



Re-Imagining Business

nine

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A look at the numbers...

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The US government has documented the existence of **forced and child labor** in the manufacture of some

122
products

originating from

58
countries

6,000

Number of Fair Trade-certified products, which are guaranteed to use ethical labor practices, with \$4 billion in annual sales.

41 million

Estimated number (19%) of US adults that are considered conscientious consumers and are concerned with supporting social justice and sustainable living with their wallets.

Farmed on 30 million acres and employing some 25 million families worldwide, **coffee is the 2nd largest global commodity after oil** and it has an enormous environmental, social and economic footprint.

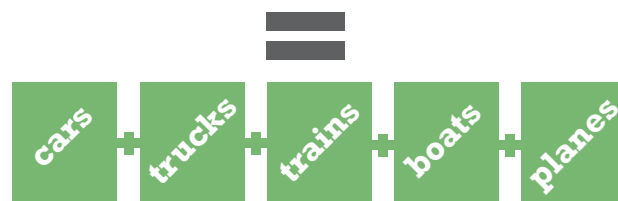


460 million

Pounds of coffee that were certified by the Rainforest Alliance in 2010, helping to make fair priced, forested and shade grown coffee the norm.

Deforestation currently accounts for 17% of greenhouse gas emissions, as much as all the cars, trucks, trains, planes and boats in the world combined.

DEFORESTATION



334 million

Forest acres worldwide (about twice the land area of Texas) that are certified by the Forest Stewardship Council (FSC). FSC maintains the highest standard in forestry by protecting indigenous rights, keeping more trees standing and protecting biodiversity.



Since its inception in 2002, the **1% For the Planet** network has grown to more than **1,400 businesses in 38 countries**, together giving over **\$15 million annually** to more than **2,000** social and environmental groups worldwide.

TOMS' one-for-one model has **provided over one million pairs of shoes** (one pair donated for each one sold) to those in need and has also begun to **attract partnerships and spin-offs**.



Newman's Own line of food products gives all of the company's profits to **charitable causes** and has **given more than \$300 million to date**.

New Leaf Paper has **saved the equivalent of over 5 million trees and 400 million pounds of greenhouse gases** by developing new and innovative lines of recycled papers.



Impact investing—where an investor proactively seeks to invest in businesses that generate financial returns and have intentional social and/or environmental goals—is growing substantially and it is estimated that the industry could grow from its **present \$50 billion to \$500 billion** within the next decade.

If we connect the dots between the things we touch every day like paper, electronics, clothes and coffee, to name a few, it might come as a surprise that the way in which “stuff” is made has profound impacts on people and the planet. These impacts can be positive and life-affirming or devastating and destructive.

It all depends on whether the lowest price and the highest profit are the primary forces or whether responsibility and sustainability are in the driver’s seat.

The leading forces behind the re-imagination of the market place are ordinary people committed to spending their dollar in a way that is consistent with their values, and visionary business leaders. In this new frontier, the four Ps are all intertwined—**people and planet are just as important as price and profit.**

Emphasizing ethics in the marketplace is critical at this time and has the potential to...

Eliminate the existence

of forced and child labor in the manufacturing of products

Enable millions to **create real livelihoods** for their families

Tackle some of our **most pressing social and environmental challenges**

Empower ordinary citizens to use their dollars to help create **the world they want**



The Next Frontier of Business

Ask a grade-schooler to draw a picture of the environment, and you'll often see billowing smokestacks and factory drainpipes spewing pollution. Inherently, we see business as the villain, and it is true that the forces driving corporate America have created many of the environmental crises we face today. As our global prosperity has grown, markets have been chewing up the planet because they fail to account for the true costs of pollution.

But what if we could turn that equation on its head and enlist business in a global movement to save our fragile ecosystem? What if we could leverage the profit motive and the human urge for innovation to solve our environmental problems? After all, profit, at its root, comes from smartly anticipating and meeting human wants and needs, which include clean air, clean water and a safe place to live. And innovation is as deeply engrained in the American psyche as the Wright Brothers' "flying machine" and President Kennedy's mission to the moon. Joined and harnessed, these two historic drivers of human enterprise—profit and innovation—can save our planet from catastrophe and pioneering businesses can lead the way.

Innovation is as deeply engrained in the American psyche as the Wright Brothers' "flying machine" and President Kennedy's mission to the moon.

The Promise of Innovation

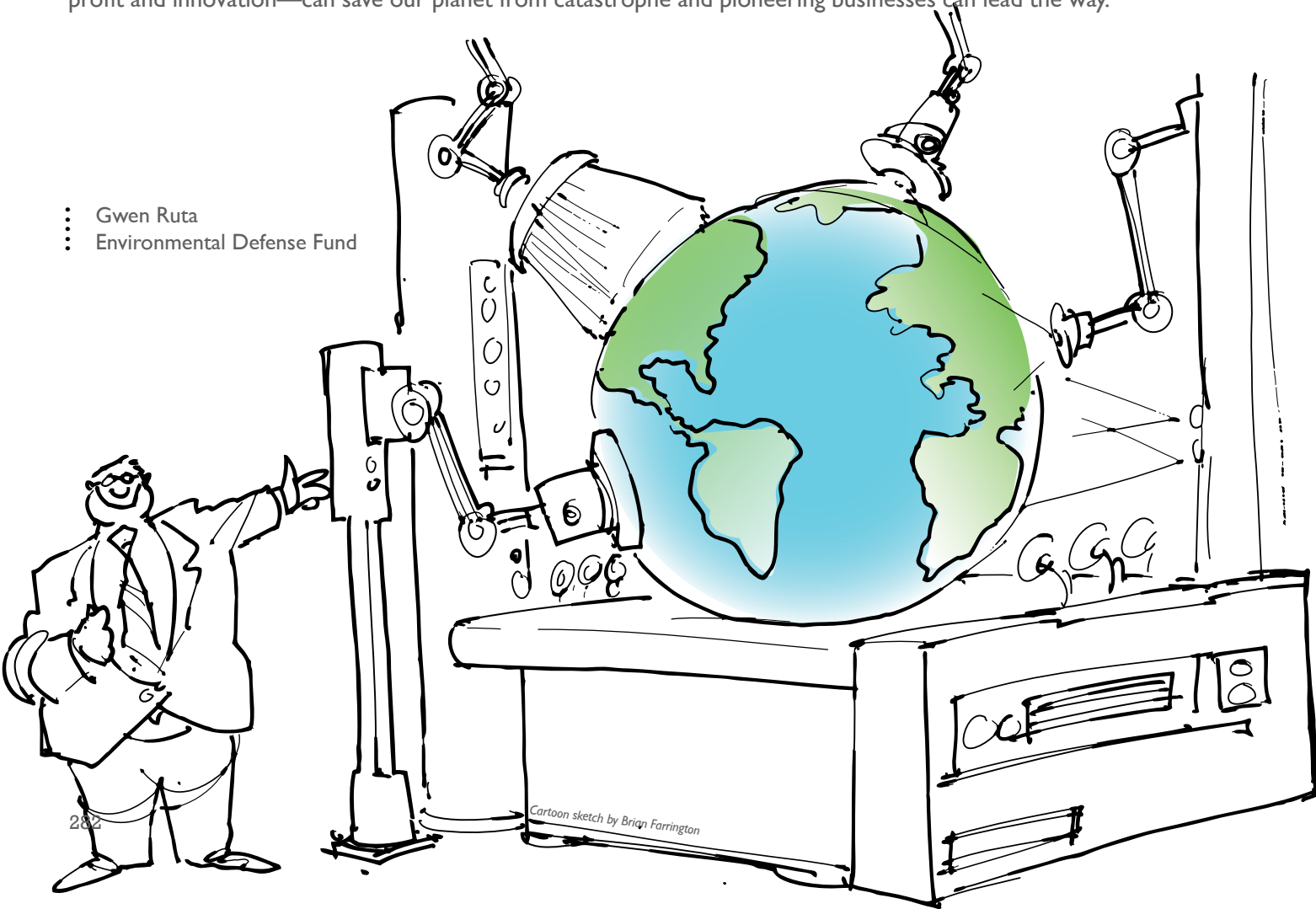
Innovation is taking place all over this country every day, from small process improvements on the factory floor to emerging new products that will change the way we work and live. Let's take a look at some examples that illustrate how much there is to build on:

Materials Building materials that adjust to weather conditions, super-strong but lightweight auto bodies that boost fuel efficiency, clothing that resists stains and repels water—all this and more is in the works. New kinds of materials are being developed every day that can sense and adjust to the world around them and change their properties (like flexibility or electrical conductivity) in an instant. Lightweight, self-healing plastics would make vehicles and aircraft more fuel-efficient and safer.¹ Moreover, it's possible that the next materials revolution will come not from creating new chemicals, but from mining our landfills and using

discarded materials. North American landfills contain more aluminum than we can produce by mining, and the same may be true of gold and copper, which are used in the circuit boards of electronics. One ton of trashed computers contains more gold than 17 tons of ore, and there's no shortage of them; Americans toss out 50 million computers annually. Enterprising companies are developing landfill mining technologies such as rotating magnets that pull lightweight metals from the trash heap.²

Energy We're all familiar with wind power and solar energy, but how about ocean energy, which turns wave action into electricity, or geothermal power, which uses the earth's heat to do the same? And what if instead of gasoline from petroleum, we were able to create fuel from yeast, or algae? Algae has the potential to produce ten times the fuel per acre than corn (for ethanol) or soybeans (for biodiesel), and it can be grown in arid land or brackish water—areas that wouldn't compete

... Gwen Ruta
... Environmental Defense Fund



One ton of trashed computers contains more gold than 17 tons of ore and there's no shortage of them: Americans toss out 50 million computers annually.



Photo courtesy Randy Montoya and Sandia National Laboratories



Replacing half of the world's oil with algae-derived fuel could **reduce CO2 emissions by 25 percent.**

A researcher adjusts the nutrient injection ports on an algal tank mixing arm. As part of a project to create alternative sources of energy, researchers at Sandia National Laboratories are cultivating green algae that holds promise as a new supply of biofuel.

with food production. Moreover, algae could have a positive influence on reversing climate change because it consumes CO₂. Replacing half of the world's oil with algae-derived fuel could reduce CO₂ emissions by 25 percent.³ These advances in energy technology are all in the works today, along with the crucial components that will make them work, like high-efficiency batteries that can store power generated when the wind blows to meet our energy needs in calm weather, or lightweight materials that hold tiny solar cells and act as an energy-generating "skin" around a building. The 2009 Solar Decathlon, a biannual collegiate competition, featured a home that was covered with 250 thin-film solar panels and topped with 11 rooftop panels, producing 200 percent of the energy needed to run the home.⁴

Smart Design Designers of consumer and commercial products are starting to factor environmental impacts into the design process, looking at not just the direct impacts (energy or resource inputs and waste outputs), but also at the full lifecycle from extraction of raw materials to processing intermediaries to manufacturing all the way to use and disposal of the product. One design concept that is catching on is cradle-to-cradle design based on the ecological concept that

A new office complex in Zimbabwe stays cool without air conditioning and uses 90% less energy for ventilation than conventional buildings of its size.

"waste is food." Building on that concept, cradle-to-cradle products are designed to be reused or recycled.

Biomimicry What can termites teach us about architecture? A lot, as it turns out. Researchers have imitated termites' ability to maintain steady temperatures inside their mounds at a new office complex in Zimbabwe. It stays cool without air conditioning and uses 90 percent less energy for ventilation than conventional buildings of its size.⁵ This is just one example of biomimicry, a new science that is taking the best ideas of Mother Nature and applying them to help solve society's toughest problems in a sustainable way. After 3.8 billion years of trial and error, animals, plants and microbes have figured out what works. For example, photosynthesis—the process by which plants use chlorophyll to convert sunlight, water and CO₂ into carbohydrates and oxygen—is inspiration for a possible clean fuel solution. Scientists are working to reproduce this process to split water into hydrogen and oxygen, using

People take a first look inside the house of Technische Universität Darmstadt, Germany, on the opening day of the US Department of Energy Solar Decathlon 2009 in Washington, DC. Team Germany's house which integrated thin-film copper indium gallium selenide (CIGS) cells generates 200 percent of the house's energy needs and won overall first place.



Photo courtesy Jim Terry, US Department of Energy Solar Decathlon



BMW showcased its Hydrogen 7 CleanEnergy car, the world's first production-ready hydrogen vehicle.

up excess CO₂ along the way. If commercialized, the process would make hydrogen fuel cells an efficient and inexpensive way to create and store energy.⁶

Hybrid Vehicles Hybrid technology continues to evolve, with new models available for delivery trucks and utility vans, and new ways of storing and managing energy being developed. Foremost among these are so-called hydraulic hybrids, which store energy in the form of pressurized fluid, and plug-in hybrids, where the battery can be charged through an electrical outlet. Because they operate primarily on electricity for the first 20 to 40 miles, plug-in hybrids can achieve 70 to 100 miles per gallon, quadrupling the fuel economy of the average car on the road today.

The federal government calculates that 84 percent of US cars, pickup trucks and SUVs could switch to plug-in hybrid technology without any changes needed to

our existing electrical grid. If this happened, we would reduce national gasoline consumption by 6.5 million barrels each day, which is equivalent to over half of US petroleum imports.⁷

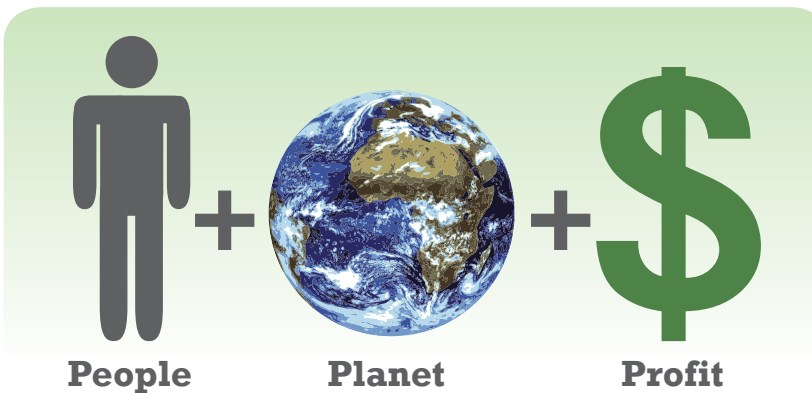
A Global Change Engine

Couple innovation with profit—in other words, business innovation—and what have you got? An engine for global change.

That engine is just getting started in the environmental arena, but it has the power to turn our planet's biggest environmental problems into its biggest economic opportunities. As we move from the agricultural revolution of the 18th century to the Industrial Revolution of the 19th century, to the information revolution of the 20th century, can we create a new innovation revolution in the 21st century?

While these innovations are nearly ripe, it will take the right combination of progressive market forces and smart policies to get them from the drawing room table to the factory floor quickly enough to change our planet's environmental trajectory.

Triple Bottom Line: The “3 Ps”



- This new way of thinking recognizes that over the long run, a business is not sustainable without healthy, happy employees along with a healthy, productive planet.

Traditional Bottom Line



- Financial returns are the sole determinant of success.

The innovations discussed earlier are nearly ripe, but it will take the right combination of market forces and smart policies to get them from the drawing table to the factory floor quickly enough to change our planet's environmental trajectory. For example, governments around the world are adopting targets for lowering greenhouse gas emissions and creating carbon markets to help reach those targets. These systems provide a level playing field for entrepreneurs and financiers, opening a tap of investment dollars that will flow to clean vehicles, renewable energy and other green technologies. Some have estimated that the market for trading greenhouse gas emissions could grow to be as large as the stock market in the United States. That would mean tens of billions of dollars invested in new ways to cut energy use and greenhouse gas emissions.

From Orville and Wilbur Wright to Steve Jobs and Bill Gates, America has always been home to great

innovators. Today, we look to the next generation to bring business to the forefront of the environmental movement and to launch the inventions that can have profound benefits. There will be a period of trial and error—not every new technology will succeed or be accepted. But some will catch on, and investors and executives will begin to build new businesses and new markets around them.

Competitors will jump on board, and the innovations will spread until eventually they become business as usual⁸ and we move on to the next forward revolution. But in the meantime, we just might fundamentally change the relationship between business and our environment, and in the process, change our very future on this earth.

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Gwen Ruta, vice president of corporate partnerships, spearheads Environmental Defense Fund's (www.edf.org) work with multinational companies to create innovative solutions to environmental challenges. Ranked number one for effective environmental partnerships by the Financial Times, Ruta's team has kicked off transformations in market sectors from shipping to retail to fleets. Partner companies include Walmart, KKR, FedEx, DuPont and McDonalds. Previously, Ruta held senior positions at Metcalf & Eddy, the US Environmental Protection Agency and Harvard's Kennedy School of Government. She is on advisory boards for Henderson Global Investors, the Environmental League of Massachusetts and the University of Michigan. She holds a M.P.A. from Harvard University and a B.S. from the University of Virginia.



World-Changing Innovations

Examples of individuals, organizations and businesses that are manifesting progressive ideas are highlighted throughout this book. Here are a few more cutting-edge innovations that have potential to solve some of our greatest challenges.

A Mini Power Plant in Box

While developing a technology to produce oxygen for a NASA mission to Mars, former NASA scientist, K.R. Sridhar realized that by reversing the process, he could create an energy source that is cleaner and more efficient than oil, gas or coal and more reliable than wind or solar power. “This technology is fundamentally going to change the world,” said Sridhar, cofounder and CEO of Bloom Energy. “It’s going to have a disruptive impact on the way energy is produced.”¹ Called a Bloom Box, the technology is essentially a fuel cell that generates electricity on site without burning or combustion. The fuel cells work by oxidizing the fuel, which is up to two times more efficient than combustion. In their efforts to reduce their CO2 footprints, Google, Walmart, eBay and other large corporations have installed industrial-sized models. Bloom Energy plans to tap into the residential market with a unit that will power a single-family home using half the fuel and halving carbon footprint of grid-supplied electricity.²

Oil-Eating Mushrooms

Mycologist and inventor Paul Stamets believes that mushrooms can save the world. One way is through mycoremediation—the clean up of environmental pollution with fungi. “There are dozens of examples of how mushrooms can be used for bioremediation,” said Stamets. “Mycelium [the branching, vegetative part of a fungus] of oyster mushrooms can eat petroleum products, denaturing them, and the mycelium converts the hydrocarbons into cellular carbohydrates.”³ One of Stamets’ projects introduced oil-eating fungi to a diesel oil-contaminated site. His research showed a 95 percent breakdown of hydrocarbons after eight weeks. As the mushrooms rotted away, gnats moved in to eat the spores. The gnats attracted other insects, which attracted birds, which brought in seeds. Soon the site was teeming with life and well on the way to being ecologically restored. After the Deepwater Horizon spill in April 2010, Stamets submitted a proposal involving oyster mushrooms for the Gulf of Mexico clean up effort.⁴

Magnetic Levitation (Maglev) Wind Power

Combining vertical blades and magnets, a single maglev wind turbine can produce enough energy to power 750,000 homes. The maglev does not need any electricity to operate, there is no energy loss through friction and each unit has a projected life span of 500 years.⁵ Conventional utility-scale wind turbines require wind speeds of 13 miles per hour in order to produce energy⁶ while the maglev will operate speeds as slow as 5 feet per second. Building a single giant maglev wind turbine would reduce construction and maintenance costs and require much less land than hundreds of conventional turbines.⁷ “Unlike any other form of renewable energy, wind energy has the greatest potential for energy independence,” said Ed Mazur inventor of a commercial-sized maglev wind turbine.⁸



Photo courtesy Bloom Energy



Photo courtesy Tomorrow Never Knows, flickr

“This technology is fundamentally going to change the world.”

from the editor

from the editor

“The 17 most critical services provided by nature were worth between \$16 and \$54 trillion annually, which averages to about **\$45 trillion** in 2010 after inflation.”

Seeing the Full Value of Ecosystems

In policy, economics and business, decisions are always made with cost-benefit in mind. For years, natural ecosystems were not integrated in this quantitative decision-making process. The environment was not a part of the bottom-line.

But intuitively we all know that ecosystems have value. For example, the shade of a tree eliminates the need to bring an umbrella everywhere. On a larger scale, healthy forests sequester carbon emissions, filter water, and produce oxygen.

Valuing all these services in dollars and cents is a momentous task. In 1997 a group of 13 economists and environmental scientists made the first and only highly-reputed attempt, estimating that the 17 most critical services provided by nature were worth between \$16 and \$54 trillion annually, which averages to about \$45 trillion in 2010 after inflation.¹

In the years following that landmark study, ecosystems valuations has become far more practical and precise. Faced with the prospect of building an \$8 billion water filtration facility to deal with dropping water quality, New York City instead chose to purchase and protect land throughout the Catskills Mountains for \$1.5 billion. New Yorkers’ water bills might have doubled to pay for the plant—instead they increased just 9 percent.² Many traditional economists question the accuracy of dollar values attached to ecosystems, but sometimes the evidence is inarguable. After Hurricane Katrina devastated the Gulf Coast, scientists pointed out that the now fast-disappearing coastal wetlands once buffered the region against storms. Further study prompted by Katrina found that coastal wetlands provide over \$23 billion in storm protection services every year.³ Informed by ecosystems valuations like these, the state of Louisiana decided to reinvest every penny of roughly \$200 million of new offshore oil tax revenues into rebuilding its wetlands.⁴

Supplying the Demand for a Livable Planet

... Tensie Whelan
... Rainforest Alliance



Paper, coffee, chocolate, bananas, beef, cut flowers, fruit—the prices of such everyday products, high as they are, still don't reveal their environmental or social costs. Often, producing these and many other things we consume daily degrades the environment, threatens ecosystems, pollutes drinking water and endangers workers.

It's important we tune into this. How we manage the production, consumption and renewal of natural resources determines the social condition of billions of people, the environmental condition of the planet and our collective future.

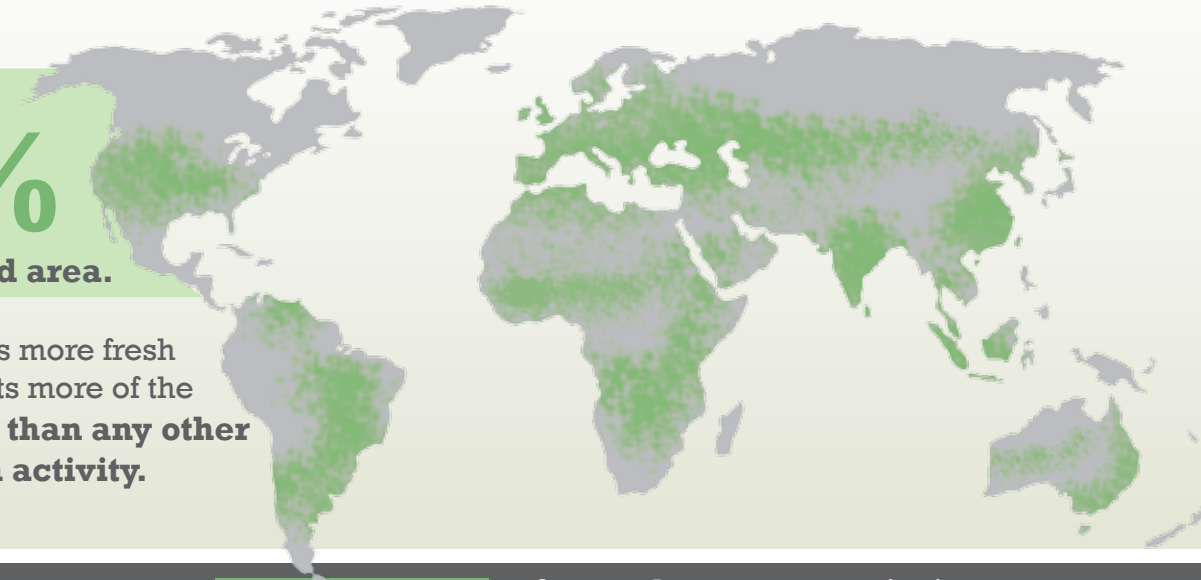
Cultivating Conservation on Farms

The principal agent of ecosystem destruction and species extinction is not smokestacks or tailpipes; it's agriculture. Farming has the largest environmental impact of any industry. Occupying 38 percent of the Earth's land area, agriculture uses more fresh water, and affects more of the planet's surface, than any other single human activity.

Agriculture has the **largest environmental impact** of any industry.

It occupies
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Agriculture uses more fresh water and affects more of the planet's surface **than any other single human activity.**



Agriculture is one of the leading causes of climate change, responsible for

14%

of greenhouse gas emissions from soil erosion, poor irrigation practices, uncontrolled use of fertilizers and other agrochemicals, biomass burning and livestock production.

Agriculture is one of the leading causes of climate change, responsible for 14 percent of greenhouse gas (GHG) emissions from soil erosion, poor irrigation practices, the uncontrolled use of fertilizers and other agrochemicals, biomass burning and livestock production.¹ And it's a main driver of clearing forests. When deforestation from farmland expansion and tree plantations is factored into calculations, some 30 percent of global GHG emissions are coming from agriculture today.²

But it's not as though we can just stop farming, or do with less of it. We have to find ways to farm sustainably. Sustainability certification is a powerful way to convert global agriculture's negative impacts to positive ones. Rainforest Alliance Certified™, USDA Organic, Sustainable Agriculture Network, Marine Stewardship Council and Forest Stewardship Council are just a few examples of voluntary, independent programs that use the power of markets and certification standards to guide farmers toward sustainable farm management and provide an accountable way to evaluate social and environmental improvements.

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The agricultural products we use the most—including coffee, bananas, cocoa and many others—tend to be the ones with the largest environmental and social footprints. They also offer some of the largest opportunities for certification programs to turn their impacts into positive ones by converting production to environmentally and socially sustainable practices.

Coffee is a perfect example. In the 1970s, agronomists began promoting a new coffee farming system, where the sheltering forest trees are cleared and coffee bushes are packed in dense hedgerows and doused with agrochemicals. Monoculture farming produces more beans but eliminates wildlife habitats, promotes forest destruction and soil erosion and pollutes streams.

Coffee is the second largest global commodity after oil, and it has an enormous environmental, social and economic footprint. Coffee is farmed on 30 million

Environmental Impacts:

- Monoculture systems clear forests and replace them with densely packed crop plants, doused with agrochemicals.
- Eliminates wildlife habitats; promotes forest destruction, soil erosion, pollution

Opportunity for Sustainability:

- Example: A Rainforest Alliance Certified™ farm where coffee is shade grown can contain diverse wildlife and 100 or more tree species.

coffee

Environmental Impacts:

- Use of dangerous pesticides, poor working conditions, water pollution, deforestation
- Agrochemical runoff and erosion kills fish, clogs rivers, and chokes coral reefs.

Opportunity for Sustainability:

- Today, 15% of all the bananas in international trade come from Rainforest Alliance Certified Sources, meaning they exceed standards in terms of environmental protection, social equity and economic viability.

bananas

Environmental Impacts:

- Livestock grazing causes 18% of greenhouse gas emissions. Grazing is a major contributor to deforestation and is the single worst driver of land degradation.

Opportunity for Sustainability:

- Certification will require cattle operations to implement practices like sustainable pasture management, animal welfare and carbon-footprint reduction—transforming deforestation, GHG emissions and animal abuse.

beef

acres and growing it employs some 25 million families worldwide.³ Fluctuations in coffee supply and demand, government policies and coffee prices can create unstable financial conditions, not only for the farmers, but also for wildlife. That’s because coffee farms can serve as important buffer zones for biodiverse forest habitats.

One coffee cooperative in El Salvador that is Rainforest Alliance Certified holds more than 100 tree species. There, biologists have spotted members of dozens of species of rare birds, wild cats such as ocelots, postcard-size butterflies, technicolor frogs, seldom-seen orchids, monkeys and (once) a giant anteater. There are varying credible certification programs out there and certification is one way to ensure that coffee farms maintain wildlife habitat and other environmental benefits, while also protecting livelihoods and worker rights.

Bananas, the world’s most popular fruit, are another example of how specific changes in farming can reduce impacts. Before the 1990s, banana plantations were infamous for environmental and social abuses, which included the use of dangerous pesticides, poor working conditions, water pollution and deforestation. Pesticide-impregnated plastic bags, which protect bananas as they grow, often littered riverbanks and beaches near banana farms, while agrochemical runoff and erosion killed fish, clogged rivers and choked coral reefs.

Today widespread use of certification programs on banana farms is helping protect the environment while also protecting people by fostering farming practices that improve worker health and safety and empower farmers and their communities economically.

Beef, a staple of most American diets, also has significant environmental impacts. More than a quarter of the Earth’s terrestrial surface is devoted to livestock grazing, which causes 18 percent of global GHG emissions.⁴ Grazing is a major contributor to deforestation and the single worst driver of land degradation.

New sustainable ranching standards developed by the Sustainable Agriculture Network (an international coalition of leading conservation groups) will require certified cattle operations in Latin American, Africa, Asia and Oceania to implement best practices like integrated management systems, sustainable pasture management, animal welfare and carbon-footprint reduction. As farms voluntarily adopt the new standards and get certified, the deforestation, GHG emissions and animal abuse ranching causes now stand to be transformed.

In addition to helping the planet, certification also helps farmers survive economically by encouraging them to operate more efficiently, giving them entrees to consumer markets and often paying them a price premium for what they produce. Programs like Rainforest Alliance Certified, Fair Trade and others can help farmers bear the erratic swings in the global market, so they can remain in business and keep working to adopt more sustainable practices.

These programs are already significant forces in global markets, and are growing fast. In 2010, more than 219,000 metric tons of coffee, 120,000 metric tons of tea and 15 percent of all the bananas in international trade came from Rainforest Alliance Certified farms. But there is plenty of room for further expansion of sustainable markets in all areas of agriculture.

Protecting the World’s Remaining Forests

Forests provide food, fuel, fiber, medicine and building materials. They shelter communities and wildlife, prevent erosion, filter water, protect coral reefs, control pests and mitigate climate change by capturing and storing atmospheric carbon. In fact, they contain more carbon than the atmosphere and the world’s oil reserves combined. Yet they are also the planet’s fastest-disappearing natural resource.

Forests provide food, fuel, fiber, medicine and building materials.

They shelter communities and wildlife, prevent erosion, filter water, protect coral reefs, control pests and mitigate climate change by capturing and storing atmospheric carbon.

They are also the planet’s fastest-disappearing natural resource.

400 years ago:

2/3

two thirds of the planet’s land mass was covered by forest.

Today:

1/3

only half remains and we continue to lose what stands.



Photos courtesy Rainforest Alliance

Above: A worker holds a package of Rainforest Alliance Certified coffee
Below: Women pluck tea on the Rainforest Alliance Certified tea estates in the Coonoor region of India.



Four hundred years ago, two-thirds of the planet's land mass was covered by forest. Today only half remains and we continue to lose what stands. Deforestation currently accounts for some 15 percent of greenhouse gas emissions—as much all the cars, trucks, trains, planes and boats in the world combined.⁵ Protecting forests, especially tropical forests, is one of the most cost-effective ways to reduce emissions and preserve biodiversity and support forest-dependent communities.

But less than one-tenth of forests are formally protected. The great majority are subject to logging and other development, and are under pressure from continuing strong demand for wood and wood products. They are also one of the world's most important global carbon stocks. Their soils, trees, wetlands and other ecosystems contain an estimated 205 billion tons of carbon—the equivalent of decades' worth of global emissions from burning fossil fuels.⁶

One way to protect them is through global forestry certification programs, such as the Forest Stewardship Council (FSC). FSC is a voluntary, independent certification program acknowledged as the gold standard for sustainable management of working forests. Almost anything made from wood or other forest products is available with the FSC label.

Compared to non-certified forestry, FSC working forests are managed sustainably, harvesting lower volumes of wood with less environmental impact, replanting trees, providing wide conservation areas, preserving sensitive ecosystems and protecting endangered species habitat. Today a total of 334 million forest acres worldwide—about twice the land area of Texas—are FSC certified.

Giving Producers and Consumers a Choice

With substantive, independent certification programs producers have an incentive to make their operations sustainable and beneficial. Operating sustainably has a recognized value, and therefore becomes a viable choice.

The same is true for us as consumers, who are the ones choosing to buy the products with credible certified labels. Studies show that given a reasonable choice between products that are sustainably produced and those that aren't, we'll consistently prefer the sustainable product. In fact, demand for environmentally and socially responsible goods is at an all-time high. If we connect the dots between what we buy at the supermarket, and our aspirations for a sustainable future, it opens up all kinds of opportunities for us to be a key part of the solution, and help create positive environmental and social impacts. Our ability to choose, our power as consumers to signal an alignment of economic forces with our aspirations for the future, is the biggest lever we have to create positive global change.

Consumers need to recognize the power they have, for good or ill—a power far greater than governments.

As the market for sustainable goods and services grows, we're rapidly reaching a tipping point beyond which that force will be fully unleashed. When it is, products will carry their "real" prices, with the cost and added value of sustainable production built in. Consumers and businesses will be more aware of the impacts their choices have on workers and the environment, and will demonstrate their support for sustainability through their purchases.

The idea that we can simply shop our way out of looming environmental threats like climate change and mass species extinctions has been justly ridiculed. Buying yet more stuff that happens to be marketed to appeal to the eco-aware won't save the planet. But consumers do need to recognize the purchasing power they have, for good or ill—a power far greater than governments. Gains in the key sectors of farming and forestry would not have happened without consumer demand driving them.

Our choices aren't isolated. They connect with the choices of millions of others and they reverberate, as business people say, across the entire supply chain, from the company boardrooms to the workers who grew the food and the ecosystems that support the farm. Consumers who understand that will continue to drive the sustainable certification movement, which will keep pushing the global economy towards sustainability.

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Tensie Whelan serves as the president of the global sustainability non-profit Rainforest Alliance (www.rainforest-alliance.org), which works to conserve biodiversity and ensure sustainable livelihoods by transforming land-use practices, business practices and consumer behavior. She has been involved with the Rainforest Alliance since 1990, first as a board member, then as a consultant, becoming the executive director in 2000. Whelan has been working in the environmental field for more than 25 years, including as the vice president of conservation information at the National Audubon Society and executive director of the New York League of Conservation Voters.



Eco-conscious choices you can make

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+ Choose certified products when you shop: Consumers can help drive the evolution of the sustainable economy by choosing products bearing the Rainforest Alliance, FSC seals and other credible certification labels. **Find available certified products at:** www.rainforest-alliance.org/green-living/marketplace * www.greenerchoices.org/eco-labels * www.ecolabelindex.com/ecolabels

+ Choose sustainable destinations when you travel: Travel and tourism is the world's largest industry, and has enormous environmental and social impacts, for good or ill. Help make it a powerful engine for a sustainable economy by choosing sustainable certified destinations when you travel. **Find more information and a searchable database of certified destinations at:** SustainableTrip.org

+ Choose positive impacts where you work: Businesses can produce and source goods and services sustainably, which studies show improves their bottom lines as well as their environmental and social impacts. **For resources to get started,** see www.rainforest-alliance.org and click on "Engage Your Business"



Photos courtesy Sasielisk Ungdom (SUN) flickr

A Look at the Niger River: Understanding the Global Implications of America's Addiction to Oil

Most Americans know the role oil plays in propping up corrupt dictatorships in the Middle East, but American oil consumption has destroyed communities across the globe. Nicaragua, Equatorial Guinea, and Ecuador have all struggled with the “resource curse” of oil. Nowhere are the side effects of American oil consumption more obvious than Nigeria, which exports almost as much oil as Saudi Arabia to the US.¹

When oil was first discovered in Nigeria in the 1950s, energy extraction was heralded as the industry that would modernize the populous but impoverished African nation. Shell, Chevron, and Exxon-Mobil rushed to develop the oil fields, but never brought their Western quality of life or regulatory standards to the Niger Delta.

Nigeria has the lowest quality of life of any major oil producing nation. Over half of rural communities have no access to clean drinking water—largely because of rampant oil spills—and rural life expectancy is around 40 years. Due to environmental damages, formerly self-sufficient rural communities can no longer fish or farm in the Delta, but also lack the resources needed to enter new industries.²

Since oil extraction began, an estimated 12 million barrels of oil have spilled in the Niger Delta by both bandits and the corporations extracting the oil.³ Americans were outraged at the Exxon Valdez oil spill, but over five decades the rate of leaks, dumping, and spills in Nigeria has equaled one Exxon Valdez every single year.

Even worse is the human cost. Government forces, bandits, private military, and militants intermittently wage open warfare over the corporate oilfields. There are few official records of the hundreds of clashes, but it's estimated that fighting has displaced some 200,000 civilians and killed 14,000 more in the last 10 years.⁴

As we continue to focus our efforts on building a carbon-free society, we stop being complicit in creating a reality that has so often negatively impacted rural and indigenous communities around the world.



Photo courtesy Merbabu



Photo courtesy Eric Bajart

Indonesia: Connecting the Dots

The choices we make every day as consumers can have impacts all around the world. Take, for example, Indonesia and its connection to Americans. Indonesia's rainforests provide habitat for an incredibly diverse array of wildlife and are relied upon by some of the earth's most endangered species such as orangutan, Sumatran tigers and rhinoceroses. These rainforests also support the livelihood of more than 30 million forest-dependent peoples.

Indonesia's rainforests also play an important role in global climate change. As a result of rapid deforestation, despite the small size of the country, it is now the third largest contributor of climate changing greenhouse gas emissions after only the United States and China.

While it may not be obvious, many products we use on a daily basis may directly contribute to the destruction of Indonesia's rainforests. Forest and paper products like calendars, notebooks and furniture may be derived from trees harvested in Indonesia's rainforests or from plantations that were established by clearing rainforests. Foods such as french fries, cookies, cereal and ice cream, and personal care products such as cosmetics are often made with palm oil, which is also often sourced from plantations that were established by clearing natural rainforest.

Fortunately, there are a number of things consumers can do to ensure that they are lessening these impacts. Using paper products that contain high levels of recycled and Forest Stewardship Council (FSC) fiber can reduce pressure on endangered forests in Indonesia and throughout the world. When it comes to palm oil, consumers can check ingredient labels and avoid products with palm oil, or support products and companies that use sustainably grown palm oil or alternatives.

The impact American consumers have in Indonesia is just one of many examples how a purchase can have either a positive or negative impact on people, wildlife and forests throughout the world. It shows how much of a difference it can make when we carefully consider the materials, ingredients and source of the products we buy.

from the editor

The Rise of the Conscientious Consumer

• Bama Athreya
• International Labor Rights Forum

American consumers have a long history of acting in support of the rights of workers who produce the goods they wear and consume. From combating sweatshop abuses in the US and developing a union label for consumers at the turn of the 20th century, to solidarity boycotts of table grapes in the late 1960s and again in the 1980s that established rights for farm workers, American consumers have time and again demonstrated their commitment to ethical consumerism.

Consumer awareness and activism are more important today than ever, as consumer products ranging from coffee to computers originate not in US factories or farms, but in far reaches of the globe. Rubber for our automobile tires comes from Liberia, where it has been shown to be produced with child labor.¹ Electronic components for our computers and mobile phones are produced in



China, where forced labor is alleged to be used in some factories.² Most of the roses and carnations now sold in the US come from Colombia, where women workers are exposed to pesticides banned in the US and denied their basic rights.³ The US government has documented the existence of forced and child labor in the manufacture of some 122 products originating from 58 different countries.⁴ The conditions these workers and sometimes children find themselves in can be dismal, and the US, as the world's largest consumer, needs to do more to stop this.

In the 1990s, activism and media exposure of sweatshop conditions, such as in Nike shoe factories in Asia,⁵ and in Gap⁶ and Wal-Mart⁷ garment factories in Central America, succeeded in pushing companies to adopt codes of conduct regarding labor and human rights and to develop private, voluntary monitoring systems to supervise these codes. While private, company-directed activities have their role in addressing labor rights abuses, they are not enough because these initiatives are often not verified and regulated by an

independent third party. Educated consumers in the US are ready to support ethically produced goods in the marketplace, and it is time for fresh thinking and new approaches to make this the norm.

Consumers Want Ethically Produced Goods

The trend toward ethical consumerism is real, well-documented by the media and supported by academic research. Articles have appeared regularly in the *New York Times*,⁸ *Time* magazine⁹ and other leading publications highlighting new initiatives directed at ethical consumers. Such initiatives range from eBay's World of Good online marketplace to the socially conscious Edun clothing brand and the Red initiative working to end AIDS globally, both promoted by U2 frontman Bono.¹⁰ Sustainable and ethical initiatives directed at US and European consumers now proliferate, with certification systems in place for wood and wood products,¹¹ fish and seafood,¹² fresh flowers¹³ and a growing number of additional products.

The US government has documented the existence of forced and child labor in the manufacture of some 122 products originating from 58 different countries.





Above: A co-op member harvests a cocoa pod.
Below: A cocoa-farming couple in front of their home in the Dominican Republic.



More than 6,000 Fair Trade-certified products are available with an annual value exceeding \$3.6 billion.

Based on fair prices, ethical purchasing and sustainability, the Fair Trade certification system appeals to consumers as a powerful way to reduce global poverty through everyday shopping. The Fair Trade label connects consumers directly with small producers and farmers in developing countries to restore ethical trading relationships, stabilize markets and promote justice in conventional trade. By guaranteeing a “fair trade” price for crops, and thus influencing consumer behavior, the system has helped to expand the market for fair trade products in North America exponentially each year. More than 6,000 Fair Trade-certified products are available with an annual value exceeding \$3.6 billion.¹⁴

Organics is another movement-based certification system that has taken hold in North America, stemming from farmers who are dedicated to certain ethical principles of stewardship of the land. Organics has grown into a big business, with an estimated \$55 billion in sales globally last year.¹⁵

Consumer Support of Ethical and Fair Trade

Can this increased consciousness of consumers translate to the issue of workers’ rights and the problem with sweatshops? Research from Harvard University suggests that the answer is yes. Based on empirical research in a New York area department store, the study found that consumers would accept price increases of up to 20 percent without any decrease in sales for products they believed to be produced with good labor practices. Over a five-month period, researchers compared the sales of products that were labeled as ethically produced. Using two different product categories—towels and candles—researchers placed comparable items manufactured by different brands side by side with only one brand displaying the label. The study found that sales of labeled items not only increased, but sales of labeled items in both product categories also increased as prices increased.¹⁶

A Harvard study found that **sales increased** for items labeled as **ethically produced** even as **prices increased** for these items.



Making Ethical Markets a Global Reality: Next Steps

There are a handful of successful experiments in the area of labor rights certification, including the path-blazing GoodWeave program to certify that South Asian carpets are child-labor-free. This program aims to transform the handmade rug industry by certifying child-labor-free rugs and by providing education and opportunities to at-risk children. GoodWeave uses

license fees collected from manufacturers to fund educational initiatives.¹⁷ The handmade carpet industry exploits nearly 250,000 children to weave carpets for American homes, and a reliable certification system is imperative because an independent third party can validate manufacturers’ claims and lend credibility in the eyes of consumers.

A few companies in the United States have attempted to pioneer this approach. The Unionwear company applies the old “Look for the Union Label” approach to assure consumers that products are

made under fair working conditions.¹⁸ University students have promoted a “Designated Suppliers Program” that would reward suppliers who adhere to codes of conduct with preferential treatment in the university-licensed apparel market.¹⁹ TransFair USA has developed a pilot Fair Trade certification system for apparel and linens that aims to apply standards from cotton through cut-and-sew production.²⁰ Maggie’s Organics recently piloted a “Fair Labor Apparel” system,

GoodWeave helps provide education and opportunities for at-risk children in South Asia. Below, students do homework at a GoodWeave supported school in Nepal.



also applying to cotton through cut-and-sew. All of these projects are on a learning curve. However, if any of the pilot programs are able to iron out kinks, and expand globally, then increased consumer consciousness will diminish the demand for sweatshop-produced apparel and linens.

Beyond labeling, the anti-sweatshop movement needs to help consumers sort through the variety of market claims by creating information-sharing platforms. Many have begun to realize that it is just as important to rate certification systems as it is companies. Green America has built a reputation around a credible consumer guide to evaluate the relative claims of companies, and help weed through the multitude of labels on the environmental front. In the area of labor rights, an online initiative called Good Guide has begun work to undertake a similar consumer education platform.²¹ Free2Work, a similar platform specific to the issues of forced and child labor, and providing evaluations of certification systems and labels as well as companies, is being launched by ILRF and the Not For Sale campaign.²² Consumer education is a major pillar of a truly equitable, ethical, and sweat-free market.

Governments also can have a role in ending the confusion over labeling through engagement with market standards. Anti-sweatshop activists successfully pushed for the creation of a new group to evaluate market claims on ending forced labor and child labor in global agriculture. Under the auspices of the US Department of Agriculture, this new stakeholder group is tasked with determining which certification systems in place for agricultural imports can make credible claims to be ending or reducing forced labor and child labor.

Another promising avenue for activism is the focus on government-as-ethical consumer. The North American anti-sweatshop movement has, in recent years, done notable work to promote sweat-free public procurement policies, ensuring that no tax dollars are spent in sweatshops. A coordinating organization, SweatFree Communities, was founded in 2002 by anti-sweatshop organizers who were working separately on local campaigns to achieve sweat-free purchasing policies to prevent businesses from selling apparel made in sweatshops to public institutions. These campaigns have won sweat-free purchasing policies in states, cities and school districts throughout North America.

Members of SweatFree Communities protest the use of tax dollars to support sweatshops.



What is encouraging is that the definition of business is changing and the goal is no longer to get the highest profit at the expense of human dignity, worker fairness or environmental impact.

Pieced together, these initiatives add up to a growing movement—a movement in which consumers have a leading role. As the US public becomes increasingly aware that many daily household products are produced by forced labor, child labor or otherwise exploitative working conditions, increasingly, consumers are asking where to find ethically produced goods. Until an anti-sweatshop or “ethically produced” label is created, consumers need to do their own research. Ask your local retailers to carry ethically made products, look for the Fair Trade label and search for sweatshop-free products online through websites such as SweatFree Communities, Green America, Good Guide and Free2Work.

Such a movement is poised to grow and catalyze more ethically produced goods. Changes in behavior and consumption will inevitably give rise to new questions and challenges. But one thing is clear: Few individuals want to exploit workers for products even if they are just a bit cheaper, and this message is growing louder. The companies that make the goods we buy need to make profits to survive. But what is encouraging is that the definition of business is changing, and the goal is no longer to get the highest profit at the expense of human dignity, worker fairness or environmental impact.

Commerce needs not be a linear race to the top, but rather designed in a circular manner where community benefit and corporate citizenship play an equal role.

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What you can do to be an Ethical Consumer:

- Ask your local retailers to carry ethically produced products.
- Search for sweat-free products on sites such as: [SweatFree Communities](#), [Green America](#), [Good Guide](#), and [Free2Work](#).
- Ask your state and local government to make sure that your tax dollars are not spent on sweatshop products.

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The Role of Business in Tackling Tough Social Problems

Some businesses are changing their business models. They are showing that the purpose of business is to serve. For them, profits are a tool but not the ultimate goal. These businesses are developing products that solve society's most pressing problems, from point-of-use water purifiers, rollable water containers and foot-powered irrigation pumps to sugar cane charcoal, solar ovens and peddle-charged batteries.



More than 1 billion people around the world lack access to clean drinking water and nearly 2.5 billion lack adequate sanitation. Water-borne diseases cause 80 percent of all illnesses in developing countries and account for an estimated 2 million deaths annually. Life and Water Development Group Cameroon (LWDGC) along with Thirst Relief International USA are working to save lives and improve health by providing clean water to developing areas from two unlikely sources: dirt and bacteria. The filter removes 99 percent of the bacteria in the water. The two organizations have been installing bio sand filters in villages throughout Cameroon, Africa.



Realizing that donations are not a long-term solution for impoverished people, social entrepreneurs Nick Moon & Martin Fisher began designing and developing tools to create jobs and wealth for poor people in Africa. Villagers purchase the low-cost tools and establish small businesses. Moon and Fisher's company, Kickstart, creates tools that are profitable, durable, affordable and easy to operate and maintain. Tools such as the micro-irrigation "MoneyMaker" pump and "Mafuta Mali" sunflower and sesame oil press have helped create 35,000 businesses and \$35 million annually in profits and wages.

In 2006, American traveler Blake Mycoskie befriended children in Argentina and found they had no shoes to protect their feet. Wanting to help, he created TOMS Shoes, a company that would match every pair of shoes purchased with a pair of new shoes given to a child in need. Blake returned to Argentina with a group of family, friends and staff later that year with 10,000 pairs of shoes made possible by TOMS customers. TOMS has given over one million pairs of new shoes to children in need around the world.¹ TOMS' one-for-one mission has also begun to attract partnerships and spins off Ralph Lauren, Element Skateboards² and the SunNight Solar Corp's BoGo flashlight.³



Newman's Own began with salad dressing created for actor Paul Newman's friends and family. The company now manufactures food products such as spaghetti sauce, frozen pizza, lemonade, salsa, cookies, coffee, iced tea, dog food, cat food and many others. One hundred percent of all profits and royalties are donated to educational and charitable organizations worldwide. The company has given \$300 million to charity.⁴



The International Rescue Committee, a Newman's Own Foundation beneficiary, responds to the world's worst humanitarian crises and helps people rebuild their lives.

Clearly, businesses have an important role to play in addressing global social issues and we are seeing a radical positive shift in public interest in social entrepreneurship and the number of businesses working to solve society's toughest problems.

from the editor