

Two Percent Per Year

Paul Barten

No, I'm not referring to inflation—the annual loss of buying power of a dollar, which coincidentally is 2 to 3 percent per year. I'm referencing the general goals of the United Nations Paris Climate Agreement signed in 2016. (Let's simply ignore the fact that President Trump unilaterally withdrew the United States from this agreement in 2017, with no coherent explanation, and stick with the other 194 signatories.)

The foundation of this global agreement are the so-called 20/20/20 targets: a 20% reduction in carbon dioxide emissions, 20% of energy from renewable sources (e.g., wind, solar, geothermal, tidal), and a 20% increase in energy efficiency by the year 2030. It is the culmination of years of consensus-building and negotiation, beginning with the first annual conference in Berlin in 1995. Major breakthroughs occurred in Kyoto (1997), Bonn (2001), Durban (2011), and Paris (2015).

Let's assume it takes a few years to get started and add a little cushion to ensure the goals are met or exceeded. Dividing 20% by 10 years yields the incremental goal of ~2% per year. Now, let's accept personal responsibility for the goal of reducing our use of energy and natural resources—in any combination and any reasonable, sustained manner.

Some of you will recall that we filled a flip chart with “2% ideas” in about 10 minutes after my talk about climate change in May. Before I provide a specific example, let's consider the following background information in this introductory article:

1. If we had to pick a year when human-induced climate change started it would be 1820 ...when agrarian societies began to industrialize. Point being, we are not going to reverse two centuries of adverse impacts in a few years with some magical technology or clever shortcut.
2. The changes in population and per capita use of energy and natural resources were small at first but they all have been growing exponentially for two centuries.
3. Unfortunately, environmental impact is the product (not the sum) of these terms ...more people ...*times* more energy use per person ...*times* more natural resource use per person [yikes].
4. Some national governments are making great strides towards meeting their 2030 benchmarks (e.g., Holland is already generating *all* the renewable energy it needs to run its national railway system [clean, comfortable and efficient mass transit]). The United States is not one of them. In fact, recent policy changes and regulatory roll-backs mean we are headed in the opposite direction (e.g., “Clean Coal”). We can wait for national leadership or take the initiative at a personal and community level.
5. Once you accept personal responsibility and become more conscious of your use of energy, food, water, gasoline, and all the other components of daily life, you will find that 2% per year reductions are readily attainable. This will be more challenging as time goes on, but you will get more determined and creative too.

Here is a mission statement written for us by Mahatma Gandhi. “*If we could change ourselves, the tendencies in the world would also change. As a man changes his own nature, so does the attitude of the world change towards him. We need not wait to see what others do.*”

Here's the plan. I will be passing along 2% ideas in monthly installments in the CCC Chronicle. Some of them you will already be doing. Others may need to be adapted to your personal circumstances.

Some of them you may not have thought of and may want to try. Then, in the not too distant future, I would like to receive *your* ideas and examples; we'll work together on a monthly installment.

We'll keep a running list to demonstrate to ourselves and others that we can reverse the trend, lead by example, and make sustained progress. Mathematically ...MORE people ...*times* LESS energy use per person ...*times* LESS waste of natural resources per person yields a positive environmental impact. And this positive environmental impact will grow exponentially too, especially if several hundred members of CCC accept the challenge. If we influence family, friends, co-workers ...so much the better.

Example – reusable shopping bags. Plastic bags are a petroleum product. There are a few exceptions (i.e., bioplastics), but in my view, they are marketing gimmicks. Paper bags use a renewable raw material (wood fiber from forests where trees can re-grow) but also require substantial amounts of water, energy, and other chemical constituents to manufacture. Both can be reused a few times and, in theory, can be recycled ...but that process uses more energy and is less efficient than we would hope. In contrast, a well-made reusable shopping bag can be used for years. (If it gets a little tear or hole, fix it with duct tape or packing tape.) Use it for just one year of weekly grocery shopping and you have avoided the environmental costs of 100 or more plastic bags. The conscious effort of keeping reusable shopping bags in your car, in your pantry, or near your back door is minimal. That's it. Boring old reusable shopping bags are, in actuality, an easy and sustainable 2% win.

Case Study – A few weeks ago, I stopped by our local hardware store on a Saturday morning to buy a quart of paint. It was about 80 °F, but pleasant. There was a full-sized, crew cab diesel pickup idling in the parking lot with the windows closed and the AC blasting ...soot drifting out of the over-sized, macho-Billy tailpipe. The owner of the store and the owner of the pickup were having an animated conversation [expletives deleted for church newsletter] at the counter ...“What's all this nonsense about banning plastic bags about! If things keep going the way they're going you won't be able to live in this state anymore!!” [I didn't quite follow the logic of the second statement. But I suppose that's because I have a Ph.D. and no common sense. I also wonder which state is their beau ideal?]

2% Per Year List

1. Reusable shopping bags
- 2.

When I purchased the paint the store owner, in a polite, sincere way, asked me if I wanted a bag. I said “no thanks” ...and somehow managed to carry the 4 lb. can and 1 oz. paint stirrer 30 feet to my car. Just then I remembered what my friend Mike Stevens added to the flip chart in May. He said ...“One day it occurred to me that I should take my reusable shopping bag into the hardware store or *any* other store ...not just the grocery store.” So, it follows that I can hardly wait to bring my Save-the-Earth, Gandhi quote, pastel flowers, birds and bees, lollipop tree reusable shopping bag to that hardware store. It will, no doubt, evoke a surprised and perplexed ...“Hey, you brought your own bag?!” comment. To which I can respond “Yup. I'm glad you don't have to waste hard-earned money on those flimsy plastic bags that rip open, cut into your hand, and pile up in our pantry.” Hopefully, the store will be busy and someone in line behind me will get the same idea.

