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New York University School of Law

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Ladies and Gentlemen:

Thank you Paul and Jim for those kind introductions. I would especially like to thank our host, New York University and the President of the College John Sexton and the Dean of the Law School Richard Revesz. I am also grateful to our co-sponsors, the World Resources Institute and Set America Free.

A few days ago, scientists announced alarming new evidence of the rapid melting of the perennial ice of the north polar cap, continuing a trend of the past several years that now confronts us with the prospect that human activities, if unchecked in the next decade, could destroy one of the earth's principle mechanisms for cooling itself. Another group of scientists presented evidence that human activities are responsible for the dramatic warming of sea surface temperatures in the areas of the ocean where hurricanes form. A few weeks earlier, new information from yet another team showed dramatic increases in the burning of forests throughout the American West, a trend that has increased decade by decade, as warmer temperatures have dried out soils and vegetation. All these findings come at

the end of a summer with record breaking temperatures and the hottest twelve month period ever measured in the U.S., with persistent drought in vast areas of our country. *Scientific American* introduces the lead article in its special issue this month with the following sentence: “The debate on global warming is over.”

Many scientists are now warning that we are moving closer to several “tipping points” that could – within as little as 10 years – make it impossible for us to avoid irretrievable damage to the planet’s habitability for human civilization. In this regard, just a few weeks ago, another group of scientists reported on the unexpectedly rapid increases in the release of carbon and methane emissions from frozen tundra in Siberia, now beginning to thaw because of human caused increases in global temperature. The scientists tell us that the tundra in danger of thawing contains an amount of additional global warming pollution that is equal to the total amount that is already in the earth’s atmosphere. Similarly, earlier this year, yet another team of scientists reported that the previous twelve months saw 32 glacial earthquakes on Greenland between 4.6 and 5.1 on the Richter scale – a disturbing sign that a massive destabilization may now be underway deep within the second largest accumulation of ice on the planet, enough ice to raise sea level 20 feet worldwide if it broke up and slipped into the sea. Each passing day brings yet more evidence that we are now facing a planetary emergency – a climate crisis that demands immediate action to sharply reduce carbon dioxide emissions worldwide in order to turn down the earth’s thermostat and avert catastrophe.

The serious debate over the climate crisis has now moved on to the question of how we can craft emergency solutions in order to avoid this catastrophic damage.

This debate over solutions has been slow to start in earnest not only because some of our leaders still find it more convenient to deny the reality of the crisis, but also because the hard truth for the rest of us is that the maximum that seems politically feasible still falls far short of the minimum that would be effective in solving the crisis. This no-man's land – or no politician zone – falling between the farthest reaches of political feasibility and the first beginnings of truly effective change is the area that I would like to explore in my speech today.

T. S. Eliot once wrote: *Between the idea and the reality,  
Between the motion and the act Falls the Shadow. ... Between  
the conception and the creation, Between the emotion and the  
response Falls the Shadow.*

My purpose is not to present a comprehensive and detailed blueprint – for that is a task for our democracy as a whole – but rather to try to shine some light on a pathway through this terra incognita that lies between where we are and where we need to go. Because, if we acknowledge candidly that what we need to do is beyond the limits of our current political capacities, that really is just another way of saying that we have to urgently expand the limits of what is politically possible.

I have no doubt that we can do precisely that, because having served almost three decades in elected office, I believe I know one thing about America's political system that some of the

pessimists do not: it shares something in common with the climate system; it can appear to move only at a slow pace, but it can also cross a tipping point beyond which it can move with lightning speed. Just as a single tumbling rock can trigger a massive landslide, America has sometimes experienced sudden avalanches of political change that had their beginnings with what first seemed like small changes.

Two weeks ago, Democrats and Republicans joined together in our largest state, California, to pass legally binding sharp reductions in CO2 emissions. 295 American cities have now independently “ratified” and embraced CO2 reductions called for in the Kyoto Treaty. 85 conservative evangelical ministers publicly broke with the Bush-Cheney administration to call for bold action to solve the climate crisis. Business leaders in both political parties have taken significant steps to position their companies as leaders in this struggle and have adopted a policy that not only reduces CO2 but makes their companies zero carbon companies. Many of them have discovered a way to increase profits and productivity by eliminating their contributions to global warming pollution.

Many Americans are now seeing a bright light shining from the far side of this no-man’s land that illuminates not sacrifice and danger, but instead a vision of a bright future that is better for our country in every way – a future with better jobs, a cleaner environment, a more secure nation, and a safer world.

After all, many Americans are tired of borrowing huge amounts of money from China to buy huge amounts of oil from the Persian Gulf to make huge amounts of pollution that destroys

the planet's climate. Increasingly, Americans believe that we have to change every part of that pattern.

When I visit port cities like Seattle, New Orleans, or Baltimore, I find massive ships, running low in the water, heavily burdened with foreign cargo or foreign oil arriving by the thousands. These same cargo ships and tankers depart riding high with only ballast water to keep them from rolling over.

One-way trade is destructive to our economic future. We send money, electronically, in the opposite direction. But, we can change this by inventing and manufacturing new solutions to stop global warming right here in America. I still believe in good old-fashioned American ingenuity. We need to fill those ships with new products and technologies that we create to turn down the global thermostat. Working together, we can create jobs and stop global warming. But we must begin by winning the first key battle – against inertia and the fear of change.

In order to conquer our fear and walk boldly forward on the path that lies before us, we have to insist on a higher level of honesty in America's political dialogue. When we make big mistakes in America, it is usually because the people have not been given an honest accounting of the choices before us. It also is often because too many members of both parties who knew better did not have the courage to do better.

Our children have a right to hold us to a higher standard when their future – indeed the future of all human civilization – is hanging in the balance. They deserve better than the spectacle of censorship of the best scientific evidence about the truth of our

situation and harassment of honest scientists who are trying to warn us about the looming catastrophe. They deserve better than politicians who sit on their hands and do nothing to confront the greatest challenge that humankind has ever faced – even as the danger bears down on us.

We in the United States of America have a particularly important responsibility, after all, because the world still regards us – in spite of our recent moral lapses – as the natural leader of the community of nations. Simply put, in order for the world to respond urgently to the climate crisis, the United States must lead the way. No other nation can.

Developing countries like China and India have gained their own understanding of how threatening the climate crisis is to them, but they will never find the political will to make the necessary changes in their growing economies unless and until the United States leads the way. Our natural role is to be the pace car in the race to stop global warming.

So, what would a responsible approach to the climate crisis look like if we had one in America?

Well, first of all, we should start by immediately freezing CO<sub>2</sub> emissions and then beginning sharp reductions. Merely engaging in high-minded debates about theoretical future reductions while continuing to steadily increase emissions represents a self-delusional and reckless approach. In some ways, that approach is worse than doing nothing at all, because it lulls the gullible into thinking that something is actually being done when in fact it is not.

An immediate freeze has the virtue of being clear, simple, and easy to understand. It can attract support across partisan lines as a logical starting point for the more difficult work that lies ahead. I remember a quarter century ago when I was the author of a complex nuclear arms control plan to deal with the then rampant arms race between our country and the former Soviet Union. At the time, I was strongly opposed to the nuclear freeze movement, which I saw as simplistic and naive. But,  $\frac{3}{4}$  of the American people supported it – and as I look back on those years I see more clearly now that the outpouring of public support for that very simple and clear mandate changed the political landscape and made it possible for more detailed and sophisticated proposals to eventually be adopted.

When the politicians are paralyzed in the face of a great threat, our nation needs a popular movement, a rallying cry, a standard, a mandate that is broadly supported on a bipartisan basis.

A responsible approach to solving this crisis would also involve joining the rest of the global economy in playing by the rules of the world treaty that reduces global warming pollution by authorizing the trading of emissions within a global cap.

At present, the global system for carbon emissions trading is embodied in the Kyoto Treaty. It drives reductions in CO<sub>2</sub> and helps many countries that are a part of the treaty to find the most efficient ways to meet their targets for reductions. It is true that not all countries are yet on track to meet their targets, but the first targets don't have to be met until 2008 and the largest and

most important reductions typically take longer than the near term in any case.

The absence of the United States from the treaty means that 25% of the world economy is now missing. It is like filling a bucket with a large hole in the bottom. When the United States eventually joins the rest of the world community in making this system operate well, the global market for carbon emissions will become a highly efficient closed system and every corporate board of directors on earth will have a fiduciary duty to manage and reduce CO2 emissions in order to protect shareholder value.

Many American businesses that operate in other countries already have to abide by the Kyoto Treaty anyway, and unsurprisingly, they are the companies that have been most eager to adopt these new principles here at home as well. The United States and Australia are the only two countries in the developed world that have not yet ratified the Kyoto Treaty. Since the Treaty has been so demonized in America's internal debate, it is difficult to imagine the current Senate finding a way to ratify it. But the United States should immediately join the discussion that is now underway on the new tougher treaty that will soon be completed. We should plan to accelerate its adoption and phase it in more quickly than is presently planned.

Third, a responsible approach to solutions would avoid the mistake of trying to find a single magic "silver bullet" and recognize that the answer will involve what Bill McKibben has called "silver-buckshot" – numerous important solutions, all of which are hard, but no one of which is by itself the full answer for our problem.



One of the most productive approaches to the “multiple solutions” needed is a road-map designed by two Princeton professors, Rob Socolow and Steven Pacala, which breaks down the overall problem into more manageable parts. Socolow and Pacala have identified 15 or 20 building blocks (or “wedges”) that can be used to solve our problem effectively – even if we only use 7 or 8 of them. I am among the many who have found this approach useful as a way to structure a discussion of the choices before us.

Over the next year, I intend to convene an ongoing broad-based discussion of solutions that will involve leaders from government, science, business, labor, agriculture, grass-roots activists, faith communities and others.

I am convinced that it is possible to build an effective consensus in the United States and in the world at large on the most effective approaches to solve the climate crisis. Many of those solutions will be found in the building blocks that currently structure so many discussions. But I am also certain that some of the most powerful solutions will lie beyond our current categories of building blocks and “wedges.” Our secret strength in America has always been our capacity for vision. “Make no little plans,” one of our most famous architects said over a century ago, “they have no magic to stir men’s blood.”

I look forward to the deep discussion and debate that lies ahead. But there are already some solutions that seem to stand out as particularly promising:

First, dramatic improvements in the efficiency with which we generate, transport and use energy will almost certainly prove to be the single biggest source of sharp reductions in global warming pollution. Because pollution has been systematically ignored in the old rules of America's marketplace, there are lots of relatively easy ways to use new and more efficient options to cheaply eliminate it. Since pollution is, after all, waste, business and industry usually become more productive and efficient when they systematically go about reducing pollution. After all, many of the technologies on which we depend are actually so old that they are inherently far less efficient than newer technologies that we haven't started using. One of the best examples is the internal combustion engine. When scientists calculate the energy content in BTUs of each gallon of gasoline used in a typical car, and then measure the amounts wasted in the car's routine operation, they find that an incredible 90% of that energy is completely wasted. One engineer, Amory Lovins, has gone farther and calculated the amount of energy that is actually used to move the passenger (excluding the amount of energy used to move the several tons of metal surrounding the passenger) and has found that only 1% of the energy is actually used to move the person. This is more than an arcane calculation, or a parlor trick with arithmetic. These numbers actually illuminate the single biggest opportunity to make our economy more efficient and competitive while sharply reducing global warming pollution.

To take another example, many older factories use obsolete processes that generate prodigious amounts of waste heat that actually has tremendous economic value. By redesigning their processes and capturing all of that waste, they can eliminate

huge amounts of global warming pollution while saving billions of dollars at the same time.

When we introduce the right incentives for eliminating pollution and becoming more efficient, many businesses will begin to make greater use of computers and advanced monitoring systems to identify even more opportunities for savings. This is what happened in the computer chip industry when more powerful chips led to better computers, which in turn made it possible to design even more powerful chips, in a virtuous cycle of steady improvement that became known as “Moore’s Law.” We may well see the emergence of a new version of “Moore’s Law” producing steadily higher levels of energy efficiency at steadily lower cost.

There is yet another lesson we can learn from America’s success in the information revolution. When the Internet was invented – and I assure you I intend to choose my words carefully here – it was because defense planners in the Pentagon forty years ago were searching for a way to protect America’s command and communication infrastructure from being disrupted in a nuclear attack. The network they created – known as ARPANET – was based on “distributed communication” that allowed it to continue functioning even if part of it was destroyed.

Today, our nation faces threats very different from those we countered during the Cold War. We worry today that terrorists might try to inflict great damage on America’s energy infrastructure by attacking a single vulnerable part of the oil distribution or electricity distribution network. So, taking a page from the early pioneers of ARPANET, we should develop a

distributed electricity and liquid fuels distribution network that is less dependent on large coal-fired generating plants and vulnerable oil ports and refineries.

Small windmills and photovoltaic solar cells distributed widely throughout the electricity grid would sharply reduce CO<sub>2</sub> emissions and at the same time increase our energy security. Likewise, widely dispersed ethanol and biodiesel production facilities would shift our transportation fuel stocks to renewable forms of energy while making us less dependent on and vulnerable to disruptions in the supply of expensive crude oil from the Persian Gulf, Venezuela and Nigeria, all of which are extremely unreliable sources upon which to base our future economic vitality. It would also make us less vulnerable to the impact of a category 5 hurricane hitting coastal refineries or to a terrorist attack on ports or key parts of our current energy infrastructure.

Just as a robust information economy was triggered by the introduction of the Internet, a dynamic new renewable energy economy can be stimulated by the development of an “electranet,” or smart grid, that allows individual homeowners and business-owners anywhere in America to use their own renewable sources of energy to sell electricity into the grid when they have a surplus and purchase it from the grid when they don’t. The same electranet could give homeowners and business-owners accurate and powerful tools with which to precisely measure how much energy they are using where and when, and identify opportunities for eliminating unnecessary costs and wasteful usage patterns.

A second group of building blocks to solve the climate crisis involves America's transportation infrastructure. We could further increase the value and efficiency of a distributed energy network by retooling our failing auto giants – GM and Ford – to require and assist them in switching to the manufacture of flex-fuel, plug-in, hybrid vehicles. The owners of such vehicles would have the ability to use electricity as a principle source of power and to supplement it by switching from gasoline to ethanol or biodiesel. This flexibility would give them incredible power in the marketplace for energy to push the entire system to much higher levels of efficiency and in the process sharply reduce global warming pollution.

This shift would also offer the hope of saving tens of thousands of good jobs in American companies that are presently fighting a losing battle selling cars and trucks that are less efficient than the ones made by their competitors in countries where they were forced to reduce their pollution and thus become more efficient.

It is, in other words, time for a national oil change. That is apparent to anyone who has looked at our national dipstick.

Our current ridiculous dependence on oil endangers not only our national security, but also our economic security. Anyone who believes that the international market for oil is a “free market” is seriously deluded. It has many characteristics of a free market, but it is also subject to periodic manipulation by the small group of nations controlling the largest recoverable reserves, sometimes in concert with companies that have great influence over the global production, refining, and distribution network.

It is extremely important for us to be clear among ourselves that these periodic efforts to manipulate price and supply have not one but two objectives. They naturally seek to maximize profits. But even more significantly, they seek to manipulate our political will. Every time we come close to recognizing the wisdom of developing our own independent sources of renewable fuels, they seek to dissipate our sense of urgency and derail our effort to become less dependent. That is what is happening at this very moment.

Shifting to a greater reliance on ethanol, cellulosic ethanol, butanol, and green diesel fuels will not only reduce global warming pollution and enhance our national and economic security, it will also reverse the steady loss of jobs and income in rural America. Several important building blocks for America's role in solving the climate crisis can be found in new approaches to agriculture. As pointed out by the "25 by 25" movement (aimed at securing 25% of America's power and transportation fuels from agricultural sources by the year 2025) we can revitalize the farm economy by shifting its mission from a focus on food, feed and fiber to a focus on food, feed, fiber, fuel, and ecosystem services. We can restore the health of depleted soils by encouraging and rewarding the growing of fuel source crops like switchgrass and saw-grass, using no till cultivation, and scientific crop rotation. We should also reward farmers for planting more trees and sequestering more carbon, and recognize the economic value of their stewardship of resources that are important to the health of our ecosystems.

Similarly, we should take bold steps to stop deforestation and extend the harvest cycle on timber to optimize the carbon

sequestration that is most powerful and most efficient with older trees. On a worldwide basis, 2 and ½ trillion tons of the 10 trillion tons of CO<sub>2</sub> emitted each year come from burning forests. So, better management of forests is one of the single most important strategies for solving the climate crisis.

Biomass—whether in the form of trees, switchgrass, or other sources—is one of the most important forms of renewable energy. And renewable sources make up one of the most promising building blocks for reducing carbon pollution.

Wind energy is already fully competitive as a mainstream source of electricity and will continue to grow in prominence and profitability.

Solar photovoltaic energy is—according to researchers—much closer than it has ever been to a cost competitive breakthrough, as new nanotechnologies are being applied to dramatically enhance the efficiency with which solar cells produce electricity from sunlight—and as clever new designs for concentrating solar energy are used with new approaches such as Stirling engines that can bring costs sharply down.

Buildings—both commercial and residential—represent a larger source of global warming pollution than cars and trucks. But new architecture and design techniques are creating dramatic new opportunities for huge savings in energy use and global warming pollution. As an example of their potential, the American Institute of Architecture and the National Conference of Mayors have endorsed the “2030 Challenge,” asking the global architecture and building community to immediately

transform building design to require that all new buildings and developments be designed to use one half the fossil fuel energy they would typically consume for each building type, and that all new buildings be carbon neutral by 2030, using zero fossil fuels to operate. A newly constructed building at Oberlin College is producing 30 percent energy than it consumes. Some other countries have actually required a standard calling for zero carbon based energy inputs for new buildings.

The rapid urbanization of the world's population is leading to the prospective development of more new urban buildings in the next 35 years than have been constructed in all previous human history. This startling trend represents a tremendous opportunity for sharp reductions in global warming pollution through the use of intelligent architecture and design and stringent standards.

Here in the US the extra cost of efficiency improvements such as thicker insulation and more efficient window coatings have traditionally been shunned by builders and homebuyers alike because they add to the initial purchase price—even though these investments typically pay for themselves by reducing heating and cooling costs and then produce additional savings each month for the lifetime of the building. It should be possible to remove the purchase price barrier for such improvements through the use of innovative mortgage finance instruments that eliminate any additional increase in the purchase price by capturing the future income from the expected savings. We should create a Carbon Neutral Mortgage Association to market these new financial instruments and stimulate their use in the private sector by utilities, banks and homebuilders. This new “Connie Mae” (CNMA) could be a



valuable instrument for reducing the pollution from new buildings.

Many believe that a responsible approach to sharply reducing global warming pollution would involve a significant increase in the use of nuclear power plants as a substitute for coal-fired generators. While I am not opposed to nuclear power and expect to see some modest increased use of nuclear reactors, I doubt that they will play a significant role in most countries as a new source of electricity. The main reason for my skepticism about nuclear power playing a much larger role in the world's energy future is not the problem of waste disposal or the danger of reactor operator error, or the vulnerability to terrorist attack. Let's assume for the moment that all three of these problems can be solved. That still leaves two serious issues that are more difficult constraints. The first is economics; the current generation of reactors is expensive, take a long time to build, and only come in one size – extra large. In a time of great uncertainty over energy prices, utilities must count on great uncertainty in electricity demand – and that uncertainty causes them to strongly prefer smaller incremental additions to their generating capacity that are each less expensive and quicker to build than are large 1000 megawatt light water reactors. Newer, more scalable and affordable reactor designs may eventually become available, but not soon. Secondly, if the world as a whole chose nuclear power as the option of choice to replace coal-fired generating plants, we would face a dramatic increase in the likelihood of nuclear weapons proliferation. During my 8 years in the White House, every nuclear weapons proliferation issue we dealt with was connected to a nuclear reactor program. Today, the dangerous weapons programs in both Iran and North

Korea are linked to their civilian reactor programs. Moreover, proposals to separate the ownership of reactors from the ownership of the fuel supply process have met with stiff resistance from developing countries who want reactors. As a result of all these problems, I believe that nuclear reactors will only play a limited role.

The most important set of problems by that must be solved in charting solutions for the climate crisis have to do with coal, one of the dirtiest sources of energy that produces far more CO<sub>2</sub> for each unit of energy output than oil or gas. Yet, coal is found in abundance in the United States, China, and many other places . Because the pollution from the burning of coal is currently excluded from the market calculations of what it costs, coal is presently the cheapest source of abundant energy. And its relative role is growing rapidly day by day.

Fortunately, there may be a way to capture the CO<sub>2</sub> produced as coal is burned and sequester it safely to prevent it from adding to the climate crisis. It is not easy. This technique, known as carbon capture and sequestration (CCS) is expensive and most users of coal have resisted the investments necessary to use it. However, when the cost of *not* using it is calculated, it becomes obvious that CCS will play a significant and growing role as one of the major building blocks of a solution to the climate crisis.

Interestingly, the most advanced and environmentally responsible project for capturing and sequestering CO<sub>2</sub> is in one of the most forbidding locations for energy production anywhere in the world – in the Norwegian portions of the North Sea. Norway, as it turns out, has hefty CO<sub>2</sub> taxes; and, even though

there are many exceptions and exemptions, oil production is not one of them. As a result, the oil producers have found it quite economical and profitable to develop and use advanced CCS technologies in order to avoid the tax they would otherwise pay for the CO<sub>2</sub> they would otherwise emit. The use of similar techniques could be required for coal-fired generating plants, and can be used in combination with advanced approaches like integrated gasification combined cycle (IGCC). Even with the most advanced techniques, however, the economics of carbon capture and sequestration will depend upon the availability of and proximity to safe deep storage reservoirs. Nevertheless, it is time to recognize that the phrase “clean coal technology” is devoid of meaning unless it means “zero carbon emissions” technology.

CCS is only one of many new technological approaches that require a significant increase by governments and business in advanced research and development to speed the availability of more effective technologies that can help us solve the climate crisis more quickly. But it is important to emphasize that even without brand new technologies, we already have everything we need to get started on a solution to this crisis.

In a market economy like ours, however, every one of the solutions that I have discussed will be more effective and much easier to implement if we place a price on the CO<sub>2</sub> pollution that is recognized in the marketplace. We need to summon the courage to use the right tools for this job.

For the last fourteen years, I have advocated the elimination of all payroll taxes – including those for social security and

unemployment compensation – and the replacement of that revenue in the form of pollution taxes – principally on CO<sub>2</sub>. The overall level of taxation would remain exactly the same. It would be, in other words, a revenue neutral tax swap. But, instead of discouraging businesses from hiring more employees, it would discourage business from producing more pollution.

Global warming pollution, indeed all pollution, is now described by economists as an “externality.” This absurd label means, in essence: we don’t to keep track of this stuff so let’s pretend it doesn’t exist.

And sure enough, when it’s not recognized in the marketplace, it does make it much easier for government, business, and all the rest of us to pretend that it doesn’t exist. But what we’re pretending doesn’t exist is the stuff that is destroying the habitability of the planet. We put 70 million tons of it into the atmosphere every 24 hours and the amount is increasing day by day. Penalizing pollution instead of penalizing employment will work to reduce that pollution.

When we place a more accurate value on the consequences of the choices we make, our choices get better. At present, when business has to pay more taxes in order to hire more people, it is discouraged from hiring more people. If we change that and discourage them from creating more pollution they will reduce their pollution. Our market economy can help us solve this problem if we send it the right signals and tell ourselves the truth about the economic impact of pollution.

Many of our leading businesses are already making dramatic changes to reduce their global warming pollution. General Electric, Dupont, Cinergy, Caterpillar, and Wal-Mart are among the many who are providing leadership for the business community in helping us devise a solution for this crisis.

Leaders among unions – particularly the steel workers – have also added momentum to this growing movement.

Hunters and fishermen are also now adding their voices to the call for a solution to the crisis. In a recent poll, 86% of licensed hunters and anglers said that we have a moral obligation to stop global warming to protect our children's future.

And, young people – as they did during the Civil Rights Revolution – are confronting their elders with insistent questions about the morality of not moving swiftly to make these needed changes.

Moreover, the American religious community – including a group of 85 conservative evangelicals and especially the US Conference of Catholic Bishops – has made an extraordinary contribution to this entire enterprise. To the insights of science and technology, it has added the perspectives of faith and values, of prophetic imagination, spiritual motivation, and moral passion without which all our plans, no matter how reasonable, *simply will not prevail*. Individual faith groups have offered their own distinctive views . And yet --- uniquely in religious life at this moment and even historically --- they have established common ground and resolve across tenacious differences. In addition to reaching millions of people in the

pews, they have demonstrated the real possibility of what we all now need to accomplish: how to be ourselves, together and how to discover, in this process, a sense of vivid, living spirit and purpose that elevates the entire human enterprise.

Individual Americans of all ages are becoming a part of a movement, asking what they can do as individuals and what they can do as consumers and as citizens and voters. Many individuals and businesses have decided to take an approach known as “Zero Carbon.” They are reducing their CO2 as much as possible and then offsetting the rest with reductions elsewhere including by the planting of trees. At least one entire community – Ballard, a city of 18,000 people in Washington State – is embarking on a goal of making the entire community zero carbon.

This is not a political issue. This is a moral issue. It affects the survival of human civilization. It is not a question of left vs. right; it is a question of right vs. wrong. Put simply, it is wrong to destroy the habitability of our planet and ruin the prospects of every generation that follows ours.

What is motivating millions of Americans to think differently about solutions to the climate crisis is the growing realization that this challenge is bringing us unprecedented opportunity. I have spoken before about the way the Chinese express the concept of crisis. They use two symbols, the first of which – by itself – means danger. The second, in isolation, means opportunity. Put them together, and you get “crisis.” Our single word conveys the danger but doesn’t always communicate the presence of opportunity in every crisis. In this case, the opportunity presented by the climate crisis is not only the

opportunity for new and better jobs, new technologies, new opportunities for profit, and a higher quality of life. It gives us an opportunity to experience something that few generations ever have the privilege of knowing: a common moral purpose compelling enough to lift us above our limitations and motivate us to set aside some of the bickering to which we as human beings are naturally vulnerable. America's so-called "greatest generation" found such a purpose when they confronted the crisis of global fascism and won a war in Europe and in the Pacific simultaneously. In the process of achieving their historic victory, they found that they had gained new moral authority and a new capacity for vision. They created the Marshall Plan and lifted their recently defeated adversaries from their knees and assisted them to a future of dignity and self-determination. They created the United Nations and the other global institutions that made possible many decades of prosperity, progress and relative peace. In recent years we have squandered that moral authority and it is high time to renew it by taking on the highest challenge of our generation. In rising to meet this challenge, we too will find self-renewal and transcendence and a new capacity for vision to see other crises in our time that cry out for solutions: 20 million HIV/AIDs orphans in Africa alone, civil wars fought by children, genocides and famines, the rape and pillage of our oceans and forests, an extinction crisis that threatens the web of life, and tens of millions of our fellow humans dying every year from easily preventable diseases. And, by rising to meet the climate crisis, we will find the vision and moral authority to see them not as political problems but as moral imperatives.

This is an opportunity for bipartisanship and transcendence, an opportunity to find our better selves and in rising to meet this challenge, create a better brighter future – a future worthy of the generations who come after us and who have a right to be able to depend on us.