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Sustainable Consumption and Communities: Bringing the American Way of Life into the Twenty-First Century

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**THE SEVENTEENTH ANNUAL
LLOYD K. GARRISON LECTURE**

**Sustainable Consumption and Communities:
Bringing the American Way of Life into the
Twenty-First Century**

DANIEL FARBER*

It is a great honor to be here today. The Environmental Law Program at Pace is known nationally and internationally. I am also very happy to have indirect association with Lloyd Garrison who, if you read about him on the little brochure or on the website, is really the model of the public-spirited lawyer, of the kind we don't always see today at major law firms. I think he is a great role model. Steve mentioned my book, *Lincoln's Constitution*,¹ and the point of connection is that Lloyd Garrison was the great grandson of William Garrison, the famous abolitionist, which I think is pretty cool.

So, my topic today is about sustainable consumption and communities. I thought I would tell you about how I started thinking about this issue. Now, you may be thinking this is an

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1. DANIEL A. FARBER, *LINCOLN'S CONSTITUTION* (2003).

obvious issue, so why did it take him so long? About a year and a half ago, a publisher sent me a free copy of a book called *Confessions of an Eco-Sinner* by Fred Pearce.² I recommend it. The title is very misleading—I thought it would be some guy flagellating himself for eating ice cream and going on with gloom-and-doom and guilt and self-incrimination. I could do all of those things on my own, without the help of the author. But I eventually did pick it up and started reading it, and it turned out to be fascinating. The subtitle of the book is something like “tracking down the sources of my stuff,”³ and what he did was take a bunch of stuff in his house, including a t-shirt he had just bought; some kind of electronic equipment like a CD player; groceries; and he tried to track down where they had just come from, and not just in a generic sense. He didn’t just want to find out what country his broccoli came from, but what field it was from. He would go talk to the people who were there. He also did some stuff on what happened to things after he got rid of them. He got rid of an old laptop; he followed it until the pieces turned up in India and China where they were being disassembled and recycled. It was really an interesting book and one that didn’t just parrot environmental truisms. He is very thoughtful about some of the pluses and minuses about what he finds during the trip. That got me thinking about consumption as an important part of the equation, and then I also worked with people outside of the Law School who are very interested in issues like energy efficiency and food systems and that also gave me a nudge in the right direction.

Most of what we do in environmental law is really on the production side. We look at factories that are producing goods, and we try to figure out how to get them to control what comes out of the smoke stack, or what comes out of the pipe that goes in the nearby river, and the stuff that they bury afterwards in oil drums that corrode later and causes a Superfund site. That is the prototypical set of environmental issues. We occasionally look at what kinds of products that they make; for example, with automobiles, we have pollution rules for automobiles. But by and

2. FRED PEARCE, *CONFESSIONS OF AN ECO-SINNER: TRACKING DOWN THE SOURCES OF MY STUFF* (2008).

3. *Id.*

large we look at the production process – we don't look at what happens at the other end of the economic equation of consumption. I think that it is worth expanding our horizons.

Now, nothing I am going to say is meant to imply that we should stop worrying about production. What firms do in producing goods or services is a very important part of the equation and overlaps in some ways with the consumption part, but I think that we haven't given enough attention to the issues of consumption.

It turns out for example, that individual consumption, including household heating and cooling as well as personal transportation, accounts for roughly one third of U.S. energy use and carbon emissions.⁴ We could reduce those amounts by about 20 percent in a decade because there is a lot of stuff we haven't done yet. There are a lot of low hanging fruit that is easy and cheap; and in some ways it is easier and cheaper than the corporate sector because we have already been pushing corporations to some extent on environmental issues, and we haven't tried to get individuals involved. Households are also major sources for pollutants that cause local ozone problems, and for toxic pollution such as mercury releases. So it is not just a matter of looking at consumption because we want people to be more virtuous. We want to look at consumption because what people do on the receiving end of goods and services, and energy, is important in the overall picture.

In a free society, if we want to change what people are doing, we are mostly going to be involved in informing them and giving them opportunities, and only secondarily in trying to force them to make changes, because there are real limits as a practical matter, if not a philosophical matter, to how much we can control decisions people make in everyday life. But even given that constraint, there seems to be quite a bit that can be done.

I am going to talk really in two big chunks. The first part is kind of theoretical: it is thinking about how consumption relates to individual well-being, how much we need economic growth, and

4. Michael P. Vandenbergh et al., *Implementing the Behavioral Wedge: Designing and Adopting Effective Carbon Emissions Reduction Programs*, 40 ENVTL. L. REP. NEWS & ANALYSIS 10547, 10549 (2010).

to what extent environmental law could make progress by at least taking a little bit of the edge off of the consumerism that has dominated our society. So that is the broad issue, and then I am going to talk some about more practical things. There are lots of relatively un-dramatic changes that can be made that would move in the right direction. One of the reasons that there are many different changes is that people consume a lot of things in a lot of different ways, and therefore it is not going to be easy necessarily to come up with some grand solution that will address all of them. You can imagine some economic incentives that would affect consumption: carbon taxes that get passed on to consumers, or even value-added taxes for lots of good and services. Those would have a macro effect, but much of what you are trying to accomplish is really more micro-level, and is going to require a lot of different things. Now, there are actually, on this practical side of things, many people who are working on issues of this kind right here at Pace. I may not spend much time talking about those as I would with other audiences, because there are people here who are right in the trenches and know a lot about them and probably a lot of students who have been exposed to a lot of these issues too.

So, there are a bunch of things that we could do. One of the problems is that consumers don't have enough access to information about consumption choices. We could do a lot about that, and in part we could do a lot by being imaginative with smart phone applications and Internet and other ways of giving people information that we didn't have back in the days of electric typewriters and dinosaurs. Now we have these things, and they provide ways that we can get people information much more quickly and cheaply than we might have been able to, and in a much more tailored way than we might have been able to in the past.

We can also pursue water efficiency. Water efficiency is important for a lot of reasons, especially in the Western half of the country, but also increasingly in the East. One of the reasons it is important is that water use is tied to energy use in many ways. So water is high in energy use; on the other hand, energy use also uses a lot of water for cooling purposes and so forth, so they are kind of integrated. There is a lot that can be done about

water efficiency and it hasn't been a focal point yet, so we can do more.

I noticed there is a course here on sustainable communities, and that is something I am going to talk about more, but that is really critical if we are going to get people out of private automobiles. We cannot expect them to live in places that are organized like Los Angeles and then expect them not to drive. We need to find ways of changing cities that are more conducive to other forms of transportation including walking, and I think that that will have side effects that people will like. So, a part of my argument is that a lot of the sustainability stuff does not involve wearing a hair-shirt and living in an unheated house. It actually involves things that will make people's lives better in one way or another. Related to that, it involves more public transportation and using hubs as centers for development. City streets turn out not to be very well-designed for environmental purposes, and the reason is that they are designed by somebody's idea of what you need to do to avoid tort liability if there is a car crash. Because that has been the only issue, it turns out that you can do other things that will keep tort liability under control, but they are more environmentally friendly.⁵

We need to have better ways of keeping track of people's well-being. The main thing that we look at now is GDP. GDP, at the end of the day, is how much people are consuming. We only feel like we are making progress if people are consuming a lot more, and that is neither a sensible approach to measuring well-being nor an environmentally friendly approach. And then there are lots of other things: we can use better campaigns to inform people about environmental issues; we can use green labeling and education programs; and we can provide incentives for sellers and manufacturers to get involved in trying to get their customers to change behavior in a pro-environmental way. So there are lots of different things, and time allowing, I will come back to talk about some of them. But I also want to try to be really careful for discussion because there a lot of ideas here that I am still working with and I really want to get feedback.

5. See JOHN URGO ET AL., *CTR. FOR RES. EFFICIENT COMMUNITIES, MOVING BEYOND PREVAILING STREET DESIGN STANDARDS: ASSESSING LEGAL AND LIABILITY BARRIERS TO MORE EFFICIENT STREET DESIGN AND FUNCTION* (2010).

So, let me start with the question of consumption at the 50,000-foot-level. The United States is an extravagant user of resources. I'll give you some figures.⁶ We have about one twentieth of the world's population; we use one fifth of the world's fossil fuels. We produce a quarter of the carbon dioxide, and we are responsible for one third of the paper and plastic use.⁷ From 1900 to 1990, the U.S. population tripled, while the use of raw materials multiplied seventeen times.⁸ Each individual is responsible for much larger amounts of raw materials. We use a fifth of the world's copper, a fourth of aluminum, and a third of paper.⁹ Fourteen million trees are cut down every year for mail-order catalogs.¹⁰ I don't even know why anyone has mail-order catalogs today instead of using the Internet. There is a lot of waste that goes with this. Ninety-nine percent of the material used in production ends up as waste and headed for disposal within six weeks of the sale of the original product.¹¹

Now, this is just not going to work over the long run, and it really doesn't take much arithmetic to figure that out. I think there is no question that Americans were much better off by 1990 than they were in 1900: cars, antibiotics, iPods, and all kinds of miracles that came into people's lives. People ate better. Life expectancy was higher. I am not questioning that. So let's assume that the next century that we are in now is a replica of the previous century. That means that by 2090, the U.S. would alone consume three times the current world total of fossil fuels, produce three times its carbon dioxide, use three times the current world consumption of copper, et cetera.

This obviously is not feasible; there aren't unlimited amounts of these things. A part of the problem will undoubtedly be cured by technology. There are things that use copper now, and we will figure out how to use reprocessed paper for them by later in the

6. See Dave Tilford, *Sustainable Consumption, Why Consumption Matters*, SIERRA CLUB (2000), http://www.sierraclub.org/sustainable_consumption/tilford.asp (last visited Nov. 20, 2011).

7. *Id.*

8. *Id.*

9. *Id.*

10. *Id.*

11. *Id.*

century, and maybe we will figure out how to grow trees in space. So, some of that will be handled by technology. But the thing to keep in mind is the magnitude; to make this work, we need to get more than seventeen times as good at using resources, and I think that is very hard to be confident about, even with a lot of technological progress. That is assuming that keeping the current situation going would be acceptable, and I don't think it is. I don't think we can even comfortably consume our current amounts all the way through this century as demand grows from other countries, as environmental stresses continue, and so forth. So, at some point, we have got to figure out a way to get people to live without such resource and energy intensive forms of consumption.

Now, why do we consume all this stuff? There is some level of consumption that is just required to stay alive. There are people in the world who are on the verge of not getting that. They don't have enough calories to live on or the food is no good, or the water system isn't sanitary, all kinds of things like that. They might freeze to death if they don't have adequate clothes; they don't get any medical attention; so we have got probably at least a billion people in the world who are in that situation, and then some who are not too much better off. But once you get past the level of minimal survival and minimal decency, the reason that you consume is not so you can be around the next day, it is because you like what you are getting. You are getting some kind of satisfaction, gratification, or something, out of the stuff that you are consuming.

I think we need to take a closer look at the question of what makes people happy, to what extent is buying and using things an important part of what makes people happy. Does giving people a lot more money so that they can buy and consume a lot more things make them a lot happier? Now, these are questions people have been asking since the Ancient Greeks, but recently there has been some real rigorous study of this.¹² There is a whole field of what is called, with a certain amount of dignity,

12. See, e.g., DEREK BOK, *THE POLITICS OF HAPPINESS: WHAT GOVERNMENT CAN LEARN FROM THE NEW RESEARCH ON WELLBEING* (2010) for an excellent discussion of the policy implications of the growing body of research on happiness.

Hedonic Studies, but which is more accurately called Happiness Studies, where economists and psychologists have gone around and found out what makes people feel good.¹³

The way they do this is pretty simple, although there are a lot of bells and whistles to provide some reliability. But the basic idea is that you go around and ask people: “How do you feel?”, “Did you have a good day?”, “How much of your day would you say was painful and how much of it was pleasurable?”, “Did you feel like crying today?”, “How much did you laugh yesterday?”, “How satisfied are you with your life as a whole?” There are a bunch of different questions, and many discussions of what kinds of questions work best. Sometimes you do this by just going around and asking a whole bunch of people, and other times you take a smaller group, but you follow them day-by-day or hour-by-hour and they keep a journal of how they are feeling at a given time.¹⁴ It turns out that you could actually learn some things from this; it is not just random. So, in some ways, the most interesting part of this project was finding out what you can learn from these studies.

Not surprisingly, economists are very interested in the relationship between money and happiness. After all, economics is mostly about trying to get people more money (to the extent that it has a normative point to it), and we’d like to know what to think of that as a goal. The literature is complicated, and it doesn’t all fit totally neatly together. It partly depends on what kind of study you are doing, what kinds of questions you ask about happiness, whether you look at the same person at five-year intervals or whether you look across countries at how people are doing. So, I don’t want to oversell this as being the answer, but it turns out that although having money according to at least

13. See generally DANIEL KAHNEMAN, ED DIENER, & NORBERT SCHWARTZ, *WELLBEING: THE FOUNDATIONS OF HEDONIC PSYCHOLOGY* (1999) (providing a more technical but less recent overview of the research).

14. See JOSEPH E. STIGLITZ, AMARTYA SEN, JEAN-PAUL FITOUSSI, *REPORT BY THE COMMISSION ON THE MEASUREMENT OF ECONOMIC PERFORMANCE AND SOCIAL PROGRESS* (2009).

some of the studies is helpful towards happiness, it is not necessarily the major factor by any means.¹⁵

There are some individual personality things that I should mention too. Some people just have sunnier dispositions than others. So, under all circumstances, ‘A’ may be happier than ‘B’ as you move them around in different ways, but we can look at the same person over periods of time or we can look at large enough groups of people that we can be pretty confident that are as many optimists and pessimists in both groups and try to compare the groups. There are ways of dealing with that issue.

My sense of where the central part of the research is, although I don’t think it is carved in stone by any means, is that there is a relationship between wealth and happiness, but it shows strong diminishing returns. That is, doubling your income will not double your happiness. Doubling it again will do even less, so the curve levels off like that. Now, some studies don’t show even that. People in the U.S. are much wealthier now by most measures than they were in 1950, but in fact people aren’t any happier if you ask them about it.¹⁶ You get the same kinds of answers about how people are feeling as you did back before they had all this great electronic stuff and cars with GPS and all these other wonderful things that we have today. You get about the same answers. Across societies, there seems to be a relationship between per capita GDP and happiness, but there is huge variation. So, there are some places where there are higher GDPs and people seem miserable, and there are others where the GDPs are relatively low, but people seem pretty happy.¹⁷

The one thing we know is that if you are just going to measure how well off a society is by how much money people have, or how much they consume, you are not getting a good measure if what you care about is how well-off people really feel.

15. See generally CAROL GRAHAM, HAPPINESS AROUND THE WORLD: THE PARADOX OF HAPPY PEASANTS AND MISERABLE MILLIONAIRES (2009) (providing a concise overview of the research).

16. Bok, *supra* note 12, at 5

17. See RICHARD A. EASTERLIN, HAPPINESS, GROWTH, AND THE LIFE CYCLE (Holger Hinte & Klaus F. Zimmerman eds., Oxford Univ. Press 2010) (discussing the data).

Now there are a couple different ways of looking at this question of well-being. I am talking about the subjective approach, when you want to know what makes people happy. You can also look objectively at things like life expectancy, level of education in society, other kinds of measures of what life looks like from the outside. I am talking about what people feel like, and that is partly because it is more relevant for consumption. I think a lot of consumption is really just designed to make you feel good, or at least to help you avoid feeling bad.

Now, some of the relationship between wealth and well-being seems to be situational; that is, it makes people happy to be around others who have less than they do. It makes them less happy to be around others who have more than they do.¹⁸ So, there is a kind of competitive aspect that has implications for economics, because what it means is that if you made everybody twice as wealthy, it might not make them feel at all better because they would still be competing with each other to see who could be on top. So, it is a rat race that nobody can win.

But for me, what is important about these studies is not just what doesn't necessarily make people happier, but the studies that show the things that do make people happier. The studies are quite consistent about that. There are different ways of doing it. They can ask you about an activity, and ask whether the last time you did this was fun or unpleasant. They can ask you what you did in the preceding four hours and then ask you how you feel about whatever it was. You can ask separately about happiness stuff and then just ask them things about their life (are you married, divorced, etc.). There are different methodologies—you can do it across countries, across individual life spans—but the results are actually surprisingly consistent, according to some psychologists.

What makes people feel happier? Health, or at least their perception of their own health, which is not always the same as what their doctor would say. Thinking that you are healthier is associated with happiness. Religion is associated with happiness. Religious people are happy on average compared to non-religious. Non-religious people who live in communities of religious people

18. *Id.* at 14.

are apparently happier on average than they would be if they lived with other non-religious people. Living in a place with a democratic government and individual rights and tolerance of minority groups, which you might think is a philosophical issue—people who live in countries without these things are actually less happy than people who have them.¹⁹

There are all kinds of interesting things to be learned. For example, according to a very well-conducted study, among American and French women, walking is seen as the most pleasurable activity on balance, followed closely by sex, and then by exercise.²⁰ I am not quite sure what lesson to take from that, but food for thought anyway.

The other thing that turns out to be really important is social life; so marriage is important for happiness. Having friends is important; people who don't have friends tend to be unhappy. Participating in civic groups is conducive to happiness. Being nice to other people actually makes people feel better apparently. So, these kinds of social interactions seem to be at least as important as money, and maybe even quite a bit more so.

These findings are important because they suggest that maybe there are some ways that we can substitute away from consumption that will actually leave people pleased with the change afterwards. They will say “gosh I am so glad that we got X, Y, and Z in our community because my life has really been a lot better.” There is a lot to talk about economic growth as a goal and whether it should be. There is a lot of very philosophical debate about consumption. I have found a number of academics, especially in the social sciences, who are very dubious about the goal of economic growth, but I have found other people, too. I want to make sure I get this quote right so I don't get in trouble. The Pope has spoken of a need in effect to move beyond a purely consumerist mentality in order to promote sustainability:

19. David G. Myers, *Close Relationships and Quality of Life*, in KAHNEMAN, DIENER, AND SCHWARZ, *supra* note 13, at 374.

20. JOSEPH E. STIGLITZ ET AL., REPORT BY THE COMMISSION ON THE MEASUREMENT OF ECONOMIC PERFORMANCE AND SOCIAL PROGRESS 88, 170 (2009). See also TIM BROWN, PROSPERITY WITHOUT GROWTH? THE TRANSITION TO A SUSTAINABLE ECONOMY 88 (2009).

it is becoming more and more evident that the issue of environmental degradation challenges us to examine our lifestyle and the prevailing models of consumption and production, which are often unsustainable from a social, environmental, and even economic point of view. We can no longer do without a real change of outlook, which will result in new lifestyles in which the quest for truth, beauty, goodness and communion with others for the sake of the common good are the factors, which determine consumer choices, savings, and investments.²¹

I am sure the Pope is not alone among religious figures or other notables in terms of having this position, I just happen to have stumbled on this statement by the Pope, which then goes on to talk about climate change as an urgent issue.

Whatever you could say about the idea of a no-growth society in the abstract, at least in the near run of the next few decades, I find it hard to think of this as being a plausible target for a bunch of reasons. One is that people are very attached to their current lifestyles, and it is not going to be easy to get rid of the idea that you're supposed to get even more next year than you have this year. So it is going to take a while to have that cultural change.

There are other things that depend on growth. Some people worry that if we stop growing, we would have more of a zero-sum society, and it would be harder to get money for programs that help the poor, or that help other disadvantaged groups. As it is now, people can tell themselves "yes, our society is doing more for the poor, but next year there is going to be more for everybody and the pie is going to be bigger, so it is okay to have a little bit of it redistributed"—we won't be able to do that. In any event, I think it is just going to be a very difficult sell in the near term, but I think it is an idea that at least we can begin moving towards: that growth as such is not the be-all and end-all of social policy—or as individual financial wealth, in terms of individual life either. I think that if we can get people to rethink what is important in their lives, then in the long run, we might have a

21. Pope Benedict XVI, Message Of His Holiness Pope Benedict XVI For The Celebration Of The World Day Of Peace 1 January 2010: If You Want To Cultivate Peace, Protect Creation, 11 (Dec. 8, 2009), *available at* http://www.vatican.va/holy_father/benedict_xvi/messages/peace/documents/hf_b-en-xvi_mes_20091208_xliii-world-day-peace_en.html.

real change in how people think about economic growth and consumption.

I don't necessarily think we should abandon the question of the desirability of growth, but it is a background issue in the shorter term. I would also say that it is not really clear to me what growth means over really long periods of time; how do you know if you have had growth when the United States of today and the United States of 2060 may be so different? How do we measure how much richer one society is than another? That is a theoretical economic issue, but one that economists are actually concerned about.

Derek Bok, the former President of Harvard, has written a book about happiness and public policy that is just excellent.²² It really pains me that it is not enough for him to have been President of Harvard and Dean of Harvard Law School; he has to go on and keep writing good books when he is 80. He does a really good job of trying to look at all of this literature and think about what its general implications are—not much about the environment. One of the things that make people really unhappy is unemployment. That is one of the guaranteed types of unhappiness. It is not just about having money; it is about the psychological impact of unemployment as well. So he has a lot of discussion about how various kinds of social policy should have discussions about that.

I think that there is a connection between all of this happiness stuff and things like sustainable communities, because if we have sustainable communities, people won't have to spend as much time as they do commuting—studies show that people everywhere hate commuting time. They will be able to not be caught in traffic for hours on end; they will be able to spend more time with their families. Women will be able to take more walks. All of these things cannot only be environmentally valuable, but they can actually also improve people's quality of life.

In some ways, what we have given people is wonderful, in terms of what people want or what we think they want, but in other ways, we haven't given a lot of people such great lives. They spend hours in cars commuting; it is frustrating and

22. See BOK, *supra* note 12.

annoying; they are exhausted when they get home; they don't have enough time with their kids. They have to use the car to go anywhere. This is not necessarily stuff that people really want – it is just stuff that we have provided them. Our healthcare outcomes are not that wonderful compared to other advanced countries. There are a lot of ways in which our society can actually do better at giving people a high quality of life. Some of those ways at least are environmentally better than what we have now. So, let me just talk very briefly about some of these ideas for any kind of post-consumerist society.

Energy conservation is a really important part of energy efficiency. There is a very striking graph of California and the U.S. in terms of per capita energy consumption.²³ Up until the 1970s, they were in lockstep going up every year, year after year, and that is what the U.S. per capita energy consumption has done to this day—it is has gone up step by step every single year, maybe a little bit down during the worst of the recent crash, but otherwise straight up in a line; but not California. California was in lockstep and then in the 1970s it started leveling off and went flat. So we aren't reducing per capita energy consumption in California, but we're not increasing it either. This is partly perhaps a matter of people not needing to heat their homes as much. It is partly just because of public policy. The California Public Utility Commission started working really hard on conservation of energy, giving incentives for utilities to actually sell less electricity instead of always rewarding them for selling more, supporting all kinds of consumer programs, et cetera²⁴

Now, California isn't totally unique on this stuff. Obviously, a lot of other states and communities are active and this part of the East Coast is one of them. I don't want to sound like too much of a California chauvinist at this point. So, there is a lot of low hanging fruit, and it is low hanging in the sense that there

23. See Arthur H. Rosenfeld & Deborah Poskanzer, *A Graph Is Worth a Thousand Gigawatt-Hours: How California Came to Lead the United States in Energy Efficiency*, INNOVATIONS, Fall 2009, at 57, 73, available at http://www.energy.ca.gov/commissioners/rosenfeld_docs/INNOVATIONS_Fall_2009_Rosenfeld-Poskanzer.pdf.

24. See ELIZABETH DORIS ET AL., ENERGY EFFICIENCY POLICY IN THE UNITED STATES: OVERVIEW OF TRENDS AT DIFFERENT LEVELS OF GOVERNMENT (2009).

are a lot of things that are actually economically desirable, as well as being good for the environment. There are a lot of energy efficient measures that have short payback periods so that you are actually better off financially after a couple three years than if you hadn't made the choice in the first place. But people still don't do it. They don't do it for a variety of reasons like lack of information or shortsightedness, and lack of availability of product, and so forth. But there are things that we could do that would have a dramatic effect.

We are already seeing some of that with light bulbs, the refrigerators of today are far more energy efficient than the ones of the past, and all kinds of different appliances (there is a lot of interesting stuff that I won't go into about the relationship between state and federal law in this area, because there is federal preemption that has to be dealt with). We see the same thing with green buildings, where there is a lot of potential for either creating new buildings or retrofitting buildings in a way that saves a lot of energy. We care about saving energy not because it is a precious and wonderful thing, [but] it is because the ways we produce energy are environmentally harmful by and large.

Most notably, we use fossil fuels, which not only cause climate change, but also are associated with all kinds of respiratory diseases, kill coal miners, destroy West Virginia mountains, and create oil spills. If we didn't have to use as much of these things, then we'd be better off. One way of using less fossil fuel is to substitute other forms of energy production, but we could also just use less energy. To some extent, that could be a cheaper and more effective initial tool than to figure out how we are going to turn our whole electric system into wind mills and solar.

Diet is something I want to mention. We think of diet as private concern. It is certainly a serious issue. It is not just invariant; you think that what people look like is pretty much what people have always looked like. Not true. Between the 1960s and the beginning of this century, the proportion of the U.S population suffering from obesity, by some medical body mass

formula, went from thirteen percent to thirty-five percent.²⁵ That is not just because it is inevitable given our genes—I assume that there are genetic differences and predisposition towards obesity, but those haven't changed in the past forty years.

This is bad for the people involved. The Center for Disease Control estimates that obesity causes 200 to 300 thousand premature deaths,²⁶ but it is also bad environmentally. This is because agriculture as a whole is very environmentally burdensome. As you know if you have taken a course on the Clean Water Act or on other environmental issues, agriculture is the least regulated sector of production and some forms of agriculture are especially heavy in their footprint. One thing, for example, is eating meat in general, but beef in particular. Beef is such a problem largely because it takes so much corn to get the beef to the point that Americans have learned to like, which means having a lot of fat, which isn't good for you anyway. Growing corn is very environmentally intensive. It takes huge amounts of fertilizer, pesticides, etc., to get the kinds of corn yields we have today.²⁷

We have to find ways that those who are not saints can also lead better lives. One way of doing this may be to continue eating meat or beef, but not as often. That is good for climate change, good for the Mississippi River, and the Dead Zone in the Gulf, and it's probably good for your health. Communities, I already mentioned—getting people out of cars onto public transportation or walking. People walk more when there is public transportation because you have to get to the bus or metro-stop. Trees in urban areas turn out to be important. Painting people's roofs white turns out to be important not only for energy use, but for reducing the urban heat effect and for reducing the risk of death from heat waves by the people who live in the house. We are going to get a lot more and a lot bigger heat waves as the

25. Jay Bhattacharya & Neeraj Sood, *Who Pays for Obesity?*, 25 J ECON. PERSP. 139, 139 (2011).

26. See PETER CALTHORPE, *URBANISM IN THE AGE OF CLIMATE CHANGE* 31 (2011).

27. Mary Jane Angelo, *Corn, Carbon and Conservation: Rethinking U.S. Agricultural Policy in a Changing Global Environment*, 17 GEO. MASON L. REV. 593 (2010)

century goes on because of climate change, so that becomes a more important factor.

There are other things we can do. We can get people more individually involved, both as consumers in various ways, but also through various forms of civic participation or public participation on the Internet with rulemaking proceedings. None of this means we need to transform the world tomorrow. We need to do a bunch of different things—none of them are going to be super easy because any kind of change, no matter what it is, is always hard work—but they aren't utopian. Each one of them may look like a small piece, but when you put them all together, you start making not only a big dent in environmental problems. You also start changing the way people live in a way that may make them open to further kinds of change. Once they realize that they actually like having more time with their kids, or more time to walk, or more time to go play tennis, or kick around a soccer ball, then they might start thinking that maybe we should worry about some things besides just the bottom line when we make societal decisions about these issues.

So let me wrap up very quickly. America was founded, in the Declaration of Independence, by people who thought that one of the key tests of a good society was the pursuit of happiness. A lot of environmental advocacy, I think, has the tone that “you are bad people, you have been having too good of a time, and it is time for you to get out on the street and rend your clothing, flagellate yourself, and pay penance for what you have been doing in the past.” No doubt there will be things that we need to do for sustainability that will not be pleasant and will be painful, but I think it is wrong to think that that has got to be the major theme.

If environmental law is going to work, and it's going to have political and cultural staying power, we have got to be thinking not just about the environment, but also about how we can give people a good quality of life—how we can give them the kind of pursuit of happiness that Thomas Jefferson promised them in 1776? I think that would be very difficult to do if in fact happiness is about the “person who dies with the most toys wins.” If that is the pursuit of happiness, it is pretty hard to square with sustainability. It turns out that really isn't what it takes to make people happy.

I think that there is a possibility that we could, as a result of our efforts of sustainability, end up not only protecting nature and protecting ourselves from environmental harms, but actually making our lives better in a way that people will value. At least that is what I hope.

Thank you very much.