



2014 The Year that Was: The Green, Sharing, Making Economy

In 2014, the Green Economy -- dominating the media enviro beat and UN negotiations since well before the 2012 Rio Earth Summit -- merged and morphed into the Sharing Economy and the Maker Economy to offer us a vision of Transformative Transnationalism. But, is this really a new Triple Bottom-line or just the same old Triple-Bottom Feeders? ETC Group takes an irreverent look at what was new in 2014 -- and what only claimed to be.

The Green Economy:

Throughout 2014, the UN in New York refined its list of Sustainable Development Goals (SDGs), which, governments hope, will guide global and national development toward the Green Economy after 2015. Caught in the public crosshairs because of their huge energy and water waste, their GHG emissions and their role as the “pushers” behind the obesity epidemic, the food and beverage industry probably spent more time in the halls of the UN than most governments did, trying to persuade policymakers that they are on the Green cutting edge of a new paradigm in food, health and the environment. PepsiCo’s lobbyists, for example, told everybody who would listen that more and more of its bottles are being made from bioplastics and touted what they are doing to reduce hunger in Mexico (the same country where PepsiCo is sidestepping new sugar taxes by manipulating package size; a third of Mexico’s population is obese¹). At a UN meeting in Bonn, civil society groups told Pepsi that the issue is less the questionable bioplastic bottles than the stuff inside.

In a related move, the CEO of Nestlé winged into Jalisco, Mexico, to open his company’s first “zero water” plant. The facility extracts water from cow’s milk and recycles it to clean processing equipment and then to water the garden. Based on this success, Nestlé plans to renovate a similar facility in South Africa. What will Nestlé’s super-green factories produce? Infant formula -- notoriously sold for babies who don’t need it to mothers who can’t afford it.

This year, we learned that Coca-Cola pours 1.8 billion servings every day and uses up 8 trillion gallons of water a year in manufacturing processes -- more water than one quarter of the world’s population uses.²

Also at the end of the year, the McKinsey Global Institute advised that obesity and overconsumption cost the world \$2 trillion a year, or 2.8% of global GDP.³ It was Coke, in the 1990s, that teamed up with McDonald’s to launch “supersizing” and now soft drinks are the biggest single food source of calories in the US diet.⁴ Not much has changed except the rhetoric. The Green Economy is still serving the Greed Economy.

Throughout the year, the debate over the “Greenness” and the cost/benefit of the Industrial Food Chain intensified. While agricultural input companies called for a “field to fork” analysis, retailers argued for a “fork to field” perspective and ETC demanded a wider-angle analysis with genetics at the beginning and GHG emissions at the end – “from fuck to fart,” so to speak. The debate got nasty when – during a mediated Internet dialogue on Geoengineering between Andy Parker of the Institute for Advanced Sustainability Studies in Potsdam and ETC’s Jim Thomas – Parker attacked ETC’s emphasis on the important role that peasants can play in reducing GHG emissions and provocatively published a list of ETC funders.⁵

The Sharing Economy:

Closely linked to the Green Economy, 2014 saw an explosion in interest in the Sharing Economy (a.k.a. On-Demand Economy). A year earlier, in the 2013 holiday season, more people stayed in AirBnBs than could sleep in all the hotels in Las Vegas at full capacity. By Christmas 2014, AirBnB had 1 million beds on offer – 300,000 more than its nearest rival, Intercontinental Hotels (IHS). What began a few years ago as a clever use of social media to post affordable accommodation by renters and homeowners hoping to make a little extra cash, AirBnB (short for “air bed” and sometimes – but rarely – “breakfast”) can now also mean rooms, suites, whole houses or a ranch in Brazil for \$3000 a night. (ETC suggested AirBnB change its name to Earth Flat Society.)

AirBnB’s mobile counterpart, in cities, is Uber, a mobile phone-based taxi service. Besides your spare room or your car, you can also “share” (i.e., rent) your Weed Whacker, your jewelry, your cocktail dress or Grandma’s best silverware. You can also go on Mechanical Turk to rent out your brain⁶ – or on any of the exponentially multiplying sharing websites – to rent your brawn. The Internet-based Sharing Economy makes it easier for buyers and sellers to connect, price, pay and protect themselves and/or their goods.

The notion of leasing rather than owning has blossomed so quickly that some major car companies are anticipating a real and sharp decline in new car sales and developing business plans that will have them park their latest models on the street to be rented by the hour, day or week. This could not only mean fewer cars but also fewer parking lots, lower GHGs, fewer traffic accidents, and lower road maintenance.

So, what’s not to like? Actually, there is a lot to like; but not everything – and it’s not new. Mid-17th century Roman homes rarely had kitchens, yet some middle-class Roman families owned crystal glasses, porcelain or fine ceramic plates, silverware and tableware that they routinely loaned, traded or pawned as the need/opportunity arose.⁷ Back in the 1920s, Michelin rented its tires to cash-strapped customers.⁸ Before the labour market atomized families and rendered many of us transient, neighbours and families routinely lent a hand, loaned and borrowed cars and tractors, sewing machines and shovels.

The shock is how quickly the Sharing Economy is being monetized and monopolized. Those who have the means to rent/lease out will tend to acquire more, so they can rent/lease out more to make more cash. There goes the hope for fewer cars, lower GHG emissions, etc.

The so-called Sharing Economy is less a social revolution than traditional Capitalist Disruption. Upstart entrepreneurs are pushing aside the old guard. The founders of AirBnB and Uber either are – or soon will be – billionaires. Mechanical Turk is part of Amazon, the mother of all cyber-age monopolies. Where once there were B&Bs set up to let retirees pay off their mortgages, now a single landlord in Manhattan rents out 272 beds through AirBnB every night. Not long ago, families rented these rooms by the month or year. Where are they now? For all its warts, the local taxi co-op or company is being run over by a multinational monopoly already operating in more than 50 countries. Letting your niece use the spare room to go to university now represents a lost income opportunity. If your neighbour borrows your lawn mower, it should be worth something. Pass the negotiation through a neutral website and you can almost look her in the eye when you pass in the street.

Why is the Sharing Economy happening now? Partly, it's the Internet; partly, it's poverty. In 2014, the stock markets signalled the end to the so-called financial downturn. US employment is back up above where it was in 2008. Yet, even the financial press noted that 2 million full-time jobs were missing in the USA and the ILO tells us there are still 67 million people around the world that used to have jobs. Most of the new jobholders are part-time, self-employed, or both. An old friend of ETC Group, René Salazar, once made a list with his friends of 60 jobs unemployed young men did to make money in metro Manila. The list was stunningly innovative, skill-taxing, usually cooperative, and sometimes legal. It's what marginalized people have always done – negotiating an informal economy for mutual benefit in order to survive.

Neth Daño (ETC's Asian director) has another Philippine example of sharing: seeds. For 12,000 years – not just in the Philippines but around the world – farmers bred, saved and exchanged seed. Then, along came intellectual property protection over plant varieties and the WTO and now it is becoming illegal to share the most essential element in our food system. The means of the Marginalized are being monopolized.

The Maker Economy:

DIY 3-D printers and DIY Bio (gene synthesizers) arguably made 2014 the “Meet Your Maker” Year. In more than 98 cities and 56 countries (including over 200,000 people in New York and San Francisco), Makers⁹ met and made things – everything from DIY pistols (to DIY for) to senseless glowing plants – but mostly really ugly fridge magnets, junk jewelry and bad beer. Even public libraries (wondering what to do with their reference rooms post-Wikipedia) are setting up 3-D printing shops and every incubator and accelerator from Barcelona and Bangalore is making space for biohackers to either beat Ebola or (better still) brew natural botox. The 3-D printers and the biohackers have even joined forces to print out skin, blood vessels, and organ parts. Fridge magnets aside, the Makers see themselves on

the threshold of a truly liberating Industrial Revolution. Both individually and in worldwide collaborations, the Makers believe they can make GE, GM (and maybe even BP) history. Desktop manufacturing (“China on a desk”) will slash energy costs, transportation costs, storage costs, and manufacturing waste to almost nothing. As importantly, the new technologies can unleash the Galileo or Mendel in each of us. Capitalism – as we know it – is doomed.

Again, so what’s not to like? And again, there are things to like. But this is not new and Makers are not beyond multinational control.

2014 was the 60th anniversary of the celebration of another Makers’ movement. Featured on the cover of *Time* in the summer of 1954 was the “New Billion Dollar Hobby” – the DIY Home Building/Improvement movement.¹⁰ It could be argued that the breakthroughs then – starting with World War I and accelerating in the 1930s – were improvements in forest-harvesting machinery linked to highway infrastructure. But the real impetus was poverty – the necessities of the 1930s Great Depression that gave underemployed families the time and the need to build and repair their own homes. As it was in the 1930s, so it is today.

The USA had experienced another Maker Movement early in the Industrial Revolution when American access to British machinery – made of iron or steel – was limited and manufacturers were forced to use wood in place of steel parts. The unexpected side effect was that American industry – out of necessity – continuously replaced and reinvented its machinery while its British counterparts had no incentive to replace or reinvent their steel parts. The Singer Sewing Machine also launched a Maker movement. Families could access cheap high-fashion designs, order cloth, and make made-to-measure clothes at a fraction of the price of the originals in Paris or New York. And, like today, people could design their own clothing. By the 1970s, however, the DIY homebuilders and clothes makers were in full retreat in front of the advancing legions of IKEA stores and Walmart Big Boxes. The costs are higher, the products are inferior, the creativity is zero and the companies are (so far) victorious.

2014 reminded us that the Sharers and the Makers can’t rely on new technologies alone to overcome the Fakers, the Hackers, the Breakers and the Takers. There is no such thing as a Techno-fix Revolution. We don’t get to win until we defeat the Greed Economy.

The Greed Economy:

2014 was also the year when the world – even the rich – owned up to inequality. From the French director of the IMF to the Canadian head of the Bank of England to the CEO of Unilever, the Great and Mighty could only blush and nod in agreement with Thomas Piketty’s *Capital in the 21st Century*: the concentration of wealth – and concomitant inequality – is approaching pre-Industrial Revolution levels. Oxfam International made headlines at January’s World Economic Forum announcing that the 85 richest individuals on the planet hold wealth equal to the bottom 3.5 billion (or half the world’s population). By March,

Forbes announced that the latest figures indicate just 67 people hold wealth equal to the poorest 3.5 billion. According to *The Economist* (that hotbed of left-wing radicalism):

“Global wealth has increased from \$117 trillion in 2000 to \$262 trillion this year. That comes to \$56,000 for each adult on earth. But the fortune is far from evenly distributed. In 1906 the Italian economist Vilfredo Pareto observed that 80% of land was owned by just 20% of the Italian population. Today 94.5% of the world’s household wealth is held by 20% of the adult population...”¹¹

But the sackcloth and ashes faded with the year. By August, Standard Chartered Bank’s Chief Executive of Asia, Jaspal Bindra, told *Reuters* that regulators are going too far when they expect banks to monitor everything they do everywhere in the world. The Exec complained about the expectation for banks to play the role of policemen, and he finds it particularly unfair that banks get penalized for lapses when policemen rarely get reprimanded if they make mistakes. (The next day, Standard Chartered issued a statement saying that their Asian head wasn’t speaking for them.¹²)

Also in August, Bernie Ecclestone, the CEO of Formula One (car racing) evaded a jail sentence for a bribery conviction by agreeing to pay \$100 million to a Munich court. (This was not a fine; Ecclestone admits no wrongdoing.) The Bavarian state official Ecclestone bribed, however, went to jail.

Although banks and investment houses have worked hard to persuade governments and the public that they have learned the lessons of the 2008 financial disaster, 2014 showed otherwise...

- Six major banks agreed to pay fines of \$4.3 billion for having rigged international foreign exchange rates in the years since the 2008 downturn;
- Anti-competition regulators fined companies \$5.3 billion for price-fixing in 2014. This was 30% more than in the last worst year – 2013;¹³
- By mid-2014, major banks had paid governments \$125 billion in fines for a host of failures and abuses related to the 2008 downturn. More fines are expected. At the same time, the IMF reported, banks deemed “too big to fail” received \$630 billion in hidden subsidies from governments and central banks in the year 2011-2012.¹⁴
- The Governor of the Bank of England warned that the world is not dealing with just a few bad apples but with a rotten barrel.

Most telling was an integrity survey reported in *The Financial Times* that tested 200 bankers and found them substantially more likely to cheat when gambling than their counterparts even among IT, telecom and pharmaceutical executives.¹⁵

Despite this, bankers and investment houses insist they are cleaning up their act and have made enormous strides to bring confidence back into the marketplace. At the same time, the speed and efficiency of stock trading is still increasing. Post-World War II, the average stock was held for 4 years. By 2000, stocks were held only an average of 8 months – and

only 2 months in the sluggish days before the 2008 market failure. Today, bankers and investors can analyse the triple bottom-line implications of the average stock and buy it or sell it in 22 seconds.¹⁶

In 2015, ETC Group will release a series of reports on different aspects of The Greed Economy.

ETC's World in 2014:

The world marked the 30th anniversary of Bhopal – the horrific criminal neglect that led to the deaths of thousands in India, with almost no compensation – still awaiting justice after three decades. With our allies, we struggled to connect the dots between unequal power, rising economic inequality, dirty politics and corruption, and environmental devastation. Cases like the hundreds of girls kidnapped in Nigeria, the 43 students murdered in Mexico, the devastating drought in Sao Paulo (linked to Amazonian deforestation), and even the spread of and response to Ebola highlighted the challenges we all confront.

The negotiations around the UN's Open Working Group on Sustainable Development Goals (SDGs) – 17 Goals with 193 targets after 13 sessions and 18 months – have hardly been awe-inspiring. But, it's not over yet and we continue to work with the Major Groups in New York to improve the practical possibilities.

Here are some of the other noteworthy stories from 2014:

GMOs: 2014 marked another year of staving off a transgenic invasion in Mexico. Civil society and peasant movements along with the Peoples' Permanent Tribunal stymied the corporations in the center of origin for maize. Mayan farmers and beekeepers prevailed against Monsanto when a judge ruled that the company's transgenic soy posed a threat to Yucatán lands and couldn't be planted. Monsanto took more fire when UPOV 91 ("Monsanto Law") in Chile and Guatemala was suspended; an Italian regional court upheld the country's ban on planting MON810 maize; and, in Córdoba, Argentina, protests to halt Monsanto's glyphosate factory continued.

Meanwhile, companies are working hard to take the GM out of GMOs. Three years ago, nobody in the world of genetics had heard of CRISPR-CAS9. Now it's the craze sweeping the biotech world and revolutionizing the genetic engineering of life. Dubbed "the biggest biotech breakthrough of the century," the ability to rapidly "edit" genomes at multiple locations is being promised to deliver everything from dinosaur de-extinction to disease extinction. It's also the subject of bitter patent litigation as the first "genetically edited" organisms are getting approval in the market as non-GMO.

Corporate concentration: Mega Mergers & Acquisitions are back, 5 years after the 2008/2009 financial crisis. According to Thomson Reuters, 2014 saw 40,298 transactions — worth nearly \$3.5 trillion.¹⁷ In November alone, 2 mega M&A deals were announced: (1) the

US\$66 billion acquisition of the Botox-maker Allergan by Actavis, Dublin-based global specialty pharmaceutical company, to create one of the top 10 pharmaceutical companies in the world by sales revenue and (2) the US\$34.6 billion takeover of the oil field services firm Baker Hughes by Halliburton.

Friendly Skies? Rosetta, Europe's space probe, has now travelled 6.4 billion km in the solar system since its launch in 2004, coming across water, methane, and hydrogen as well as formaldehyde and hydrogen cyanide in its ostensible search for a "Planet B." Rosetta costs Euro 1.4 billion, or approximately the price of three Airbus A380s.

In October 2014, a test spacecraft belonging to Virgin Galactic, the leading contender to bring tourists into space, exploded over California's Mojave desert, killing a pilot. While the company claims the tragic accident won't stop them from launching a consumer space race, the dramatic images of the explosion didn't make good advertising. That may be the silver lining for the climate given the carbon emissions a space tourism industry could generate. (Meanwhile, Virgin boss Richard Branson plans to award a \$25 million dollar Earth Prize for a geoengineering technology that can pull carbon out of the air.)

And speaking of air travel, the US Federal Aviation Agency (FAA) granted a slew of exemptions to its regulations of unmanned aircraft systems (UAS – i.e., drones) in 2014 and is expected to allow commercial drones to go mainstream in 2015. *Business Insider* estimates that 12% of the approximate US\$98 billion cumulative global spending on aerial drones over the next decade will be for commercial purposes.¹⁸ [Note: Less than a week into 2015, the US FAA granted its first regulatory exemption for agriculture. Advanced Aviation Solutions will be allowed to fly drones over US farmland to make photographic measurements and perform "crop scouting for precision agriculture."]

Digital Fabrication: In September 2014 at the International Manufacturing Technology Show, digital fabrication darling Local Motors of Cincinnati unveiled the world's first 3D-printed car, the Strati. The car is composed of only 50 pieces and was printed and assembled over a 2-day period before the CEO drove it off of the exhibition floor. While excellent PR, the automotive focus belies the bigger significance of demonstrating the company's 'flexible manufacturing,' which they intend to roll out as 'microfactories' that can digitally fabricate on demand anything from a car to a coffee maker.

Time to worry about AI? In 2014, warnings about Artificial Intelligence began to snowball. Precipitating renewed concern was Google's \$500 million purchase of DeepMind, a machine learning company that has developed what it calls a "neural Turing machine." (A Turing Machine is a theoretical and idealized computing device conceptualized by Alan Turing in 1936.) Before 2014, the best neural computing machines could do was recognise cats and play video games. By the end of 2014, DeepMind's technology was able to automatically caption a photograph including elements and actions in the image.¹⁹ Google claims to now be working on a computer that can programme itself.²⁰ What has captured headlines however are a series of increasingly shrill warnings about AI from Silicon Valley wonder-kid

Elon Musk²¹ who has warned that the current work on AI is “summoning a demon” and, in leaked emails, he forecasts, “Something seriously dangerous happening is in the 5 year timeframe, 10 years at most. This is not a case of crying wolf about something I don’t understand.”²² His warnings have been echoed by physicist Stephen Hawking and one of DeepMind’s founders, Shane Legg.

Shale oil boom or bubble? In 2013, BP and other oil majors were promising that the new technologies for extracting tight oil and shale oil would trigger a new oil boom, with the United States overtaking Saudi Arabia in its flow of oil. While the hype is still in full swing, a sobering analysis published in November by the Post Carbon Institute suggests that the new shale party isn’t going to last long – indeed may already be breaking up – with all the major US reserves of shale oil peaking in the next 5 years.²³ The industry disagrees, but whoever is right, we can expect to see a ramp-up of investment in extracting fracked gas and shale oil with synthetic biology, nanotech and other risky tools. Expect to see engineered consortia of microbes pumped into shale formations, and new ways to increase the value of natural gas and tight oil by feeding it to synthetic microbes to make gasoline and fishfood.

In Latin America, Mexico and Argentina have already amended their energy regulations to allow the fracking companies to go suck the shale oil and gas out of the lands. The region seems to be re-editing the Colonial period. The new laws reframe the food / fuel debate, with fuel coming out ahead. It’s the same international labour division as 500 years ago, but it’s now dubbed “neoextractivism.”

The Year’s Notables & Quotables

Best/Worst Books of 2014: Our two English language choices have a lot in common: both address major climate change/environmental concerns; both were produced by extremely talented women writers; both are fundamentally optimistic. We recommend both but for very different reasons.

Best Book: Naomi Klein, *This Changes Everything* (Simon & Schuster). Naomi Klein’s 2007 book, *Shock Doctrine*, has more relevance today than when it was published and reads like a thoughtful prologue to her new book on climate change, capitalism and inequality. Some who began reading it – and couldn’t finish – found it desperate and depressing. Those who stay the course will be intellectually and emotionally thrilled by her optimism. Yes, we are in a terrible space. No, the future is not impossible. We have all the tools we need – right now – to not only survive climate change (although, this she admits will be tough) but we can and must simultaneously change our economic system so this kind of environmental disaster is unlikely to happen again. The book is crammed with the facts, figures and conviction we need to get on with the job.

Worst Book: Diane Ackerman, *The Human Age – The World Shaped by Us* (W.W. Norton & Company). Ackerman writes beautifully and takes on our climate and environmental woes

with a fine scientific mind and wonderful prose. Her book is filled with the resiliency of nature and humankind. Her examples and descriptions are almost breathtaking. Her scope is not. In contrast to Naomi Klein, Diane Ackerman believes we can survive and prosper without fundamental economic change. Actually, “we” is an uncertain pronoun. Her book rarely mentions poverty and never addresses inequality. If we could all commute to our New York publisher’s office from our New England acreage, this book might foretell a happy ending. Despite this fatal flaw, it is worth reading.

The 2014 Math Award goes to Harvard Business School’s Prof. Robert G. Eccles, who emphasizes the upside of concentrated corporate power, including a logical desire for universally beneficial “civil-society upgrades.” He writes:

Market opportunity, peer pressure, investor pressure, and brand reputation are doing for these companies what otherwise might be accomplished only through regulation. Roughly 200 countries in the world would have to pass and enforce similar regulations. What a headache. Instead, the market itself has already gone a long way toward making the global economy adaptable by concentrating market and moral leadership into 1,000 boardrooms.”

Most cuddly PR for New Technologies: Derby, the disabled dog, runs for the first time thanks to 3D printed prosthetic legs. Who could refuse? (Apparently, no one; the YouTube video has gone viral.)

Most Blustery SynBio BS: “We want to make totally new organisms that have never existed and replace every existing organism with a better one. It just seems obvious that eventually every human will be designed on a computer.” – Austin Heinz, founder of Cambrian Genomics

Best News for the Status Quo: “I don’t think one can translate the findings [of the IPCC] into fossil fuel assets becoming redundant, because with CCS it is entirely possible that fossil fuels can continue to be used on a large scale.” Rajendra Pachauri, IPCC Chair, referring to the rapidly increasing GHG emissions leading to climate change in *The Daily Telegraph*, 3 November 2014

2014 Transparency Award: “If it’s entirely a numbers game and numeric representation, then obviously you’d be talking to the half of the people in Hong Kong who earn less than US\$1,800 a month,” Hong Kong’s Chief Executive Leung Chun-ying, explaining why his government could not accept students’ demand for direct input from the public on candidates for the city’s top post

Technology Assessment: An Idea Whose Time Has (Finally) Come? (I) “Increasingly scientists think there should be some regulatory oversight maybe at the national and international level, just to make sure that we don’t do something very foolish.” – Tesla CEO

Elon Musk, talking to an audience at MIT about the dangers of Artificial Intelligence, October 2014

Technology Assessment: An Idea Whose Time Has (Finally) Come? (II): “Eventually, I think human extinction will probably occur, and technology will likely play a part in this.” – Shane Legg, one of the founders of Google’s DeepMind

12 (Irreverent) Predictions for 2015:

1. Craig Venter, in a subtle PR ploy, will announce that he is only “2 beers” away from creating an entirely synthetic life form. The Bad Boy of Bioscience has been saying he is two years away from this goal since 2008. He came close in 2010 with the arrival of Synthia but the artificial DNA required a natural host.
2. Harvard’s George Church, having de-extincted Mary Shelley, will launch a joint collaboration based upon her Frankenstein copyright. The happy couple will sue Monsanto for infringement.
3. David Keith (also occasionally at Harvard) will announce that instead of developing carbon capture technologies to sequester GHGs, his company will capture carbon dioxide to pump more fossil fuels out of aging oil wells. (Oops, correction, they’ve been doing that already.) George Church will sue him for plagiarizing Frankenfuels.
4. The genome diagnostics start-up, 23andme, which was shut down by the FDA in 2013 will announce that, based upon the latest human genome data, it will reboot as “23,000 and whoever will pay me \$100.” [Note: Just a few days into 2015, 23andme announced that Genentech will pay \$60 million for the company’s genomic data.] We predict it will sell off the rest of its assets in 2015 and, then... “23 skidoo”? (It’s the centenary of an old saying. You kinda had to have been there... like Pat Mooney.)
5. Following news that artemisinin farmers in Africa are being driven out of business and a WHO report that resistance to the treatment is spreading in Asia, Amyris Biotechnologies will redefine itself from being “an antimalarial pharma company” to being “an anti-farmer malaria company.”
6. The sequel to the 2014 Internet dialogue between ETC’s Jim Thomas and the Potsdam Institute’s Andy Parker once again disassembles over the role of peasants in agriculture when Thomas warns Parker that “Pachamama would be doing OK if it weren’t for all those macho papas.” Calling Pachamama “sinister,” Parker demands ETC publish a list of Mother Earth’s funders;
7. Barack Obama will apologize for abusing his position as Commander in Chief commandeering a drone to take selfies of his family’s Christmas holiday. The Vatican denies that Pope Francis offered the First Family the use of his aging fleet of archangels mothballed after Curia cost cuts and concerns about methane emissions. (St. Peter’s bills for incense were becoming, well, astronomical.)

8. Due to what food and beverage companies will describe as an unfortunate misunderstanding over their pledge to get rid of food waste, 2015 will be retitled The International Year of the Dumpster.
9. Nestlé’s water campaign will team up with the Gates Foundation’s compostable toilet campaign. In a joint (news) release, the two corporate/foundation leaders will disclose plans to change the world from “feces to formula.” WikiLeaks will reveal that Nestlé staffers call their recycling program “cradle to ladle.” In a related story, George Church announces that he may de-extinct Jonathan Swift.
10. Following her participation in social movements’ meeting with Pope Francis in 2014, our own Silvia Ribeiro will deny she is re-evaluating her spiritual perspective. Her ETC colleagues, however, note that her new title is “Our Sister of Perpetual Motion” and Facebook visitors are invited to “bless” – not “like.”
11. Plans to “de-extinct” a Neanderthal will be put on hold when computer simulations suggest that the progeny is a dead ringer for Vladimir Putin.
12. Buoyed by its successful “Net Zero” gambit, the fossil fuel industry will award IPCC Chair Rajendra Pachauri the “Pet Hero” award at the Paris climate change conference.

Last Toast: 2014 was the UN International Year of Family Farming and 2015 is officially the Year of Soils. In 2015 the world (well, at least 3 companies) will celebrate the invention of “Agribusiness” which was coined 60 years ago (in 1955) by the USDA’s John H. Davis.²⁴ Anybody wanna party?

ETC’s Calendar (so far) for 2015

Date, place, event	Note
January – July, UN New York Intergovernmental Negotiations on Post-2015 Development Agenda	Less “ad hoc” than before (but still “ad nauseum”) the more-or-less monthly negotiations begin in mid-January and amble through July, culminating in a Heads of State gathering in September with signed commitments for the world’s development agenda to 2030. A critical “linking” piece in all of the Goals and Targets is the negotiation for Technology Facilitation and Assessment. Cross your fingers but don’t hold your breath!
19 -23 January, Rome (FAO Headquarters) Commission on Genetic Resources Fifteenth Regular Session	The Commission is in its final critical phase of preparing the world’s first-ever State of the World Report on all things related to agricultural genetic diversity – a mammoth intellectual exercise the Secretariat is struggling to complete despite very limited financial support. Governments and CSOs should pay attention.

Late January / Early February, Washington DC, Release of NAS and NRC reports on geoengineering (Solar Radiation Management and Carbon Dioxide Removal)	These two major reports are expected to call for significant funding for geoengineering research including field experimentation. If they do, the battle lines will be drawn for the year-long process leading to the Paris climate change conference in December where geoengineers are expected to push hard for their so-called Plan Be as the only way forward for industrialized countries.
3-4 March, Rome Second Meeting Ad Hoc Technical Committee on Sustainable Use of Plant Genetic Resources for Food and Agriculture	Following a series of bilateral and informal processes, governments may finally be coming to grips with the FAO Seed Treaty's political inertia. The results of the negotiations in two working committees will culminate in the next meeting of the Governing Body later this year. While some like to pretend that the 10-year-old Treaty is experiencing "growing pains," most recognize that it is in a full-blown "midlife crisis."
24-28 March, Tunis World Social Forum 2015	Meeting in Tunis, the WSF is at the right place at the right time. Social movements are preparing for the climate change summit in Paris later this year. Many now recognize that geoengineering is becoming climate change's hot topic.
20-24 April, New York UNGA	Means of Implementation and Global Partnership for Sustainable Development
18-20 May, Bangkok UNEP Regional Ministerial Meeting for Asia-Pacific	UNEP's 2 nd Environment Assembly isn't until 2016 but these regional processes for the revitalized agency are creating new spaces for civil society participation.
27-30 May, Brazil, "Humanity's Dilemmas" meeting	Global gathering of social movements hosted by MST to discuss the wide range of challenges confronting social movements and humanity now and in the decades ahead.
29-30 May, Germany, Meeting of the Coalition Climat 21 and allies (TBC)	Debates on corporate power, fossil fuels and no-offsets in the context of the G7 Summit in Germany, toward the Paris climate change conference and beyond
3-14 June, Bonn Mid-session meetings of the UNFCCC bodies	Following this meeting, we will have a pretty good idea of what decisions governments will agree to in Paris on a new climate regime
25-27 September, UN New York, Post-2015 Summit	Heads of State will sign the post-2015 development agenda. Let's hope nobody blushes.
12-17 October, Rome Committee on World Food Security (CFS-42)	The global battleground for all things food and agricultural, the CFS's substantive role is clear but the real question is whether other multilateral agencies (UNEP, CBD, WHO, UNCTAD, CGIAR) will catch up and get on board.
1-7 November, Montreal, SBSTTA 19	The CBD's scientific subcommittee will take up the decisions of COP 12 last year regarding synthetic biology

	and may also debate the status of the moratorium on geoengineering agreed in 2010.
30 November -11 December, Paris, UNFCCC COP21	Will governments adopt a new climate change regime anyone can be proud of? Or, will they pretend that a unicorn technology like Bioenergy with Carbon Capture and Storage (BECCS) will allow the fossil fuel industry to overshoot and still reach Net Zero by 2100?

¹ Anon., “Pepsi and Coke Take Hammering as Junk Food Tax Starts to Bite,” *RT.com*, 9 October 2014: <http://rt.com/business/194644-sugary-drinks-tax-mexico/>

² Bartow J. Elmore, *Citizen Coke*, W.W. Norton & Company, 2014.

³ Richard Dobbs et al., “Overcoming Obesity: An Initial Economic Analysis,” McKinsey Global Institute, November 2014.

⁴ Bartow J. Elmore, *Citizen Coke*, W.W. Norton & Company, 2014.

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