor-shortage-1463687/>] RR

The worker shortage in manufacturing has been exacerbated by the 2020 COVID-19 pandemic, which erased over a decade of job gains in the manufacturing sector, eliminating more than 1.4 million positions, according to a report by Deloitte and the Manufacturing Institute (MI). To counter the trend, manufacturers should consider working with local schools and youth programs to develop a sustainable pipeline of talent.

While approximately 820,000 of the jobs lost in the COVID-19 pandemic have since been backfilled, nearly 500,000 positions remain open and manufacturing employers have had difficulty filling these roles. According to the MI report, manufacturing employers say it is currently 36 percent harder to find talent than it was in 2018, even though the unemployment rate today is much higher. This manufacturing employment shortage is likely to intensify as the number of unfilled manufacturing positions in the United States is expected to grow to approximately 2.1 million by 2030 — damaging the U.S. economy by up to $1 trillion.

While the pandemic certainly played a large role in damaging the U.S. manufacturing sector’s employment numbers, the worker shortage is nothing new. There are approximately five million fewer Americans employed in the manufacturing sector today than 20 years ago. Employers hope to reverse this trend and are under pressure to do so quickly as the median age of an American working in manufacturing is 44 years old, and older workers are retiring faster than they are being replaced.

#### A strong industrial workforce is key to US military primacy

Bloomberg Editorial Board 4/7 [(Members of the editorial board will write and edit in other capacities within Bloomberg Opinion. Because our columnists have always spoken for themselves, they will continue as before — though columnists will still refrain from endorsing candidates, a policy we have had in place since we started in 2011.) “America’s Depleted Industrial Base Is a National Security Crisis,” Bloomberg, 4/7/21. <https://www.bloomberg.com/opinion/articles/2021-04-07/america-s-depleted-industrial-base-is-a-national-security-crisis>] RR

President Dwight D. Eisenhower’s farewell address is most famous for its warning against the “unwarranted influence” of the military-industrial complex. But Eisenhower also stressed the defense industry’s importance to the country’s security: After all, it helped the U.S. maintain superiority over its rivals, forestall great-power conflict and win the Cold War.

Six decades on, America’s military remains the most advanced in the world — but the industrial base supporting it has deteriorated. Industry consolidation, domestic manufacturing decline and dysfunctional federal budgeting have combined to reduce competition throughout the defense supply chain, eroding military readiness and potentially jeopardizing national security.

As Congress considers the Defense Department’s next budget, investing in a more nimble, innovative and resilient defense-industrial base should be among its highest priorities.

Some parts of the defense industry, to be sure, continue to flourish. The U.S. spends more on its military than the next 10 countries combined, with the Pentagon’s budget consuming more than half of all federal discretionary spending. Revenue for defense contractors has increased by 83% since 2011, with annual spending per company doubling in the past five years alone.

That money, however, is flowing to a reduced cast of contractors. An analysis by Bloomberg Government found that the number of Pentagon “prime vendors” — those that receive contracts directly from the government — has dropped by 36% in the last decade. An even smaller handful has reaped the most gains. According to the Government Accountability Office, nearly half of the 183 major contracts awarded by the Pentagon in 2018 went to just five contractors and their subsidiaries.

Such concentration imposes costs on both the military and the public. The first is financial. More than two-thirds of major Defense Department contracts are awarded without a competitive bidding process, according to the GAO; most of the rest receive bids from two or fewer companies. Fewer bidders means pricier contracts: Between 2008 and 2018, the average acquisition cost of a U.S. weapons program, in constant dollars, increased by 12.5%.

A lack of suppliers also undermines America’s ability to respond to crises. The Pentagon has identified a “staggering” number of cases where it relies on a single vendor for critical components. It’s down to a lone domestic source of both ammonium perchlorate, a key ingredient for warship propulsion systems, and chaff, a material that fighter jets release to evade enemy radar systems. A sole manufacturer provides all of the Army’s gun and howitzer barrels and mortar tubes. Meanwhile, offshoring has made the supply chain more vulnerable to trade disruptions, cyberattacks and sabotage.

This attenuation of the U.S.’s military supply chain poses a growing national security risk — and it demands a bold response.

President Joe Biden’s $2.25 trillion infrastructure plan includes $180 billion in investments to strengthen U.S. supply chains. The administration should use the Defense Production Act and other authorities to boost support for smaller domestic suppliers of critical goods and services. The Pentagon should also streamline its cumbersome contracting and acquisition process, which discourages innovation and crowds out nontraditional vendors. Initiatives like the Trusted Capital program, which connects investors with companies developing new military technologies, should be expanded. Finally, the Federal Trade Commission and the Justice Department should increase scrutiny of defense-industry mergers and acquisitions to limit excessive consolidation.

A well-functioning supply chain depends on a diverse array of private-sector companies. The viability of those companies, in turn, depends on a sufficient supply of skilled labor. Upgrading the skills of both service members and the civilian workforce that supports the military is critical. The Pentagon should expand digital training for current employees and offer promotions and higher pay to civilian staff with advanced technical skills. Congress should boost funding for the department’s Skills Imperative initiative, which brings together schools and employers to address defense-industry workforce needs. It should also encourage apprenticeship programs in key sectors, such as shipbuilding, that lack qualified workers.

As Eisenhower recognized, America’s influence abroad depends on its strength at home. Revitalizing the defense-industrial base is essential not only for national security, but also for the preservation of peace around the world.

#### US primacy prevents great-power conflict — multipolar revisionism fragments the global order and causes nuclear war

Brands & Edel, 19 — Hal Brands; PhD, Henry A. Kissinger Distinguished Professor of Global Affairs at the Johns Hopkins School of Advanced International Studies. Charles Edel; PhD, Senior Fellow and Visiting Scholar at the United States Studies Centre at the University of Sydney. (“The Lessons of Tragedy: Statecraft and World Order;” Ch. 6: Darkening Horizon; Published by Yale University Press; //GrRv)  
Each of these geopolitical challenges is different, and each reflects the distinctive interests, ambitions, and history of the country undertaking it. Yet there is growing cooperation between the countries that are challenging the regional pillars of the U.S.-led order. Russia and China have collaborated on issues such as energy, sales and development of military technology, opposition to additional U.S. military deployments on the Korean peninsula, and naval exercises from the South China Sea to the Baltic. In Syria, Iran provided the shock troops that helped keep Russia’s ally, Bashar al-Assad, in power, as Moscow provided the air power and the diplomatic cover. “Our cooperation can isolate America,” supreme leader Ali Khamenei told Putin in 2017. More broadly, what links these challenges together is their opposition to the constellation of power, norms, and relationships that the U.S.-led order entails, and in their propensity to use violence, coercion, and intimidation as means of making that opposition effective. Taken collectively, these challenges constitute a geopolitical sea change from the post-Cold War era.

The revival of great-power competition entails higher international tensions than the world has known for decades, and the revival of arms races, security dilemmas, and other artifacts of a more dangerous past. It entails sharper conflicts over the international rules of the road on issues ranging from freedom of navigation to the illegitimacy of altering borders by force, and intensifying competitions over states that reside at the intersection of rival powers’ areas of interest. It requires confronting the prospect that rival powers could overturn the favorable regional balances that have underpinned the U.S.-led order for decades, and that they might construct rival spheres of influence from which America and the liberal ideas it has long promoted would be excluded. Finally, it necessitates recognizing that great-power rivalry could lead to great-power war, a prospect that seemed to have followed the Soviet empire onto the ash heap of history.

Both Beijing and Moscow are, after all, optimizing their forces and exercising aggressively in preparation for potential conflicts with the United States and its allies; Russian doctrine explicitly emphasizes the limited use of nuclear weapons to achieve escalation dominance in a war with Washington. In Syria, U.S. and Russian forces even came into deadly contact in early 2018. American airpower decimated a contingent of government-sponsored Russian mercenaries that was attacking a base at which U.S. troops were present, an incident demonstrating the increasing boldness of Russian operations and the corresponding potential for escalation. The world has not yet returned to the epic clashes for global dominance that characterized the twentieth century, but it has returned to the historical norm of great-power struggle, with all the associated dangers.

Those dangers may be even greater than most observers appreciate, because if today’s great-power competitions are still most intense at the regional level, who is to say where these competitions will end? By all appearances, Russia does not simply want to be a “regional power” (as Obama cuttingly described it) that dominates South Ossetia and Crimea.37 It aspires to the deep European and extra-regional impact that previous incarnations of the Russian state enjoyed. Why else would Putin boast about how far his troops can drive into Eastern Europe? Why else would Moscow be deploying military power into the Middle East? Why else would it be continuing to cultivate intelligence and military relationships in regions as remote as Latin America?

Likewise, China is today focused primarily on securing its own geopolitical neighborhood, but its ambitions for tomorrow are clearly much bolder. Beijing probably does not envision itself fully overthrowing the international order, simply because it has profited far too much from the U.S.-anchored global economy. Yet China has nonetheless positioned itself for a global challenge to U.S. influence. Chinese military forces are deploying ever farther from China’s immediate periphery; Beijing has projected power into the Arctic and established bases and logistical points in the Indian Ocean and Horn of Africa. Popular Chinese movies depict Beijing replacing Washington as the dominant actor in sub-Saharan Africa—a fictional representation of a real-life effort long under way. The Belt and Road Initiative bespeaks an aspiration to link China to countries throughout Central Asia, the Middle East, and Europe; BRI, AIIB, and RCEP look like the beginning of an alternative institutional architecture to rival Washington’s. In 2017, Xi Jinping told the Nineteenth National Congress of the Chinese Communist Party that Beijing could now “take center stage in the world” and act as an alternative to U.S. leadership.38

These ambitions may or may not be realistic. But they demonstrate just how significantly the world’s leading authoritarian powers desire to shift the global environment over time. The revisionism we are seeing today may therefore be only the beginning. As China’s power continues to grow, or if it is successful in dominating the Western Pacific, it will surely move on to grander endeavors. If Russia reconsolidates control over the former Soviet space, it may seek to bring parts of the former Warsaw Pact to heel. Historically, this has been a recurring pattern of great-power behavior—interests expand with power, the appetite grows with the eating, risk-taking increases as early gambles are seen to pay off.39 This pattern is precisely why the revival of great-power competition is so concerning—because geopolitical revisionism by unsatisfied major powers has so often presaged intensifying international conflict, confrontation, and even war. The great-power behavior occurring today represents the warning light flashing on the dashboard. It tells us there may be still-greater traumas to come.

The threats today are compelling and urgent, and there may someday come a time when the balance of power has shifted so markedly that the postwar international system cannot be sustained. Yet that moment of failure has not yet arrived, and so the goal of U.S. strategy should be not to hasten it by giving up prematurely, but to push it off as far into the future as possible. Rather than simply acquiescing in the decline of a world it spent generations building, America should aggressively bolster its defenses, with an eye to preserving and perhaps even selectively advancing its remarkable achievements.

#### Nuclear war causes extinction – famine and climate change

Starr 15 [(Steven, Director of the University of Missouri’s Clinical Laboratory Science Program and a senior scientist at the Physicians for Social Responsibility) “Nuclear War, Nuclear Winter, and Human Extinction,” Federation of American Scientists, 10/14/2015] DD

While it is impossible to precisely predict all the human impacts that would result from a nuclear winter, it is relatively simple to predict those which would be most profound. That is, a nuclear winter would cause most humans and large animals to die from nuclear famine in a mass extinction event similar to the one that wiped out the dinosaurs.

Following the detonation (in conflict) of US and/or Russian launch-ready strategic nuclear weapons, nuclear firestorms would burn simultaneously over a total land surface area of many thousands or tens of thousands of square miles. These mass fires, many of which would rage over large cities and industrial areas, would release many tens of millions of tons of black carbon soot and smoke (up to 180 million tons, according to peer-reviewed studies), which would rise rapidly above cloud level and into the stratosphere. [For an explanation of the calculation of smoke emissions, see Atmospheric effects & societal consequences of regional scale nuclear conflicts.]

The scientists who completed the most recent peer-reviewed studies on nuclear winter discovered that the sunlight would heat the smoke, producing a self-lofting effect that would not only aid the rise of the smoke into the stratosphere (above cloud level, where it could not be rained out), but act to keep the smoke in the stratosphere for 10 years or more. The longevity of the smoke layer would act to greatly increase the severity of its effects upon the biosphere.

Once in the stratosphere, the smoke (predicted to be produced by a range of strategic nuclear wars) would rapidly engulf the Earth and form a dense stratospheric smoke layer. The smoke from a war fought with strategic nuclear weapons would quickly prevent up to 70% of sunlight from reaching the surface of the Northern Hemisphere and 35% of sunlight from reaching the surface of the Southern Hemisphere. Such an enormous loss of warming sunlight would produce Ice Age weather conditions on Earth in a matter of weeks. For a period of 1-3 years following the war, temperatures would fall below freezing every day in the central agricultural zones of North America and Eurasia. [For an explanation of nuclear winter, see Nuclear winter revisited with a modern climate model and current nuclear arsenals: Still catastrophic consequences.]

Nuclear winter would cause average global surface temperatures to become colder than they were at the height of the last Ice Age. Such extreme cold would eliminate growing seasons for many years, probably for a decade or longer. Can you imagine a winter that lasts for ten years?

The results of such a scenario are obvious. Temperatures would be much too cold to grow food, and they would remain this way long enough to cause most humans and animals to starve to death.

Global nuclear famine would ensue in a setting in which the infrastructure of the combatant nations has been totally destroyed, resulting in massive amounts of chemical and radioactive toxins being released into the biosphere. We don’t need a sophisticated study to tell us that no food and Ice Age temperatures for a decade would kill most people and animals on the planet.  Would the few remaining survivors be able to survive in a radioactive, toxic environment?

### Advantage 2 — Democracy

#### Advantage two is democracy

#### The US is instigating a global democratic crisis – any lapse in US policy spills over

Werner 7/9 [(Jake, a Postdoctoral Global China Research Fellow at the Boston University Global Development Policy Center.) “Does America Really Support Democracy—or Just Other Rich Democracies?” Foreign Affairs, 7/9/2021. https://www.foreignaffairs.com/articles/united-states/2021-07-09/does-america-really-support-democracy-or-just-other-rich] BC

In a speech he delivered in February, U.S. President Joe Biden painted a portrait of a world fundamentally divided between democracy and autocracy. “We’re at an inflection point,” he said, “between those who argue that, given all the challenges we face . . . that autocracy is the best way forward, . . . and those who understand that democracy is essential . . . to meeting those challenges.” Biden has insisted that both his domestic and foreign agendas put the United States in the best possible position to win this epochal conflict.

But this fixation on a clash between autocracy and democracy obscures a deeper divide in geopolitics. The United States asserts leadership of the world’s democracies, but it actually stands opposed to most democracies on many of the most significant global issues. From the COVID-19 pandemic to global trade rules, from climate change to economic development, the United States is actively frustrating the priorities of most of the world’s democracies. In the process, U.S. foreign policy is—in the name of democracy—compounding the global crisis of democracy and delegitimizing U.S. power.

Rich and poor democracies share many problems. Forty years of increasingly concentrated wealth, deteriorating public goods, eroding stability for workers, and a disintegrating sense of collective belonging have provided raw material for nationalism, racism, and authoritarianism in democracies of all levels of wealth. The Biden administration understands this. In speech after speech, Biden has made an essential point: people are losing faith in democracy because democracy is not meeting their needs. In his domestic agenda, Biden recognizes that investing in the common good, providing greater power and security to labor, and mobilizing people to confront the climate crisis are all crucial to the project of fending off illiberal politics and reviving democracy in the United States.

Yet Biden’s foreign policy suffers from a strange disconnect. Rather than pursuing a global strategy to revive faith in the common good, Biden focuses on outcompeting China—as if people outside the United States value democracy not because it empowers them but because it is synonymous with U.S. power. Biden argues that for the sake of democracy, Americans must “develop and dominate the products and technologies of the future.” That would certainly help Americans and people in other rich, technologically advanced democracies. That might help U.S. investors, but is not a vision of a global economy in which all democracies can deliver for their people.

A different approach is possible, one capable of reversing the global antidemocratic tide by opening new opportunities for people around the world. It will require a better framework for understanding today’s conflicts, one more capacious than a myopic binary that pits liberal democracy against its authoritarian other.

INVISIBLE DEMOCRACIES

The claim that the United States is at odds with most democracies may feel jarring, but that is only because U.S. leaders and media so often conflate the “world’s democracies” with the handful of rich countries, including former colonial powers in Europe (and Japan) and states that began as settler colonies, such as Australia and Canada. A 2020 New York Times article, for example, headlined the findings of a Pew Research Center poll this way: “Distrust of China Jumps to New Highs in Democratic Nations.” The poll was not, however, about “democratic nations.” Most of the world’s largest democracies—countries such as Brazil, India, Indonesia, Mexico, and South Africa—were not included, nor were many smaller democracies such as Botswana, Papua New Guinea, and Sri Lanka. It was instead a poll of people in (as Pew itself put it) “advanced economies.”

According to the Economist Intelligence Unit’s Democracy Index, democratic developing countries are home to twice as many people as rich democracies—three times as many, if one counts semidemocratic “hybrid regimes” such as those in Bangladesh, Nigeria, and Turkey. Yet the world’s many poor democracies remain largely peripheral to the worldview of U.S. policymakers. They enter into Beltway conversations only when they threaten regional stability or become useful in wider geopolitical conflicts.

This invisibility is understandable. Precisely because they are poor, the democracies of the global South exert far less influence over world politics and the global economy than their wealthy counterparts. The rich democracies account for about 15 percent of world population but enjoy 43 percent of global GDP as measured by purchasing power (59 percent in dollar terms), and their military budgets amount to nearly two-thirds of the world’s war spending. Many Americans also share a feeling of cultural or ethnic affinity with the rich democracies that does not extend to the poor democracies.

Confusing democracy with wealth fundamentally distorts strategic thinking about what U.S. leaders so often proclaim to be a top priority: ensuring that democracy flourishes around the world. Poor and rich democracies alike have been moving in an illiberal direction in recent years. But a foreign policy aimed at renewing and supporting democracy will fail if it is based solely on the preferences of rich countries. That’s because the democracies of the global South, more often than not, have interests that are very different from those of the rich democracies—interests that frequently align with more authoritarian developing countries. In other words, one effect of framing the major struggle in the world today as a fight between democrats and authoritarians is to render invisible the inequality that characterizes the global economy, which is often the more consequential division.

#### A right to strike solves 3 warrants—

#### Worker strikes withhold labor from wealthy elites to make way for new progressive legislature.

Pope 18 [(James Gray, a distinguished professor of law at Rutgers Law School and serves on the executive council of the Rutgers Council of AAUP/AFT Chapters, AFL-CIO.) “Labor’s right to strike is essential,” PSC Cuny, September 2018. <https://www.psc-cuny.org/clarion/september-2018/labor%E2%80%99s-right-strike-essential>] RR

Strikers can be fired and fined for peacefully refusing to work, but their leaders can be jailed and their unions fined millions of dollars. Officials have no discretion to grant amnesty in a strike settlement. Under the Taylor Law, the red-state teachers would have been punished notwithstanding the justice of their cause or the extent of their public support. So repressive is the law that it has been condemned by the Committee on Freedom of Association of the International Labor Organization, a tripartite body that includes employer representatives. The next time a Republican governor works up the nerve to enforce anti-strike laws against public workers, they’ll have the satisfaction of piggybacking on those Democratic friends of labor, Cuomo and de Blasio.

POLITICAL CLIMATE

What provoked Cuomo and de Blasio to close ranks and launch a simultaneous attack on workers’ rights? Gubernatorial candidate Cynthia Nixon had the audacity to include in her platform a plank endorsing public workers’ right to strike. No wonder Cuomo and de Blasio struck back: Like Bernie Sanders, Nixon threatened the grip of Wall Street-backed politicians on what was once the party of working people.

The right to strike should be a no-brainer for any self-respecting candidate who claims to care about working people. It isn’t some transitory policy fix; it’s a fundamental human right, recognized in international law. Without the right to strike, workers have no effective recourse against unhealthy conditions, inadequate wages, or employer tyranny. Before the American labor movement began its long decline, unions made the right to strike a litmus test for supporting candidates. Labor leaders held that anti-strike laws imposed “involuntary servitude” in violation of the Thirteenth Amendment to the United States Constitution. Corporate interests ridiculed this claim, arguing that the Amendment guaranteed only the individual right to quit and go elsewhere. But workers and unions held their ground. “The simple fact is that the right of individual workers to quit their jobs has meaning only when they may quit in concert, so that in their quitting or in their threat to quit they have a real bargaining strength,” Congress of Industrial Organizations (CIO) General Counsel Lee Pressman explained. “It is thus hypocritical to suggest that a prohibition on the right to strike is not in practical effect a prohibition on the right to quit individually.”

Labor leaders quoted the Supreme Court’s statement that the Amendment was intended “to make labor free, by prohibiting that control by which the personal service of one man is disposed of or coerced for another’s benefit which is the essence of involuntary servitude.” Although they never convinced the Supreme Court that this principle covered the right to strike, Congress did embrace the core of their claim when it protected the right to strike in two historic statutes, the Norris-LaGuardia Act of 1932 and the Wagner National Labor Relations Act of 1935. The “individual unorganized worker,” explained Congress, “is helpless to exercise actual liberty of contract and to protect his freedom of labor.”

A DEMOCRATIC NEED

The recent teacher strikes underscore another, equally vital function of the strike: political democracy. It is no accident that strikers often serve as midwives of democracy. Examples include Poland in the 1970s, where shipyard strikers brought down the dictatorship, and South Africa in the 1970s and 1980s, where strikers were central to the defeat of apartheid. Even in relatively democratic countries like the United States, workers often find it necessary to withhold their labor in order to offset the disproportionate power of wealthy interests and racial elites. During the 1930s, for example, it took mass strikes to overcome judicial resistance to progressive economic regulation. Today, workers confront a political system that has been warped by voter suppression, gerrymandering and the judicial protection of corporate political expenditures as “freedom of speech.” With corporate lackeys holding a majority of seats on the Supreme Court, workers may soon need strikes to clear the way for progressive legislation just as they did in the 1930s.

#### Strikes are key political tools— they incentivize being active in political institutions and transform conditions.

Reddy 1/6 [(Diana S., a Doctoral Fellow at the Law, Economics, and Politics Center at UC Berkeley Law, and a PhD candidate in UCB's Jurisprudence and Social Policy Program.) ““There Is No Such Thing as an Illegal Strike”: Reconceptualizing the Strike in Law and Political Economy,” The Yale Law Journal, 1/6/21. <https://www.yalelawjournal.org/forum/there-is-no-such-thing-as-an-illegal-strike-reconceptualizing-the-strike-in-law-and-political-economy>] RR

B. Striking as Political

For those who believe that a stronger labor movement is needed to counterbalance the concentrations of economic and political power in this new Gilded Age, the question is not just whether the law is bad (it is), but whether strikes can be effective nonetheless. If labor activists are correct that there is “no such thing” as an illegal strike, just an unsuccessful strike, the question follows: what makes a strike successful enough, under current conditions, to transcend legal constraints?154 To some extent this is an empirical question, and one on which there are many opportunities for generative research. Beginning with the theoretical, however, I suggest that the success of strikes must be measured in more than economic wins in the private sphere. Like their Progressive Era progenitors, their success must be in raising political consciousness in the public sphere—in making the stakes of the twenty-first century labor question apparent.155

As noted above, under current labor law, strikes are conceptualized as “economic weapons,” as hard bargaining.156 And while legal terminology is distinct from on-the-ground understandings, unions have often emphasized the economic nature of the strike as well. Strikes are “[t]he power to stop production, distribution and exchange, whether of goods or services.”157 A strike works because “we withhold something that the employer needs.”158 At the same time, there has been a corresponding tendency to dismiss the more symbolic aspects of the strike. To quote White again, “while publicity and morale are not irrelevant, in the end, they are not effective weapons in their own right.”159

These arguments are important. A strike is not simply protest; it is direct action, material pressure. But with union density lower than ever, ongoing automation of work tasks that renders employees increasingly replaceable, and decades of neoliberal cultural tropes celebrating capital as the driver of all economic growth and innovation, it is a mistake to think of publicity and morale as nice-to-haves, rather than necessities. Instead, striking must be part of building what sociologists have described as the “moral economy,” cultural beliefs about fair distribution untethered to technocratic arguments about what is most efficient.160 And in that way, striking is and must be understood as political.

The term political, of course, has many meanings—engendered by law, culture, and the relationship between the two. Building on the work of other scholars, I have argued that neo-Lochnerian readings of the First Amendment which have categorized labor protest as solely economic, and therefore apolitical, are one mechanism by which unions have lost legitimacy (and legal protection) as a social movement.161 Under current law, what precisely constitutes the political is less than clear, though. In distinguishing “political” speech from other kinds of speech for the purpose of First Amendment analysis, the Supreme Court has at times equated the political with: electioneering;162 speech directed to or about the government;163 or most broadly, “speech and debate on public policy issues.”164 Within labor parlance, by contrast, the term “political strike” is specifically used to refer to strikes that are “designed to win a specific political outcome, such as the passage of legislation or a change in

regulation.”165 Consistent with the NLRA’s construction of unions as economic entities, strikes which are solely “political” and without sufficient nexus to the employment relationship, are deemed unlawful secondary boycotts.166

But my argument here for reconceptualizing the strike as political is not about more “political strikes,” or about electoral politics, or even necessarily about state action. Based on a vision of the “political” as normative engagement directed towards collective decision-making—it is about destabilizing jurisprudential line drawing between the economic and the political in the first place.167 It is recognizing that all strikes are political or have the potential to be—in that all strikes are protest meant to transform collective conditions, not merely bargaining towards immediate, transactional ends. To use political science terminology, strikes are contentious politics: “[E]pisodic, public, collective interaction among makers of claims and their objects.”168 They are a way through which workers engage in claims-making when business and politics as usual have proven nonresponsive.169 They do not only address the employer; they engage the polity.

The need to reconceptualize the strike as outward-facing towards the public, not just inward-facing towards the employer, is partly a function of material changes, both in economic production and union density. As labor scholar Jane McAlevey points out, “Today’s service worker has a radically different relationship to the consuming public than last century’s manufacturing worker had . . . In large swaths of the service economy, the point of production is the community.”170 For this reason, she argues that effective strikes today must engage the public to be successful.171 Union density is also many times higher now in the public sector than in the private one, an upending of the realities of unionization mid-century.172 As illustrated by the Supreme Court’s decision in Janus v. AFSCME, it is easier to see the economic work of unions as political (qua affecting government policy, spending, and debt) in the public sector.173

Yet, the shift is also about recognizing that it was a legal and an ideological accommodation that made the work of unions in their representative capacity appear as “economic,” and thus outside politics. The work of unions has been artificially “bifurcated” vis-à-vis the political realm.174 For years, as Reuel Schiller has argued, unions have engaged in “two sets of activities that appear barely related to one another”: private, transaction bargaining in the workplace; combined with broad, public mobilization around electoral politics. But there were always alternate visions of the relationship between the economic and the political within union advocacy and workplace governance.175 If “establishing terms and conditions of employment [is] a political act involving not just a worker and an employer, but also a union, an industry as a whole, and the state,” then union advocacy is a political act too.176 Strikes are part of the “contest of ideas.”

Reconstructing a purposefully political philosophy, jurisprudence, and tactical repertoire of collective-labor advocacy is a project that is new again; and it will inevitably require deliberation, debate, and compromise.177 For the time being, though, one thing seems apparent. Strikes must be a part of engaging a broad swath of the public in reconceptualizing political economy.

#### Strikes are key to take decisive action if democracy is threatened.

Madeloni 20 [(Barbara, is the education coordinator at Labor Notes and a former president of the Massachusetts Teachers Association.) “Unions Are Beginning to Talk About Staving Off a Possible Coup,” LaborNotes, 10/15/20. <https://labornotes.org/2020/10/unions-are-beginning-talk-about-staving-possible-coup>] RR

UNIONS ARE THE BEDROCK

If these resolutions represent a growing realization that labor must act in the face of threats to a peaceful transfer of power, we can expect to see similar resolutions pass in the days ahead. But if these resolutions are to have teeth, the leaders who voted to endorse these actions need a plan to talk with members, name the risk, and prepare workers.

Organized workers will be essential to upholding a fair election and peaceful transfer of power. “Labor unions are a bedrock institution in any democracy and have always had a special role to play in defending democracy in society,” UE President Carl Rosen told me in an email.

“This is especially true in the U.S. today. Unions should be at the front lines in defense of American democracy and should be prepared to take decisive action if our democratic traditions are threatened.”

#### Democracies are key to solve climate change— US democratic leadership is key.

Fiorino 9/22 [(Daniel J, is the Director of the Center for Environmental Policy at American University in Washington DC. He his author of Can Democracy Handle Climate Change? (Polity, 2018). ) “Democracy is suited to tackle climate change,” Democracy Without Borders, 9/22/21. <https://www.democracywithoutborders.org/20869/democracy-is-suited-to-tackle-climate-change/>] RR

Comparing democratic and authoritarian systems

Climate change is a complex challenge, the largest collective action problem in history, and a classic illustration of the concept of a wicked problem. It is distinctive in many ways: unlike most forms of air or water pollution, the effects are not immediately obvious; harms occur mostly in the future, with a perceived temporal mismatch of costs and benefits. Scientific uncertainty allows opponents of action at least to raise doubt. Further, acting on the causes of the problem requires basic changes in economic and social systems, not just incremental fine-tuning.

Democracies overall are more suited to handling climate change

There is good reason to believe, however, that democracies overall are more suited to handling climate change than their authoritarian counterparts. Among the reasons studied in the literature are the relatively free flows of information on problems and solutions in democracies; their administrative capacities and lower levels of corruption; their more a

ctive engagement in global problem-solving; multiple points of access in policy making (pluralism); superior scientific and technical capacity; and dynamic, innovative economies. Overall better governance capacities, such as less corruption, are part of their advantage (see for instance Dasgupta and De Cian 2018 as well as Povitkina 2018).

The research on the climate capacities of democracies strongly suggests they are no less and probably more capable then authoritarian regimes. A 2013 study of national policies found that countries with a history of and experience with democracy generally have better climate mitigation laws and policies. In another study of climate policy, authoritarian regimes did not perform better than established democracies and actually lag far behind.

Democracy critics often point to recent experience in the United States, where the Trump administration had reversed nearly every climate initiative of the Obama administration and withdrew from the 2015 Paris agreement. These policy reversals do not bode well for democratic arguments about climate change. Nonetheless, only hours after being sworn in, President Biden moved to reinstate the US to the Paris accord. Overall, the United States also illustrates the strengths of democracies: pluralism, innovation, open flows of information, and political accountability. In particular, federalism enables states—California, New York, Washington, and Hawaii, among them—to act as innovative clean energy and climate leaders.

Why the democracy issue matters

Lovelock has said in this book that surviving climate change “may require, as in a war, the suspension of democratic government for the duration of the survival emergency” (p. 95). The problem is that this will be a perpetual war. Climate change is not something one just solves. Mitigating its causes and adapting to its effects is a constant struggle. And democracy is not something we can put on the shelf and revive when a crisis passes, if it does.

**Warming causes extinction – any reduction should be prioritized above every other impact**

**Ramanathan et al. 17** [Veerabhadran Ramanathan is Victor Alderson Professor of Applied Ocean Sciences and director of the Center for Atmospheric Sciences at the Scripps Institution of Oceanography, University of California, San Diego, Dr. William Collins is an internationally recognized expert in climate modeling and climate change science. He is the Director of the Climate and Ecosystem Sciences Division (CESD) for the Earth and Environmental Sciences Area (EESA) at the Lawrence Berkeley National Laboratory (LBNL), Prof. Dr Mark Lawrence, Ph.D. is scientific director at the Institute for Advanced Sustainability Studies (IASS) in Potsdam, Örjan Gustafsson is a Professor in the Department of Environmental Science and Analytic Chemistry at Stockholm University, Shichang Kang is Professor, Cold and Arid Regions Environmental and Engineering Research Institute, Chinese Academy of Sciences (CAS); CAS Center for Excellence in Tibetan Plateau Earth Sciences, and Molina, M.J., Zaelke, D., Borgford-Parnell, N., Xu, Y., Alex, K., Auffhammer, M., Bledsoe, P., Croes, B., Forman, F., Haines, A., Harnish, R., Jacobson, M.Z., Lawrence, M., Leloup, D., Lenton, T., Morehouse, T., Munk, W., Picolotti, R., Prather, K., Raga, G., Rignot, E., Shindell, D., Singh, A.K., Steiner, A., Thiemens, M., Titley, D.W., Tucker, M.E., Tripathi, S., & Victor, D., authors come from the following 9 countries - US, Switzerland, Sweden, UK, China, Germany, Australia, Mexico, India, “Well Under 2 Degrees Celsius: Fast Action Policies to Protect People and the Planet from Extreme Climate Change,” Report of the Committee to Prevent Extreme Climate Change, September 2017, http://www.igsd.org/wp-content/uploads/2017/09/Well-Under-2-Degrees-Celsius-Report-2017.pdf] TDI

**Climate change is becoming an existential threat with warming in excess of 2°C within the next three decades and 4°C to 6°C within the next several decades. Warming of such magnitudes will expose as many as 75% of the world’s population to deadly heat stress in addition to disrupting the climate and weather worldwide. Climate change is an urgent problem requiring urgent solutions**. This paper lays out urgent and **practical solutions that are ready for implementation now, will deliver benefits in the next few critical decades**, and places the world on a path to achieving the longterm targets of the Paris Agreement and near-term sustainable development goals. The approach consists of four building blocks and 3 levers to implement ten scalable solutions described in this report by a team of climate scientists, policy makers, social and behavioral scientists, political scientists, legal experts, diplomats, and military experts from around the world. These solutions will enable society to decarbonize the global energy system by 2050 through efficiency and renewables, drastically reduce short-lived climate pollutants, and stabilize the climate well below 2°C both in the near term (before 2050) and in the long term (post 2050). It will also reduce premature mortalities by tens of millions by 2050. As an insurance against policy lapses, mitigation delays and faster than projected climate changes, the solutions include an Atmospheric Carbon Extraction lever to remove CO2 from the air. The amount of CO2 that must be removed ranges from negligible, if the emissions of CO2 from the energy system and SLCPs start to decrease by 2020 and carbon neutrality is achieved by 2050, to a staggering one trillion tons if the carbon lever is not pulled and emissions of climate pollutants continue to increase until 2030.

There are numerous living laboratories including 53 cities, many universities around the world, the state of California, and the nation of Sweden, who have embarked on a carbon neutral pathway. These laboratories have already created 8 million jobs in the clean energy industry; they have also shown that **emissions of greenhouse gases and air pollutants can be decoupled from economic growth**. Another favorable sign is that **growth rates of worldwide carbon emissions have reduced from 2.9% per year during the first decade of this century to 1.3% from 2011 to 2014 and near zero growth rates during the last few years. The carbon emission curve is bending, but we have a long way to go and very little time for achieving carbon neutrality**. We need institutions and enterprises that can accelerate this bending by scaling-up the solutions that are being proven in the living laboratories. We have less than a decade to put these solutions in place around the world to preserve nature and our quality of life for generations to come. The time is now.

The Paris Agreement is an historic achievement. For the first time, effectively all nations have committed to limiting their greenhouse gas emissions and taking other actions to limit global temperature change. Specifically, 197 nations agreed to hold “the increase in the global average temperature to well below 2°C above pre-industrial levels and pursue efforts to limit the temperature increase to 1.5°C above pre-industrial levels,” and achieve carbon neutrality in the second half of this century.

**The climate has already warmed by 1°C. The problem is running ahead of us, and under current trends we will likely reach 1.5°C in the next fifteen years and surpass the 2°C guardrail by mid-century with a 50% probability of reaching 4°C by end of century**. Warming in excess of 3°C is likely to be a global catastrophe for three major reasons:

• **Warming in the range of 3°C to 5°C is suggested as the threshold for several tipping points in the physical and geochemical systems; a warming of about 3°C has a probability of over 40% to cross over multiple tipping points, while a warming close to 5°C increases it to nearly 90%, compared with a baseline warming of less than 1.5°C, which has only just over a 10% probability of exceeding any tipping point.**

**• Health effects of such warming are emerging as a major if not dominant source of concern. Warming of 4°C or more will expose more than 70% of the population, i.e. about 7 billion by the end of the century, to deadly heat stress and expose about 2.4 billion to vector borne diseases such as Dengue, Chikengunya, and Zika virus among others**. Ecologists and paleontologists have proposed that warming in excess of 3°C, accompanied by increased acidity of the oceans by the buildup of CO2 , can become a major causal factor for exposing more than 50% of all species to extinction. 20% of species are in danger of extinction now due to population, habitat destruction, and climate change.

The good news is that **there may still be time to avert such catastrophic changes**. The Paris Agreement and **supporting climate**

**policies must be strengthened substantially within the next five years to bend the emissions curve down faster, stabilize climate, and prevent catastrophic warming**. To the extent those efforts fall short, societies and **ecosystems will be forced to contend with substantial needs for adaptation—a burden that will fall disproportionately on the poorest three billion who are least responsible for causing the climate change problem.**

Here we propose a policy roadmap with a realistic and reasonable chance of limiting global temperature to safe levels and preventing unmanageable climate change—an outline of specific science-based policy pathways that serve as the building blocks for a three-lever strategy that could limit warming to well under 2°C. The projections and the emission pathways proposed in this summary are based on a combination of published recommendations and new model simulations conducted by the authors of this study (see Figure 2). We have framed the plan in terms of four building blocks and three levers, which are implemented through 10 solutions. The first building block would be fully implementing the nationally determined mitigation pledges under the Paris Agreement of the UN Framework Convention on Climate Change (UNFCCC). In addition, several sister agreements that provide targeted and efficient mitigation must be strengthened. Sister agreements include the Kigali Amendment to the Montreal Protocol to phase down HFCs, efforts to address aviation emissions through the International Civil Aviation Organization (ICAO), maritime black carbon emissions through the International Maritime Organization (IMO), and the commitment by the eight countries of the Arctic Council to reduce black carbon emissions by up to 33%. There are many other complementary processes that have drawn attention to specific actions on climate change, such as the Group of 20 (G20), which has emphasized reform of fossil fuel subsidies, and the Climate and Clean Air Coalition (CCAC). HFC measures, for example, can avoid as much as 0.5°C of warming by 2100 through the mandatory global phasedown of HFC refrigerants within the next few decades, and substantially more through parallel efforts to improve energy efficiency of air conditioners and other cooling equipment potentially doubling this climate benefit.

For the second building block, numerous subnational and city scale climate action plans have to be scaled up. One prominent example is California’s Under 2 Coalition signed by over 177 jurisdictions from 37 countries in six continents covering a third of world economy. The goal of this Memorandum of Understanding is to catalyze efforts in many jurisdictions that are comparable with California’s target of 40% reductions in CO2 emissions by 2030 and 80% reductions by 2050—emission cuts that, if achieved globally, would be consistent with stopping warming at about 2°C above pre-industrial levels. Another prominent example is the climate action plans by over 52 cities and 65 businesses around the world aiming to cut emissions by 30% by 2030 and 80% to 100% by 2050. There are concerns that the carbon neutral goal will hinder economic progress; however, real world examples from California and Sweden since 2005 offer evidence that economic growth can be decoupled from carbon emissions and the data for CO2 emissions and GDP reveal that growth in fact prospers with a green economy.

The third building block consists of two levers that we need to pull as hard as we can: one for drastically reducing emissions of short-lived climate pollutants (SLCPs) beginning now and completing by 2030, and the other for decarbonizing the global energy system by 2050 through efficiency and renewables. Pulling both levers simultaneously can keep global temperature rise below 2°C through the end of the century. If we bend the CO2 emissions curve through decarbonization of the energy system such that global emissions peak in 2020 and decrease steadily thereafter until reaching zero in 2050, there is less than a 20% probability of exceeding 2°C. This call for bending the CO2 curve by 2020 is one key way in which this report’s proposal differs from the Paris Agreement and it is perhaps the most difficult task of all those envisioned here. Many cities and jurisdictions are already on this pathway, thus demonstrating its scalability. Achieving carbon neutrality and reducing emissions of SLCPs would also drastically reduce air pollution globally, including all major cities, thus saving millions of lives and over 100 million tons of crops lost to air pollution each year. In addition, these steps would provide clean energy access to the world’s poorest three billion who are still forced to resort to 18th century technologies to meet basic needs such as cooking. For the fourth and the final building block, we are adding a third lever, ACE (Atmospheric Carbon Extraction, also known as Carbon Dioxide Removal, or “CDR”). This lever is added as an insurance against surprises (due to policy lapses, mitigation delays, or non-linear climate changes) and would require development of scalable measures for removing the CO2 already in the atmosphere. The amount of CO2 that must be removed will range from negligible, if the emissions of CO2 from the energy system and SLCPs start to decrease by 2020 and carbon neutrality is achieved by 2050, to a staggering one trillion tons, if CO2 emissions continue to increase until 2030, and the carbon lever is not pulled until after 2030. This issue is raised because the NDCs (Nationally Determined Contributions) accompanying the Paris Agreement would allow CO2 emissions to increase until 2030. We call on economists and experts in political and administrative systems to assess the feasibility and cost-effectiveness of reducing carbon and SLCPs emissions beginning in 2020 compared with delaying it by ten years and then being forced to pull the third lever to extract one trillion tons of CO2

The fast mitigation plan of requiring emissions reductions to begin by 2020, which means that many countries need to cut now, is urgently needed to limit the warming to well under 2°C. Climate change is not a linear problem. Instead, we are facing non-linear climate tipping points that can lead to self-reinforcing and cascading climate change impacts. Tipping points and selfreinforcing feedbacks are wild cards that are more likely with increased temperatures, and many of the potential abrupt climate shifts could happen as warming goes from 1.5°C in 15 years to 2°C by 2050, with the potential to push us well beyond the Paris Agreement goals.

Where Do We Go from Here?

**A massive effort will be needed to stop warming at 2°C, and time is of the essence. With unchecked business-as-usual emissions, global warming has a 50% likelihood of exceeding 4ºC and a 5% probability of exceeding 6ºC in this century, raising existential questions for most, but especially the poorest three billion people. A 4ºC warming is likely to expose as many as 75% of the global population to deadly heat.** Dangerous to catastrophic impacts on the health of people including generations yet to be born, on the health of ecosystems, and on species extinction have emerged as major justifications for mitigating climate change well below 2ºC, although we must recognize that the uncertainties intrinsic in climate and social systems make it hard to pin down exactly the level of warming that will trigger possibly catastrophic impacts. To avoid these consequences, we must act now, and we must act fast and effectively. This report sets out a specific plan for reducing climate change in both the near- and long-term. With aggressive urgent actions, we can protect ourselves. Acting quickly to prevent catastrophic climate change by decarbonization will save millions of lives, trillions of dollars in economic costs, and massive suffering and dislocation to people around the world. This is a global security imperative, as it can avoid the migration and destabilization of entire societies and countries and reduce the likelihood of environmentally driven civil wars and other conflicts.

Staying well under 2°C will require a concerted global effort. We must address everything from our energy systems to our personal choices to reduce emissions to the greatest extent possible. We must redouble our efforts to invent, test, and perfect systems of governance so that the large measure of international cooperation needed to achieve these goals can be realized in practice. The health of people for generations to come and the health of ecosystems crucially depend on an energy revolution beginning now that will take us away from fossil fuels and toward the clean renewable energy sources of the future. It will be nearly impossible to obtain other critical social goals, including for example the UN agenda 2030 with the Sustainable Development Goals, if we do not make immediate and profound progress stabilizing climate, as we are outlining here.

1. The Building Blocks Approach The 2015 Paris Agreement, which went into effect November 2016, is a remarkable, historic achievement. For the frst time, essentially all nations have committed to limit their greenhouse gas emissions and take other actions to limit global temperature and adapt to unavoidable climate change. Nations agreed to hold “the increase in the global average temperature to well below 2°C above pre-industrial levels and pursue efforts to limit the temperature increase to 1.5°C above pre-industrial levels” and “achieve a balance between anthropogenic emissions by sources and removals by sinks of greenhouse gases in the second half of this century” (UNFCCC, 2015). Nevertheless, the initial Paris Agreement has to be strengthened substantially within fve years if we are to prevent catastrophic warming; **current pledges place the world on track for up to 3.4°C by 2100 (UNEP, 2016b). Until now, no specifc policy roadmap exists that provides a realistic and reasonable chance of limiting global temperatures to safe levels and preventing unmanageable climate change**. This report is our attempt to provide such a plan— an outline of specifc solutions that serve as the building blocks for a comprehensive strategy for limiting the warming to well under 2°C and avoiding dangerous climate change (Figure 1). The frst building block is the full implementation of the nationally determined mitigation pledges under the Paris Agreement of the UN Framework Convention on Climate Change (UNFCCC) and strengthening global sister agreements, such as the Kigali Amendment to the Montreal Protocol to phase down HFCs, which can provide additional targeted, fast action mitigation at scale. For the second building block, numerous sub-national and city scale climate action plans have to be scaled up such as California’s Under 2 Coalition signed by 177 jurisdictions from 37 countries on six continents. The third building block is targeted measures to reduce emissions of shortlived climate pollutants (SLCPs), beginning now and fully implemented by 2030, along with major measures to fully decarbonize the global economy, causing the overall emissions growth rate to stop in 2020-2030 and reach carbon neutrality by 2050. Such a deep decarbonization would require an energy revolution similar to the Industrial Revolution that was based on fossil fuels. The fnal building block includes scalable and reversible carbon dioxide (CO2 ) removal measures, which can begin removing CO2 already emitted into the atmosphere. Such a plan is urgently needed. Climate change is not a linear problem. Instead, climate tipping points can lead to self-reinforcing, cascading climate change impacts (Lenton et al., 2008). Tipping points are more likely with increased temperatures, and many of the potential abrupt climate shifts could happen as warming goes from 1.5°C to 2°C, with the potential to push us well beyond the Paris Agreement goals (Drijfhout et al., 2015). In order to avoid dangerous climate change, we must address these concerns. **We must act now, and we must act fast. Reduction of SLCPs will result in fast, near-term reductions in warming, while present-day reductions of CO2 will result in long-term climate benefts**. This two-lever approach—aggressively cutting both SLCPs and CO2 –-will slow warming in the coming decades when it is most crucial to avoid impacts from climate change as well as maintain a safe climate many decades from now. To achieve the nearterm goals, we have outlined solutions to be implemented immediately. These solutions to bend down the rising emissions curve and thus bend the warming trajectory curve follow a 2015 assessment by the University of California under its Carbon Neutrality Initiative (Ramanathan et al., 2016). The solutions are clustered into categories of social transformation, governance improvement, market- and regulation-based solutions, technological innovation and transformation, and natural and ecosystem management. Additionally, we need to intensely investigate and pursue a third lever—ACE (Atmospheric Carbon Extraction). While many potential technologies exist, we do not know the extent to which they could be scaled up to remove the requisite amount of carbon from the atmosphere in order to achieve the Paris Agreement goals, and any delay in mitigation will demand increasing reliance on these technologies. Yet, there is still hope. Humanity can come together, as we have done in the past, to collaborate towards a common goal. We have no choice but to tackle the challenge of climate change. We only have the choice of when and how: **either now, through the ambitious plan outlined here, or later, through radical adaptation and societal transformations in response to an ever-deteriorating climate system that will unleash devastating impacts—some of which may be beyond our capacity to fully adapt to or reverse for thousands of years.**

2. Major Climate Disruptions: How Soon and How Fast? “Without adequate mitigation and adaptation, climate change poses unacceptable risks to global public health.” (WHO, 2016)

The planet has already witnessed nearly 1°C of warming, and another 0.6°C of additional warming is currently stored in the ocean to be released over the next two to four decades, if climate warming emissions are not radically reduced during that time (IPCC, 2013). The impacts of this warming on extreme weather, droughts, and foods are being felt by society worldwide to the extent that many think of this no longer as climate change but as climate disruption. Consider the business as usual scenario:

15 years from now: In 15 years, planetary warming will reach 1.5°C above pre-industrial global mean temperature (Ramanathan and Xu, 2010; Shindell et al., 2012). This exceeds the 0.5°C to 1°C of warming during the Eemian period, 115,000– 130,000 years ago, when sea-levels reached 6-9 meters (20-30 feet) higher than today (Hansen et al., 2016b). The impacts of this warming will affect us all yet will disproportionately affect the Earth’s poorest three billion people, who are primarily subsistence farmers that still rely on 18th century technologies and have the least capacity to adapt (IPCC, 2014a; Dasgupta et al., 2015). They thus may be forced to resort to mass migration into city slums and push across international borders (U.S. DOD, 2015). The existential fate of lowlying small islands and coastal communities will also need to be addressed, as they are primarily vulnerable to sea-level rise, diminishing freshwater resources, and more intense storms. In addition, many depend on fsheries for protein, and these are likely to be affected by ocean acidifcation and climate change. Climate injustice could start causing visible regional and international conficts. All of this will be exacerbated as the risk of passing tipping points increases (Lenton et al., 2008).

30 years from now: By mid-century, warming is expected to exceed 2°C, which would be unprecedented with respect to historical records of at least the last one million years (IPCC, 2014c). Such a warming through this century could result in sea-level rise of as much as 2 meters by 2100, with greater sea-level rise to follow. A group of tipping points are clustered between 1.5°C and 2°C (Figure 2) (Drijfhout et al., 2015). The melting of most mountain glaciers, including those in the Tibetan-Himalayas, combined with mega-droughts, heat waves, storms, and foods, would adversely affect nearly everyone on the planet.

80 years from now: In 80 years, warming is expected to exceed 4°C, increasing the likelihood of irreversible and catastrophic change (World Bank, 2013b). 4ºC warming is likely to expose as much as 75% of the global population to deadly heat (Mora et al., 2017). The 2°C and 4°C values quoted above and in other reports, however, are merely the central values with a 50% probability of occurrence (Ramanathan and Feng, 2008). There is a 5% probability the warming could be as high as 6°C due to uncertainties in the magnitude of amplifying feedbacks (see Section 4). This in turn could lead to major disruptions to natural and social systems, threatening food security, water security, and national security and fundamentally affecting the great majority of the projected 11.2 billion inhabitants of the planet in 2100 (UN DESA, 2015).

3. What Are the Wild Cards for Climate Disruption? Increasing the concentrations of greenhouse gases in the atmosphere increases radiative forcing (the difference between the amount of energy entering the atmosphere and leaving) and thus increases the global temperature (IPCC, 2013). However, climate wild cards exist that can alter the linear connection with warming and anthropogenic emissions by triggering abrupt changes in the climate (Lenton et al., 2008). Some of these wild cards have not been thoroughly captured by the models that policymakers rely on the most. These abrupt shifts are irreversible on a human time scale (<100 years) and will create a notable disruption to the climate system, condemning the world to warming beyond that which we have previously projected. These climate disruptions would divert resources from needed mitigation and upset mitigation strategies that we have already put in place.

1. Unmasking Aerosol Cooling: The frst such wild card is the unmasking of an estimated 0.7°C (with an uncertainty range of 0.3°C to 1.2°C) of the warming in addition to mitigating other aerosol effects such as disrupting rainfall patterns, by reducing emissions of aerosols such as sulfates and nitrates as part of air pollution regulations (Wigley, 1991; Ramanathan and Feng, 2008). Aerosol air pollution is a major health hazard with massive costs to public health and society, including contributing to about 7 million deaths (from household and ambient exposure) each year (WHO, 2014). While some aerosols, such as black carbon and brown carbon, strongly absorb sunlight and warm the climate, others refect sunlight back into space, which cools the climate (Ramanathan and Carmichael, 2008). The net impact of all manmade aerosols is negative, meaning that about 30% of the warming from greenhouse gases is being masked by co-emitted air pollution particles (Ramanathan and Carmichael, 2008). As we reduce greenhouse gas emissions and implement policies to eliminate air pollution, we are also reducing the concentration of aerosols in the air. Aerosols last in the atmosphere for about a week, so if we eliminate air pollution without reducing emissions of the greenhouse gases, the unmasking alone would lead to an estimated 0.7°C of warming within a matter of decades (Ramanathan and Feng, 2008). We must eliminate all aerosol emissions due to their health effects, but we must simultaneously mitigate emissions of CO2 , other greenhouse gases, and black carbon and co-pollutants to avoid an abrupt and very large jump in the near-term warming beyond 2°C (Brasseur and Roeckner, 2005).

2. Tipping Points**: It is likely that as we cross the 1.5°C to 2°C thresholds we will trigger so called “tipping points” for abrupt and nonlinear changes in the climate system with catastrophic consequences** for humanity and the environment (Lenton, 2008; Drijfhout et al., 2015). Once the tipping points are passed, the resulting impacts will range in timescales from: disruption of monsoon systems (transition in a year), loss of sea ice (approximately a decade for transition), dieback of major forests (nearly half a century for transition), reorganization of ocean circulation (approximately a century for transition), to loss of ice sheets and subsequent sea-level rise (transition over hundreds of years) (Lenton et al., 2008). Regardless of timescale, once underway many of these changes would be irreversible (Lontzek et al., 2015). There is also a likelihood of crossing over multiple tipping points simultaneously. Warming of close to 3°C would subject the system to a 46% probability of crossing multiple tipping points, while warming of close to 5°C would increase the risk to 87% (Cai et al., 2016). Recent modeling work shows a “cluster” of these tipping points could be triggered between 1.5°C and 2°C warming (Figure 2), including melting of land and sea ice and changes in highlatitude ocean circulation (deep convection) (Drijfhout et al., 2015). This is consistent with existing observations and understanding that the polar regions are particularly sensitive to global warming and have several potentially imminent tipping points. The Arctic is warming nearly twice as quickly as the global average, which makes the abrupt changes in the Arctic more likely at a lower level of global warming (IPCC, 2013). Similarly, the Himalayas are warming at roughly the same rate as the Arctic and are thus also more susceptible to incremental changes in temperature (UNEP-WMO, 2011). This gives further justifcation for limiting warming to no more than 1.5°C.

While all climate tipping points have the potential to rapidly destabilize climate, social, and economic systems, some are also **self-amplifying feedbacks that once set in motion increase warming in such a way that they perpetuate yet even more warming. Declining Arctic sea ice, thawing permafrost, and the poleward migration of cloud systems are all examples of self-amplifying feedback mechanisms, where initial warming feeds upon itself to cause still more warming acting as a force multiplier (Schuur et al., 2015).**

### Framing

**The standard is maximizing expected wellbeing**

**Moral uncertainty means preventing extinction should be our highest priority.  
Bostrom 12** [Nick Bostrom. Faculty of Philosophy & Oxford Martin School University of Oxford. “Existential Risk Prevention as Global Priority.” Global Policy (2012)]  
These reflections on **moral uncertainty suggest** an alternative, complementary way of looking at existential risk; they also suggest a new way of thinking about the ideal of sustainability. Let me elaborate.¶ **Our present understanding of axiology might** well **be confused. We may not** nowknow — at least not in concrete detail — what outcomes would count as a big win for humanity; we might not even yet **be able to imagine the best ends** of our journey. **If we are** indeedprofoundly **uncertain** about our ultimate aims,then we should recognize that **there is a great** option **value in preserving** — and ideally improving — **our ability to recognize value and** to **steer the future accordingly. Ensuring** that **there will be a future** version of **humanity** with great powers and a propensity to use them wisely **is** plausibly **the best way** available to us **to increase the probability that the future will contain** a lot of **value.** To do this, we must prevent any existential catastrophe.