

less people. I didn't see a single homeless person, shanty, or slum. No trashed neighborhoods. No piles of garbage in the neighborhoods deemed unimportant by municipal officials. The homes we passed were modest compared to U.S. McMansions but were in good shape and well maintained. I asked my guide, local waste expert Alan Watson, where the poor people lived, and he looked at me quizzically. "We have a strong social safety net here, so we don't have a lot of poor people like you do."

Finally, in a far-off field, I saw a bunch of small structures that looked almost like shanties from a distance. "Aha!" I declared. "So that is where your poor people live." "No," my host explained, "those are camper vans in a caravan park on holiday." Oh.

Each time we got out of the car, Watson had to remind me that I didn't need to lock the doors, even though it was packed to the gills with our camping gear—and the laptop with my book manuscript. He told me that his family seldom locks their house door. "Nothing bad will happen," he promised. And he was right.

I thought about my daughter and how different it would be to grow up in a world with that atmosphere: *nothing bad will happen*. To the best of our ability, we should be able to make that promise to our children and to future generations. If that means rewriting the Story of Stuff—which I firmly believe it does—then let's get to it.

# APPENDIX 1

## EXAMPLES OF PROMISING POLICIES, REFORMS, AND LAWS

**While each community and country requires a custom approach, there is a delicious smorgasbord of possible policies, regulations, laws, and programs that can improve humanity's well-being and the state of the planet.**

Some of these are already under way and just need to be scaled up. Some could be implemented right away, some over the short term, some more gradually. Some are straightforward; others are going to take some serious thought and planning in order to be implemented compassionately and justly.

This is not a comprehensive list, just a few of the possibilities I'm most excited about, presented in an order that matches up with the five stages in the Story of Stuff.

### Extraction

1. Strengthen and implement government-led international agreements and monitoring systems (not voluntary industry-led codes of conduct) on environmental sustainability and human rights issues for all mining operations—gold, diamonds, coal, coltan, everything. The Kimberley Process needs to be strengthened and enforced to be effective, and additional systems are needed to cover other types of mining. Many organizations are working on reforming mining practices; check out Earthworks in the United States, Minerals Policy Institute in Australia, and Mines, Minerals and People in India.
2. Stop logging in the planet's endangered remaining forests, from Canada's boreal forest to Indonesia's rainforest. Enact and enforce strict environmental and human rights standards for logging in other forests, prioritizing the protection of natural forests required to restore climate stability. Strengthen the Forest Stewardship Council certification program so it ensures protection of endangered forests, the rights of forest-dwelling peoples, and ecological values of the forests.

3. To reduce greenhouse gas emissions to the level needed to stabilize the climate, we simply must wean ourselves from fossil fuels and massively reduce carbon emissions. As activists from Ecuador to Nigeria to Appalachia, we need to say, “Keep the oil in the soil, keep the coal in the hole.” Policies that promote this path could include:

- Redirecting government subsidies for extractive energy industries toward the development of clean, renewable energy options.
- Redirecting subsidies for gas guzzler vehicles and highways toward promoting public transportation and zoning laws that discourage sprawl and create sidewalks, bike lanes, and public transportation, so people can reach the places they need to go without driving.
- Establishing strict guidelines on fuel efficiency for cars and energy efficiency for buildings. Fuel efficiency and energy standards should be set and enforced by the government and should be based on sound science, free from industry influence. The Obama administration has recently announced a goal of an average of 35.5 miles per gallon for U.S. vehicles by 2016. Considering that some current cars get more than 50 mpg, with the technology available to achieve even higher fuel efficiency, why stop at a measly 35.5 mpg? Likewise, buildings can be required to be vastly more energy efficient, saving energy on both cooling and heating.
- In the United States, upgrading the obsolete General Mining Act of 1872 to protect water sources, require reclamation, and deny mining claims that conflict with the protection of other resources. The Washington, D.C.-based environmental organization Earthworks coordinates a campaign to overhaul this ancient law as well as address other environmental and social issues related to mining in the United States and internationally.
- Banning mountaintop removal mining, in which entire mountaintops are blown up to access the coal inside. To see what this looks like and to get involved, visit [www.ilovemountains.org](http://www.ilovemountains.org).
- Ceasing development of Canada’s tar sands. Tar sands consist of heavy crude oil mixed with sand, clay, and bitumen. Extracting the oil entails burning natural gas to generate enough heat and steam to melt it out of the sand and uses up to five barrels of water for each barrel of oil produced. Rainforest Action Network (RAN) says that tar sands oil is the worst type for the climate, producing three times the greenhouse gas emissions of conventionally produced oil because of the energy required to extract and process it. RAN is organizing to redi-

rect the \$70 to \$100 billion the United States plans to invest in tar sands infrastructure into research and development of sustainable energy alternatives such as electric vehicles, plug-in hybrids, and solar and wind energy.

## Production

1. Reform chemicals policy, focusing on prevention rather than futile attempts to regulate hazardous chemicals after they’ve dispersed into our products, environment, and bodies. Ban the supertoxic chemicals, including chemicals that build up in our bodies (known as persistent bioaccumulative toxins, or PBTs) and toxic metals like lead and mercury. We in the United States have an opportunity to help pass the Kid-Safe Chemicals Act, the first effort to protect the public health through comprehensive chemical policy reform in more than thirty years. Sign up to join the campaign at [www.saferchemicals.org](http://www.saferchemicals.org).
2. Strengthen unions by protecting the right to organize and choosing unionized businesses for everything from clothing to hotels. Support worker cooperatives too; co-ops build democratic engagement and ensure that profits are kept in the local economy and shared more fairly.
3. Tax pollution at levels high enough to make investments in prevention vastly cheaper. Because the amount of carbon in the atmosphere has reached such crisis levels and we must reduce it to 350 ppm (see [www.350.org](http://www.350.org) for more information), taxes aren’t enough for this particular pollutant. For carbon, we have to go to the main source of the problems—the biggest CO<sub>2</sub> point emitters—and force them to change their energy consumption systems, sometimes quite radically. Many of the suggestions under the extraction section, above, will help achieve this.

## Distribution

1. Ensure that sustainability and equity are the top goals of all trade agreements. In the United States, support the Trade Reform, Accountability, Development and Employment Act of 2009 (the TRADE Act, H.R. 3012), which would significantly improve destructive trade policies like those of NAFTA and the WTO. To learn more and get involved, visit [www.citizen.org/trade/tradeact/](http://www.citizen.org/trade/tradeact/).
2. Give preference to locally made products with tools like a gradual tariff on goods that is based on how far they’ve traveled. Support local business and locally made products to reduce transportation and support local economies. The goal is not to prohibit all long-distance trade but to increasingly strengthen local production and distribution to create self-

reliant communities while also securing a just transition in those communities with export-dependent economies. For those products that are shipped long distances, prioritize rail transport over the more polluting planes and trucks.

3. Promote transparency and democracy in supply chains so everyone—workers, host communities, customers, and businesses along the chain—have access to information and a voice in decision making. Laws to support this would require that companies disclose all their suppliers (as both Dell and Hewlett-Packard now do), ensure worker rights and environmental sustainability along their supply chain, and make this information available to the public.

## Consumption

1. Decommmercialize our culture. Reclaim our mental and physical landscape from commercial advertisers. Ban billboards and other intrusive advertising. Prohibit commercial advertising to children and in public places. Get commercial advertising out of textbooks, classrooms, and all educational facilities. The Campaign for a Commercial-Free Childhood conducts research and advocates for protective policies; to get involved visit [www.commercialexploitation.org](http://www.commercialexploitation.org). Commercial Alert ([www.commercialalert.org](http://www.commercialalert.org)) runs numerous campaigns to decommmercialize our schools, media, and communities.
2. Ensure public investment in commons like libraries, athletic facilities, and parks so that residents can meet their needs and enjoy leisure time without buying Stuff. Attend city council meetings to voice your opinion about budget priorities, or better yet, run for office yourself!
3. Adopt a progressive tax on resource consumption, allowing free use for basic needs while taxing higher-quantity use. For example, water to drink is free; water to wash your SUV or water your desert lawn is really expensive. A vibrant and often-heated discussion is happening on the international level as to what constitutes basic needs.

## Disposal

1. Adopt extended producer responsibility (EPR) laws that hold producers responsible for the end-of-life management of their products, motivating better design at the front end and decreasing waste at the back end. Examples of EPR already in action include bottle bills, Germany's Green Dot program, and the computer take-back legislation in many U.S. states. To learn how to promote EPR in your community, visit [www.productaction.org](http://www.productaction.org), [www.productpolicy.org](http://www.productpolicy.org), and [www.productstewardship.us](http://www.productstewardship.us).

2. Implement significant taxes to discourage wasteful packaging and products, such as single-use beverage containers and disposable plastic bags. Ban outright those materials that are inherently toxic, such as consumer products containing mercury or PVC. Germany's Green Dot program, national bottle bills, and disposable bag taxes and bans in numerous countries demonstrate the waste reduction potential of these tools.
3. Develop a national composting infrastructure to ensure that organic waste is kept out of landfills and that composting biomaterials moves from ideal to reality. This should include support for decentralized (backyard or community level) composting where possible, supplemented by municipal composting operations.
4. Prohibit all waste incineration. It's simply not needed; technically viable and less polluting nonincineration alternatives exist for medical, municipal, and hazardous wastes. Instead, adopt a zero waste goal and invest in waste prevention, reuse, and recycling programs that conserve resources, reduce greenhouse gas emissions, and create jobs. Prohibit all scams aiming to give renewable energy credits or carbon offset credits to waste incinerators and landfill gas burning! To get involved, contact the Global Alliance for Incinerator Alternatives at [www.no-burn.org](http://www.no-burn.org).
5. For municipal wastes, implement pay-as-you-throw systems at the local level in which households and businesses pay more for waste disposal the more they throw away. For hazardous wastes, focus on prevention, as the wonderful Toxics Use Reduction Institute ([www.turi.org](http://www.turi.org)) has demonstrated is possible.

## Other Good Ideas

### Taxes and Banking

1. Tax resource use rather than labor; this motivates employers to conserve resources and hire more people.
2. Eliminate government subsidies for environmentally destructive activities and products, from mining to SUVs.
3. Cancel debts for poor countries, many of which were obtained under corrupt conditions to build projects benefiting the donor country.

### Corporate Accountability

1. End the guarantees of limited liability for corporate wrongdoing and constitutional protections of corporations as individuals that are currently conferred upon them, via their corporate charters, under U.S. corporate law.

2. Institute limits on executive salaries and raise minimum wages to reduce the obscene gap between rich and poor in the United States. A good start would be immediately restricting the compensation of top earners to one to two hundred times as much as the company's lowest-paid employee (still far higher than in other countries), with progressive restrictions each year to further shrink the income gap to a much healthier and fair ratio.
3. Strengthen corporate accountability domestically and internationally by improving rules on transparency and public involvement in decision making. In the United States, protect the Alien Tort Claims Act (ATCA) which allows foreign nationals to bring legal cases against U.S. companies for human rights or environmental abuses they cause beyond U.S. borders. Business organizations that advocate for corporate rights and free trade, including the National Foreign Trade Council and USA\* Engage, are lobbying the U.S. government to weaken or repeal ATCA. To support this important law, contact the Center for Constitutional Rights ([www.ccrjustice.org](http://www.ccrjustice.org)), EarthRights International ([www.earthrights.org](http://www.earthrights.org)), and Human Rights Watch ([www.hrw.org](http://www.hrw.org)).

### International Cooperation and Solidarity

1. Be a part of the solution, not the problem. Insist that the U.S. Government cooperate in international environmental fora and agreements. Across the board, from the Basel Convention, which deals with international waste trafficking, to the critically important UN climate convention, the U.S. delegation routinely blocks progress toward binding environmental agreements. In order to achieve real solutions to our global environmental threats and to begin a new era of U.S. environmental leadership and cooperation after years of embarrassing obstructionism, our government simply must start enthusiastically promoting environmental solutions in international settings. There's no time to stall—especially on the climate front. Write to your elected representatives urging strong action to reduce carbon emissions. Then, since the climate crisis calls for more than letter writing, visit [www.1Sky.org](http://www.1Sky.org), and Climate Justice Now ([www.climate-justice-now.org](http://www.climate-justice-now.org)) for further action ideas.
2. Join international solidarity campaigns led by communities, trade unions, and environmentalists who ask for support in their work against corporations engaged in destructive extraction, production, or disposal practices, especially when those corporations are from our home countries. Such campaigns—like sanctions against apartheid in South Africa

and the Burmese junta or the International Campaign for Justice in Bhopal—are a vital tool for promoting corporate accountability, improving industrial operations, increasing local involvement in decision making, supporting broader eco-social improvement, and strengthening international solidarity.

# APPENDIX 2

## RECOMMENDED INDIVIDUAL ACTIONS

**I always resist offering ten easy things individuals can do that will save the planet, because as I've explained, there are no ten easy things that will save the planet. I'm not saying that we shouldn't bother with being responsible and smart in our actions at the individual and household level. There are things we can do to lessen environmental health impacts on our families and workers. These actions can also reduce our ecological footprint a bit. So, yes, we should engage in these actions, as long as we don't let them either lull us into a false sense of accomplishment or let the effort of maintaining this constant, uptight, rigorous green screen on our lifestyle exhaust us. In other words, as long as taking these actions doesn't stand in the way of your engaging in the broader political arena for real change, knock yourself out.**

There's an abundance of guides on how to live a greener life. This book is not one of them. Yet, since so many Story of Stuff viewers have asked for specific suggestions, I'll share what I do. This isn't a comprehensive list, and it's not in any particular order, but it's a good place to start and includes suggestions for additional resources.

### AT HOME

1. Avoid products that leach toxics into our food, bodies, or homes. If you're not sure if a product contains these hazardous chemicals, call the customer service number on the package. If they can't confirm it's toxic free, don't buy it. Check [GoodGuide.com](http://GoodGuide.com) for information on the toxic chemicals present in thousands of specific products. And if you want to study the latest science on these toxic chemicals, check out the invaluable resources at Environmental Health News: [www.environmentalhealthnews.org](http://www.environmentalhealthnews.org).

Some prime offenders:

- Teflon nonstick pans: the nonstick Stuff is polytetrafluoroethylene which, when heated—as pans often are—releases toxic gasses linked to cancer, organ failure, reproductive damage, and other harmful health effects.
  - PVC toys, PVC shower curtains, PVC food wrap, PVC anything—PVC is the most hazardous plastic at all stages of its lifecycle: production, use, and disposal. Don't bring it into your home. To learn more about PVC, visit [www.besafenet.com/pvc/](http://www.besafenet.com/pvc/).
  - Mattresses, pillows, couches, or other furniture treated with polybrominated diphenyl ethers (PBDE), a supertoxic chemical linked to liver, thyroid, and neurodevelopmental toxicity. If the label says “treated for flame resistance,” beware. To learn more about flame retardants, see [www.cleanproduction.org](http://www.cleanproduction.org) and [www.greensciencepolicy.org](http://www.greensciencepolicy.org). The Washington Toxics Coalition's Green Guide on PBDEs explains how to avoid toxic flame retardants in consumer products and is available online at [www.watoxics.org/files/GreenProductGuide.pdf](http://www.watoxics.org/files/GreenProductGuide.pdf).
2. Reduce your waste. Even though household waste is a fraction of the volume of industrial waste, it's a no-brainer to do what we can to reduce it. It's easy, it conserves resources, and each bag of trash prevented from being dumped in a landfill or, even worse, burned in an incinerator, is a good thing. Here are some places to start:
    - Avoid single-use bottles, plastic bags, coffee cups, cans: these items, designed to be used for seconds, are grossly wasteful and easy to virtually eliminate with a modicum of advance planning. Don't beat yourself up when you are in a jam and have to use one, but try to make it the exception.
    - Compost: Get a separate bin in your kitchen for food scraps and compost these in a municipal composting program or use any number of home composting techniques. It's easy, it keeps organics out of the landfill, it prevents your kitchen garbage bag from stinking, and it provides a great natural fertilizer for soil (thus avoiding nasty chemical fertilizers) for gardens and house plants. There are many composting guides for rural, suburban, and urban settings available online. I personally prefer composting with worms—see [www.wormwoman.com](http://www.wormwoman.com) to learn how.

3. Go organic in your food, your garden, your cleaning products. Pesticides and toxic chemicals have no place in our food, our yards, and our homes. Remember, pesticides are designed to kill; that's what they are for. They're linked to a wide range of health problems from cancer to neurological and reproductive problems, and they're building up in our environment and bodies. Avoid chlorine bleach and use nontoxic cleaners. The fancy-packaged ones cost more, and cheap and easy substitutes can be made from inexpensive ingredients like vinegar, baking soda, and lemon juice. How hard is that? If you don't know how to make homemade nontoxic cleaners, ask your grandma or visit one of the many websites with recipes. My favorite is Women's Voices for the Earth: [www.womenandenvironment.org/campaignsandprograms/SafeCleaning/recipes](http://www.womenandenvironment.org/campaignsandprograms/SafeCleaning/recipes).

4. Power down: Drive less. Fly less. Get a clothesline. Get a bike. Turn down the heat and put on a sweater. Do a home energy audit to find energy leaks and fix them. No explanation needed here, I hope.

5. Unplug your TV: Why sit and stare at a box beaming messages indoctrinating us into consumer culture for hours a day when there are so many more enjoyable alternatives available? I realized this a few years ago, when at the end of TV Turnoff Week (a national program in which kids pledge to resist TV for a week), my daughter turned to me and said, "I had so much fun this week. I wish every week was TV Turnoff Week." And so it was.

6. Invest in the economy you want: When you're shopping, investing, choosing a bank, paying someone who helped you around the house—really doing anything with your money—think about whether your hard-earned dollars are supporting the kind of economy you want or the one you want to escape from. Buying locally produced, union made, or fair trade certified are all good things to consider. And remember, buying secondhand, or not buying at all, is often the best option.

## At School, Work, Church

Of course, all those individual and household action ideas apply to any setting in which you spend part of your days, such as school, work, or church. In these places, you have the automatic benefit of already being part of a group, which means your potential influence and impact is magnitudes greater. Some additional ideas for greening these settings are:

- Get your institution to adopt a sustainability policy that confirms its commitment to environmental and social sustainability. Ensure the policy is visibly supported. Include it in outreach material, orienta-

tion packets for new students, new members, or new hires, and other publications so that it becomes part of the institution's culture. Then, reach out to other organizations in your sector and invite them to join you. For guidance in working with K–12 schools, contact the Green Schools Initiative at [greenschools.net](http://greenschools.net); for working with faith-based institutions, contact GreenFaith at [www.greenfaith.org](http://www.greenfaith.org).

- Leverage your procurement dollars. Universities, businesses, and organizations of all sorts generally buy more Stuff than individuals do, so they can demand more of their suppliers. Requiring printers to use recycled paper, caterers to serve organic food, suppliers to minimize packaging, or janitorial services to avoid toxic cleansers can help, slowly, shift these business sectors to better practices.

Why do any or all of these things, even when we know they aren't enough to turn things around? The value of individual action includes:

- It demonstrates potential and alternative ways to live. Each time we visibly choose quality of life over quantity of Stuff, each time we ignore those consumer messages telling us we must have the latest gadget, we demonstrate the possibility of another way. I have solar panels on my roof. After reducing my energy use with things like using a clothesline and installing insulated curtains, the panels produce enough power for my whole house and enough extra to power the small used electric vehicle that gets my daughter and me around town. I know that the cost of solar panels and a solar-powered electric vehicle are beyond the reach of many. And I know that, really, they don't make a difference in my country's massive CO<sub>2</sub> emissions. But every time someone stops me to ask me about the car, and I tell them that I don't have to go to gas stations anymore, it spreads a sense of possibility. It's chipping away at the myth that our current industrial model is inevitable.

- Conscious consuming includes buying the least toxic, least exploitative products available or sometimes not buying something at all. Avoiding toxic-containing consumer products reduces exposure to toxics for ourselves and our families and, if it gets enough traction, sends messages upstream to producers to phase toxics out, thus benefiting workers, host communities, and the broader environment. Buying locally keeps your money in the local economy, supports local jobs, and reduces miles traveled for your Stuff—all good for the planet and communities.

- The individual actions we take to reduce our impact help us find the flaws in our system that need to be changed. I think of them as metal detectors leading us straight to what's wrong. Where the onus is on us individuals to do the right thing, these are the places in the system that need to be changed. Why does taking public transportation cost more than the bridge toll if I drive to San Francisco? Systems flaw! Clearly we need to increase public investment and subsidies to expand mass transit. Why do I have to study GoodGuide for hours to figure out which shampoo, sunscreen, and lotions don't have carcinogens and reproductive toxics? Systems flaw! Instead, let's ban toxics in body care products so that everyone knows they are buying toxic free without investing hours of research.
- Integrity: I believe that people are good. We want to do the right thing; we care about the planet, our global neighbors, and our grandchildren. It doesn't feel good to know that so many of our daily choices erode the planet's health, perpetuate inequality, and are downright toxic. Making these small choices to lessen our impact helps bring greater integrity to our values and our actions, which in turn makes us feel better about ourselves. If these small steps are lulling us into inaction in the larger picture, that's obviously not beneficial, but if we can harness that greater sense of personal integrity and that newly freed time to making real change, that is certainly a good thing.

# APPENDIX 3

## SAMPLE LETTER TO PVC RETAILERS, MANUFACTURERS, AND LOBBYISTS

Even with the best of intentions, I find that PVC (polyvinyl chloride) plastic still sneaks its way into my house occasionally. Whether it is in kids' toys received as gifts from well-meaning relatives to that horrible child-sized Barbie pink raincoat that was left at our home to products in which I didn't recognize the PVC until I opened the package and smelled that telltale smell, there it is. Sometimes PVC is in the product and sometimes it is the packaging. The problem with PVC is that once we have it, we're stuck. We can't give it to a thrift store, where someone who may be unaware of its hazards would bring it home, potentially exposing her family. We can't throw it away, since PVC releases toxics when landfilled or, worse, incinerated. So what to do? I stick this junk in an envelope or box and send it back to the retailer, the producer, or, in cases in which I can't identify either, the Vinyl Institute, which is the PVC industry's lobby group in Washington, D.C., along with an explanation and a request to stop selling, making, and advocating for the poison plastic. If I am returning a product I purchased, I always ask for a refund and donate the money to an organization working to ban PVC. If you want more information on identifying PVC in consumer products and joining campaigns to get rid of this poison plastic, please visit [www.besafenet.com/pvc](http://www.besafenet.com/pvc).

Here's a letter that you're welcome to adapt for your own use. Share it with friends. Perhaps if stores get enough of this back in the mail, they'll join the