The most important environmental or human rights policy is economic policy. That means changing the very basis of the failed system that created the problem. We need a deep green economy – not a *green-washing* economy. We must ecologize the economy. We can select where it is good to grow, but we must also select where to de-grow. Page three highlights societal shifts in the economic, ecological, and equitable areas to help us think about getting it all right.

All of our current environmental problems are unanticipated harmful consequences of our existing technology. There is no basis for believing that technology will miraculously stop causing new and unanticipated problems while it is solving the problems that it previously produced.

Imagine people living without waste, with basic needs met, and in sync with the planet’s nourishing web of life. In our current maddening reality, it can be difficult to picture and achieve this better world. To start, we must help under-consumers (the malnourished and wanting) move up to a sustainable level of consumption while we assist over-consumers (the wasteful and indifferent) down. We must protect the remnants of wild nature and allow for damaged land, water, and sky to heal.

We reviewed more than a dozen scorecards that grade nations on their performance. In this report, we call attention to a short but meaningful list of shifts from around the world that begin to add up to what is necessary to save and restore our planet. We also looked at Brazil, host to global leaders at the June 2012 Rio+20 conference. How does Brazil (or your country) measure up? Remembering that the changes must be commensurate with the scale of the problems at hand, Brazil has a long way to go. Additional material, including footnotes, is on our website at www.fdnearth.org. We welcome your suggestions.

Imagine again for a moment: if every country made the changes suggested herein, we would be well on the way to a more socially just and ecologically sensible way of living – in just one generation. We hope this helps you picture a meaningful shift to a better world.

Who's Rethinking?

1. True Cost Economy:
   **Why:** A free market system that thinks it is free from ecological limits is a failed system. It is destroying the life support systems of the planet. The price of air, water, and land pollution is most often paid by its victims – those who fall ill and the species driven into extinction. Companies fail to provide an honest accounting of true costs. In a True Cost Economy, the cheapest forms of production are the cleanest. For example, if coal-fired power plants paid the full price of their pollution, all forms of renewably generated electricity would be already cheaper than coal-powered electricity. While everyone likes a bargain, it needs to be an honest bargain.
   **Who does it well:** In 1991, Sweden enacted a carbon pollution tax that helped reduce greenhouse gas (GHG) emissions significantly without impeding the economy. Similarly, Costa Rica’s implemented a carbon tax in 1997, and British Columbia (Canada) put in place a carbon tax that has attracted support from both political parties. This is a step towards internalizing pollution externalities into our energy costs.
   **Brazil:** Though a 2007 study partly commissioned by the Brazilian government called for a carbon pollution tax, none has been implemented.

2. Carrying Capacity:
   **Why:** Adhering to carrying capacity limits (also called planetary boundaries) is essential to ensuring a flourishing planet for future generations. Currently, there is no effective institution to systematically ratchet down economic activity when approaching a carrying capacity limit. The cap and trade system is attempting to address, however poorly, carrying capacity issues by ratcheting down GHG emissions. A carbon pollution tax is a better option.
   **Who does it well:** No country adequately addresses these critical issues. Carrying capacity institutions and programs in every country will help us to select where we need to de-grow (reduce).
   **Brazil:** No substantial progress in this area.

3. Public Banking:
   **Why:** Public banking could counter the fragility of a Wall Street-style casino economy and funding of the demise of the planet’s life support systems. Money creation should not be with private banks. The bold solution is to ban usury, as did most of the world’s major religions. We need a more cooperative approach to banking at the heart of the system.
   **Brazil:** Though a 2007 study partly commissioned by the Brazilian government called for a carbon pollution tax, none has been implemented.

(continued on page 5)
The ECONOMIC RETHINK:  
Who does it well, and where does Brazil stand?

<table>
<thead>
<tr>
<th>ECONOMY</th>
<th>Who does it well</th>
<th>Brazil</th>
</tr>
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</table>
| 1 • True Cost Economy  
[Starting with a Carbon Tax] | Sweden ★ ★  
Costa Rica ★  
Canada (B.C.) ★ | |
| 2 • Carrying Capacity  
[Keep within natural limits of world’s life support systems] | (none) | |
| 3 • Public Banking  
[Support of local economies] | USA (N.D.) ★  
Netherlands ★ | |
| 4 • Over-Consumption Reduction  
[Selective de-growth] | (none) | |
| 5 • Organic Community Agriculture  
[No GMOs;Phase out industrial agriculture] | Cuba ★ ★ | |
| 6 • Governmental Integrity  
[Bring accountability back to government] | New Zealand ★ ★ | |
| 7 • Better Business Models  
[Cooperatives over corporations and new employment strategies] | Spain (Basque) ★ ★  
Denmark ★  
Netherlands ★ | |

| ECOLOGY | |
|---------| |
| 8 • Forests and Biological Diversity  
[Halt destruction of world resources; End deforestation] | Dominican Republic ★ | |
| 9 • Restoration: Reforestation and Dam Removal  
[Preserve biodiversity and water quality for all Earth’s creatures] | Ethiopia ★ ★  
USA ★  
China ★ | |
| 10 • Renewable Energy  
[End dependence on oil; Avoid biofuels] | Germany ★ ★ ★ | |
| 11 • Ecological Literacy  
[Earth-centered educational curriculum] | Mexico ★ | |

| EQUITY | |
|---------| |
| 12 • Rights of Nature  
[Respecting nature in a legal context] | Ecuador ★ ★  
Bolivia ★ ★  
USA ★ | |
| 13 • Happiness Index  
[Government is measuring deeper values] | Bhutan ★ ★  
Costa Rica ★ | |
| 14 • Indigenous Rights  
[Regard for local communities] | Peru ★ | |
| 15 • Empowerment of Women and Population  
[Participation in government; Equal opportunity] | Iceland ★ ★ | |
| 16 • Income Equality  
[Rich/poor gap and concentration of power] | Sweden ★ ★ ★ | |

Explanations start on page 2.

★★★ Outstanding effort  
★★ Important programs underway and expanding  
★ Something good was started

For more information on our data sources, please visit www.fdnearth.org.

[NOTE: Have an addition? Send us powerful examples of the big rethink for our next publication: info@fdnearth.org]
Up to 20 large dams are planned for construction in the Brazilian Amazon over the next 20 years. These harmful hydroelectric projects are already resulting in the extinction of indigenous livelihoods, an acceleration of climate change, and a steep loss of biodiversity. The construction of the Tapajos Complex alone will flood 198,400 hectares of rainforest, leading to the spontaneous release of methane - a greenhouse gas twenty-five times more potent than CO₂ - as the drowning biomass rots.

The Belo Monte Dam Complex, approved in 2011, may be the most controversial of these projects. Belo Monte, which will require more excavation than the entire Panama Canal, will divert the Xingu River and force the relocation of more than 20,000 people.

The inefficiencies of Belo Monte, which will only average an annual 39% of its full capacity, attest to the political motivations behind Rousseff’s support. A World Wildlife Fund-Brazil study demonstrated that Brazil could instead cut expected energy demand 40% by 2020 through energy efficiency initiatives, saving the energy equivalent of 14 Belo Montes.
Who does it well: The Bank of North Dakota, the only state-owned bank in the US, is a “banker’s bank” – it partners with other financial institutions, economic development groups, and guaranty agencies to support the local community by reinvesting large sums into the state’s general fund and financing student loans.

Brazil: While Brazilian banks have been stable and effective in world economic crises, they continue to fund highly destructive infrastructure projects such as large hydroelectric dams in the Amazon.

4. Over-Consumption Reduction:
Why: Wasteful lifestyles and over-consumption undercut the planet’s life support functions more than poverty. We need a “World Bank of Over-Consumption Reduction” to oversee de-growth. This, combined with a closed loop, zero-waste, sustainable production and consumption economy, would increase our survival chances.

Who does it well: Repair cafes have emerged in the Netherlands to encourage reuse of broken and weathered possessions by providing free repair services by eco-concerned citizens. However, the world needs to see more policy-driven economic actions to reduce consumption.

Brazil: No substantial progress in this area with Brazil’s ultra-rich. However, better mass transportation systems in Curitiba have reduced the consumption of fossil fuels.

5. Organic Community Agriculture:
Why: Industrial agriculture is destroying vital habitat and creating dead zones in the ocean. The increasing number of extreme weather events may spell the collapse of industrial agriculture, jeopardizing lives. Applying True Cost Economy and Carrying Capacity thinking to agriculture shapes a more organic, healthy, decentralized (bioregional), and resilient system.

Who does it well: Cuba’s loss of subsidized oil, fossil fuel fertilizers, and pesticides forced the nation to grow more food locally using more sustainable production methods. Today, 50% of fresh produce consumed in Havana is grown within the city limits.

Brazil: Less than 1% of Brazil’s land is farmed organically, and the government’s pro-GMO (genetically modified organism) position is driving Brazil in the wrong direction. On a positive note, Brazil introduced the Participatory Guarantee System as a low-cost, local organic certification system to add credibility and replace more costly international certifications.

6. Government Integrity:
Why: Government and corporate corruption is pervasive. Transparent and honest governments better represent the wishes of the people and use natural systems more sensibly.

Who does it well: New Zealand is the least corrupt country as measured by the Corruption Perceptions Index (CPI). Its extensive Official Information Act and its legislative frameworks that require fiscal transparency and accountability.

Brazil: Brazilians surveyed for the CPI rated their government as being “highly corrupt” and their parliament and legislature as “very corrupt.” Claims of self-dealing via contracts to presidential campaign funders with projects like the Belo Monte Dam are rampant. However, in 2011, Brazil did make progress by signing into legislation the Law on the Right to Information.

7. Better Business Models:
Why: Transnational corporations can have virtual monopolies and often buy off political parties. We need to put the public back into “public governance.” Business cooperatives in which the workers own the corporation are less-hierarchical and can lead to more community minded businesses and more equal distribution of wealth among the workers. Should all corporations become not-for-profits?

Who does it well: The Mondragon network of cooperatives, centered in the Basque region, is the seventh largest company in Spain. It comprises 256 businesses. The workers own the corporation, and each has a vote in company decision-making.

Brazil: There are over 7,000 cooperatives in Brazil with about 750,000 employees. While the GDP is a faulty indicator, it is notable that Brazil’s coops account for nearly 5.4% of the economy.

8. Forests & Biological Diversity:
Why: The sixth greatest extinction crisis on Earth is happening now. Forests are a critical part of wildlife habitat, ecosystem health, and weather stabilization. Maintaining biological diversity and the web of life by preserving pristine habitat is key to life on this planet. Nature nourishes all things.

Who does it well: Unlike deforested Haiti, the Dominican Republic has conserved its forests and increased their country’s forest cover from 32% to nearly 40% since 2003.

Brazil: The Yale Environmental Performance Index (EPI) ranks Brazil 101 out of 187 in forests. While Brazil’s rate of deforestation has decreased, it is still alarming. In May of 2012, industrial agriculture executives pressured President Dilma Rousseff to sign a weakened Forest Code.

9. Restoration: Reforestation & Dam Removal
Why: Rivers and natural systems worldwide are being trashed. In addition to doing less harm to the earth, we must allow natural processes to restore and rebuild healthy ecosystems.

Who does it well: Ethiopia, as part of the UNEP One Billion Tree campaign, has planted over 1.7 billion trees utilizing largely native species – more than any other country. While the US was a leading river-destroyer up to the 1970s, it is now a global leader in restoring free-flowing rivers. Over the past 40 years, the US has removed more than 1,000 dams and placed 250+ rivers into protected status. China earns one star from the extraordinary restoration of the once deserted Loess Plateau into a lush landscape that has increased food security, biodiversity, and local income.

Brazil: Today, Brazil ranks second only to China in river-destroying activity.

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10. Renewable Energy:
*Why:* The world’s addiction to fossil fuels fosters uncontrolled growth, which has cataclysmic consequences. Renewable energy systems, along with a shift to low-impact lifestyles, provide the precautionary approach that is required.

*Who does it well:* Germany leads the world with over 20% of its electricity supply renewably generated. When German Greens demanded the shutdown nuclear power plants, the government complied by shutting down half its plants and pledging to be nuclear-free by 2022. Via the Feed-in Tariff policy, many believe Germany will achieve 100% renewable energy perhaps by as soon as 2035. China has also made a credible start in wind and solar, but continues damaging energy policies with respect to coal, nuclear, and large dams.

*Brazil:* While the net energy gain from Brazil’s sugarcane ethanol is more efficient than other biofuels, biofuels are displacing critical rainforests and farmland.

11. Ecological Literacy:
*Why:* Ignorance of the immutable laws of physics and the laws of nature contributes to destructive economies. An ecologically literate democracy understands the basic principles of biosphere ecology. Every subsequent generation must be ecologically literate (especially MBA students, business leaders, and elected officials) if we are to survive on this planet.

*Who does it well:* Mexico’s water schools located in water-scarce regions educate students about water conservation and its connection to ecology, gender, and climate. While this is a start, we need to see broader programs and in every country.

*Brazil:* No substantial progress in this area.

12. Rights of Nature & Earth Jurisprudence:
*Why:* It is not illegal to kill the planet’s living systems. It should be, given that such destruction could spell doom for our own and many other species. We must shoulder our responsibilities to all life.

*Who does it well:* Ecuador became the first country to enshrine a Rights to Nature provision in its constitution in 2008. Bolivia passed a similar law shortly thereafter. Nearly three dozen US communities have also passed ordinances. [More on page 4.]

*Brazil:* No substantial progress in this area.

13. Happiness Index:
*Why:* High consumption lifestyles and happiness do not run parallel. To fix our addiction to GDP, we must look at other measures of well-being that do not rely on material growth.

*Who does it well:* The Gross National Happiness Index in Bhutan is used to help ensure that national policies benefit citizens beyond material wealth gain. Conservation and spiritual development are two indicators that Bhutan sees as adding to happiness, resulting in the ban of plastic bags, tobacco, and commercial advertising in the capital’s streets.

*Brazil:* Brazil ranks a happy 9 out of 143 countries on the Happy Planet Index. Life satisfaction ranked 7.6 out of a high of 10 points.

14. Indigenous Rights:
*Why:* Without romanticizing the situation, Indigenous tribes have a more earth-centered worldview and spiritual relationship to nature. Industrial peoples should learn from that approach.

*Who does it well:* In 2011, Peru passed the long-awaited law of Free, Prior, and Informed Consent (FPIC) with Indigenous peoples. While Indigenous leaders see loopholes in the law and implementation is uneven, this is a step in the right direction.

*Brazil:* Tragically, Brazil is destroying ancestral Indigenous homelands by damming wild rivers and allowing the massacre of tribes around illegal logging. [More on page 4.]

15. Empowerment of Women & Population:
*Why:* Patriarchy is a pervasive problem. Via women’s empowerment, we can address many societal problems, including lack of women’s education, domestic abuse, and population management.

*Who does it well:* Iceland leads the Global Gender Gap Index (GGGI), which ranks 135 countries. Women in Iceland make up the majority in university education and are nearing equal representation in politics. Iceland’s leadership is attributed to strong governmental legislation promoting gender equality.

*Brazil:* Brazil ranks 82nd on the GGGI. Though Brazil elected a female president in 2010, only about one-third of legislators and senior officials are women, and Brazilian women earn less than two-thirds of what men earn. However, Brazil has had a dramatic drop in the total fertility rate: from six children per woman in the 1960s to fewer than two today. About 89% of women are now literate; one-third of all women ages 18-23 are in college and two-thirds of all graduates are women.

16. Income Equality:
*Why:* Inequality leads to social upheaval and ecological degradation.

*Who does it well:* According to the Gini Index of income equality, the country with the most wealth distribution equality is Sweden. Sweden’s rating is due to strong government policies that distribute the wealth in the form of a social safety net with social services, insurance, & welfare programs.

*Brazil:* The Gini Index lists Brazil 13 out of 140—highly unequal.
A thing is **right** when it tends to preserve the integrity, stability, and beauty of the biotic community.

It is **wrong** when it tends otherwise.

—Aldo Leopold, *A Sand County Almanac*

**Rethinking society from the ground up!**

Nature nourishes all things. Foundation Earth calls attention to the deeper shifts that groups and nations around the world are employing to stop the biological diversity extinction crisis. Our team works for a bio-centric human order that brings our lives in sync with the laws of nature. We promote responsible True Cost economic systems that account for pollution costs and carrying capacities. To counter our failed global economic system, we promote selective de-growth in over-consuming lifestyles and problematic technologies. We promote stronger bioregional economies. We call for earth jurisprudence to shift communities, governments, and businesses to respect the needs of nature and work for biodiversity protection and restoration. This work requires ecological literacy of the biology and life support systems of the planet. It requires addressing poverty, corruption, empowerment of women, and indigenous respect.

We see this holistic perspective and an earth-appreciative worldview as key to achieving these goals. We seek your help to restructure lifestyles, communities, and societies towards ecological intelligence and justice so that your grandchildren’s grandchildren may inherit a cleaner earth, a healthier economy. Please join us in this important work.
This is not about being nice. Weather patterns are changing. We are giving nature a raging fever and it is getting worse. Deforestation contributes nearly 20% to climate disruption. Do not let them dam the Amazon. You are the last generation on Earth to have a chance to save the rainforest. Survival is at hand. Self-defense of our planet and our species is real. The old economy has put a gun to our head. We have to protect our own just like a cornered cougar protects her cubs. When the next economic breakdown hits, don’t allow the anti-environmental anti-democracy people to step into the vacuum. Pressure your “leaders” to shoulder their responsibilities. Summon your courage, get active, and rebel with focus and tough love. Seize land in your community and grow food. Real hope emanates from implementing bold plans! Fight for your big ideas and orchestrate the economic rethink to the way of cooperation. Fight and we will have a more ecologically sustainable society. Fight and we will have justice for all people and all species in this great web of life.