

CORPORATE RESPONSIBILITY RANKINGS

WHY CRR?

An in-depth look into not just why we *should* enact
Corporate Responsibility Rankings, but why we *must*

Contents

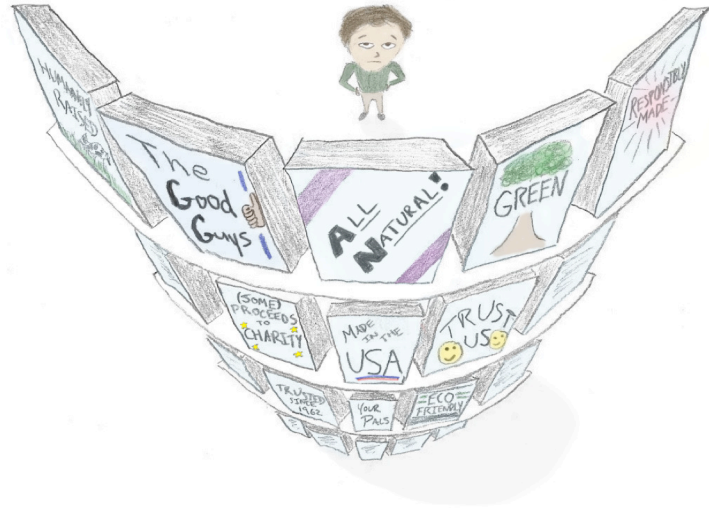
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I. Transparency & Motivation

If enacted, Corporate Responsibility Rankings would do two very important things. First, it would give a clear, simple look into the behind-the-scenes behavior of companies so that consumers could easily buy from companies that are doing the right thing. Second, by rewarding higher-ranked businesses with more sales, CR Rankings would for the first time create a major market force pushing all businesses to be more responsible.

Transparency

As conscientious shoppers, we probably all feel pretty clueless. Most of what we buy gives us no indication of how responsibly it was made. And yet the few products that do are almost just as confusing. This bread says it's USDA Organic, but what is its carbon footprint? This air conditioner has the Energy Star mark, but how well were the workers paid who made it? We tend to have that sinking feeling that the purchases we're making everyday make a huge impact on the world...but that we also have very little way of knowing what exactly that impact is and how to steer it in a better direction.



CR Rankings would end this confusion. A detailed profile of the behind-the-scenes behavior of each company would be posted online, and all of this information would be synthesized into one easy-to-compare ranking. Even better, these rankings would then be conveniently located right there in front of you whenever you make a purchase. With CRR, it couldn't be any easier to buy from more responsible companies.

The Motivation to Improve

That new transparency would be huge for consumers. But CRR would have a second, arguably much bigger impact: businesses would finally have a *motivation to improve*, a motivation to better treat their workers, the environment, and the communities in which they operate.

Right now we have the opposite. Right now businesses are motivated to be as *irresponsible* as they can get away with. Why? Because the free market rewards them for being more irresponsible.

Capitalism is for the most part a wonderful system, especially in how it promotes efficiency and innovation. If Jane's toaster costs a few dollars less than Bob's, then her toaster will most likely



outsell his. Being outsold then motivates Bob to find whatever ways possible to cut his costs, perhaps streamlining the assembly process and trimming out an unnecessary inch from his toaster's height. But this drive for lower costs may also push Bob to do some not-so-wonderful things, like cut his workers' pay, use cheaper yet more polluting fuels, and exploit loopholes in the law to avoid paying his proper share of taxes. Shady as these other options may be, they'll still cut his costs, too. In other words, the free market rewards innovation and greater efficiency, but it also rewards such bad behind-the-scenes behavior.

For the better, the Bobs and Janes out there have built our modern world—toasters, airplanes, the internet, modern medicine, you name it. For the worse, though, their corporate irresponsibility has fueled many of our biggest problems, like rising income inequality and global warming.



Corporate Responsibility Rankings would turn that irresponsible behavior around. In the same way that lower prices do, higher CR Rankings would attract more customers. That would push any company with lower rankings to become more responsible, raise those rankings, and win back more customers. Eyeing Bob's higher CR Rankings, Jane might give a raise to the lower half of her employees. After Jane then takes the rankings lead, Bob fights back by eliminating a half dozen toxic chemicals from his manufacturing process. To keep the lead, Jane ditches the same bad chemicals and starts regular donations to a local food bank.

These changes might sound small, but small changes build up. Just as the tinkering Bobs and Janes have bit-by-bit built our modern world, with CR Rankings they would bit-by-bit fix many massive, seemingly impossible problems. With just one simple law we could turn around global warming and income inequality.

Read More!

We now invite you to dive deeper into why we should enact CRR. From here we will first discuss the vital importance of CR Rankings given the failure of all other approaches to solving problems stemming from corporate irresponsibility, in [Our Current Approach Is Doomed to Fail](#). We will, in other words, dissect why laws like the minimum wage and product labels like USDA Organic do the world a great amount of good but will never solve problems like income inequality and toxic chemical consumption. We will then also see how CR Rankings will succeed where these others fail.

If you still aren't sold at that point, we will then tick through a list of the many major [Problems CRR Would Help Fix](#). Finally, we will address what could be the nagging doubts you may have about a law like CRR in [But...Why Pick on Businesses?](#) and [But...Isn't It Impossible?](#)

We hope that you will come to see CRR as a very necessary law, one that will give consumers a transparent view of the companies they are buying from and turn around a score of seemingly impossible problems, all in a business-friendly way that is (paradoxically to some) much more politically feasible and effective than its alternatives.

II. Our Current Approach Is Doomed to Fail

Pick up a newspaper or turn on TV news and you'll find a world in constant crisis. Climate change. Income inequality. Corporate tax avoidance. Antibiotic resistance. Water shortages. Communities devastated by jobs shipped overseas. Inhumane working conditions at those same outsourced jobs. And so it goes, from the big, in-your-face problems to the more hidden but equally daunting ones you never really knew existed, like the swelling worldwide accumulation of non-biodegradable waste, typified by a giant, Texas-sized patch of plastic floating in the north Pacific Ocean. Only the worst part isn't just that these problems exist, but that they continue to grow.

So what's to be done? Well, the common thread with these problems is that they are largely caused by corporate irresponsibility. Businesses produce most of the world's manmade CO₂, use most of the water, do most of the unfair paying, and so on. If we want to fix these problems, the best place to start is with our laws that regulate businesses. On this point, most pundits and politicians agree. But *how* exactly to regulate businesses is where they sharply divide.

To those on the right, we have too many laws and they're too strict. *Get the government and all of the red tape out of the way so that our job creators can innovate!* Yet, to those on the left we have too few laws and they're too lax. *The only way to get companies to pay their workers better and stop polluting so much is to force them to do so with stiffer laws!*

Really, though, both sides miss the point. Our laws have consistently failed to fix such huge problems—and will continue to fail to do so—because of neither their number nor their strictness. Our laws fail us because of *how they are structured*.

Motivation Problems

Just about all labor and environmental regulations set up a minimum or maximum bar that businesses have to meet: a minimum fuel efficiency for cars, maximum mercury levels in factory emissions, minimum percentage of income paid as taxes, etc. To simplify, let's call these *minimum bar laws*. Minimum bar laws have historically done us a lot of good by setting a baseline of decency, raising us (in much of the world, at least) above the horrid lows of unfettered, late 19th century-style capitalism, with its eighteen-hour work days, widespread child labor, unlivable pay, blackened skies and rivers, domineering monopolies, and factory equipment that once chopped off limbs with impunity (to say nothing, of course, of the much lower lows of the slavery that came before). Such mostly eliminated issues we can call *baseline problems*, because all that's needed to solve them are laws that give a baseline that businesses cannot dip below. Look closely at most any once-rampant-but-now-resolved baseline problem (like factory pay rates once so low in the US, at a dollar a day, that President FDR often called them “starvation wages”¹) and you'll find a minimum bar law (like the US minimum wage, instituted in 1938) keeping it largely at bay.



Mill-working children in Alabama in 1910.

Library of Congress

But while minimum bar laws do a rather good job with baseline problems, they don't do a very good job with that current batch of seemingly insolvable problems like global warming and income inequality. Such problems we can more aptly call *motivation problems*. Motivation problems require more than just a baseline to keep something bad from becoming excessive. *They require consistent motivation for those involved to get better and better until that something bad has disappeared entirely.*

Consider the common problem of losing weight. Cutting out double fudge sundaes from your diet is a baseline problem. Losing all hundred and fifty excess pounds, on the other hand, is a motivation problem. Nixing the sundaes is tough, but really all that's required is a simple rule and some fortitude to see it through. No more sundaes. No excuses. Done. Losing 150 pounds is exponentially more difficult, though, not only because it requires much more work, but also because there's no simple answer as to how to actually make it happen. Let's say you add a gym routine, salads at every meal, and healthier snacks. However, you only end up with the time to hit the gym twice a week, and after workouts you reward yourself with a Gatorade and snack bars. Plus, salads for lunch make you hangry in the afternoon and, without really noticing it, you boost your mood with sugary, calorie-filled sodas. After losing only eight pounds, you go back to the drawing board, deciding to bike to work and cut out all dairy. A month later you reassess again.

Get the idea? Motivation problems have no simple fix. To solve them you have to get rid of pretty much *all* the bad behavior that feeds into such problems, not just the worst excesses of it—you have to completely change how you eat and exercise, not just get rid of a few fudge sundaes. That requires a long road of tough change upon tough change. And if you don't have a strong motivation

to push through that long, hard road, you won't (hence the name "motivation" problems). In that light, it's no wonder why it's so hard to lose weight and why most people fail trying.

Of course, fudge sundaes and losing weight are just the tip of the iceberg. Such duos of baseline and motivation problems are everywhere. If smoking less than two packs a day is a baseline problem, then *quitting smoking altogether* is a motivation problem. If getting your eight-year-old to behave during family photos is a baseline problem, then getting him to behave *all the time* is a motivation problem. One is tough but doable. The other is a seemingly impossible nightmare. What makes it all much worse is that people generally try to fix motivation problems like they'd fix baseline problems: with one or two simple, strict rules, rules that attack the worst excesses of bad behavior. No more than two cigarettes an hour. Hit your sister again and you're going to your room. No more fudge sundaes. But for motivation problems these rules don't really get at the real issue. They don't give the motivation needed to go deeper and make much bigger changes. And that is why they fail.

Trying to Fix Motivation Problems with Minimum Bar Laws

If the starvation wages of the 1930's were a baseline problem, growing income inequality in general is a motivation problem. Governments around the world have passed quite a few laws over the last hundred years to fight the stubbornly large pay gap between the rich and the poor: minimum wages, progressive tax codes, free health care, food stamps, public housing. And yet over all of that time economic inequality hasn't just persisted, *it has grown*.

So why have laws like the minimum wage failed to curb rising income inequality? Because income inequality is a motivation problem. Like cutting out sundaes, the minimum wage only nibbles at the edges. It does a great job eliminating dollar-a-day wages for those at the bottom, sure, but what then? Does it motivate companies to pay the rest of their lower- and mid-level employees any better? Does it motivate them to stop shelling out million-dollar bonuses to the executives already making millions? Does it motivate them to substantially shrink their massive pay gaps overall, pay gaps in which those at the top regularly make hundreds of times more per hour than those at the bottom? (Unfortunately the answer is a pretty clear no.) Above that minimum wage, companies can still pay their workers as unfairly as they like. Hence, income inequality is largely unaffected.

Sadly this is typical for minimum bar laws. Because they knock out the excesses of bad behavior but do little to motivate businesses to weed out the rest of it, minimum bar laws are consistently great for baseline problems and consistently awful for motivation problems.

Take pesticides. In the 1940's, US farmers began widespread use of the now infamous insecticide DDT. The chemical decimated crop-ravaging bugs but also, after working its way up the food chain, helped drive many predatory bird species to the brink of extinction, the bald eagle included. In 1972, the US banned the use of DDT. Along with other minimum bar laws that protected nesting habitats, the ban helped such bird populations come roaring back, including an estimated nineteen-fold increase in the US bald eagle population since the 1960's.^{2,3}



Jeff Vanuga/USDA Natural Resources Conservation Service

In the decades since, the EPA has instituted more minimum bars to address other pesticide-related baseline problems like human overdose. It has banned dozens more pesticides and classified many others as “restricted use” to keep them out of the hands of the general public. For those pesticides allowed in large-scale agriculture, the EPA also sets what it calls “tolerances,” or maximum allowable amounts of

pesticide residue on foods sold in the country (such as 0.2 parts per million of atrazine allowable on corn or 8 parts per million of glyphosate allowable on flax meal⁴). Such measures do a great job of keeping the average citizen from consuming one large, potentially lethal dose of a chemical. An estimated 300,000 people die in eastern Asia alone from such pesticide ingestion each year,⁵ but only twenty-three do so in the US.⁶

Minimum bar laws here do another great job tackling a baseline problem. Case closed. All is right in the world. Right...?

But what if those small, legally permissible amounts of pesticides are still harmful? We now know that when we eat foods with pesticides in or on them, these chemicals stay in our bodies and build up there throughout our lives. More research is still needed, but many studies have so far linked this kind of normal, long-term pesticide consumption to a slew of major health issues in humans, including higher rates of cancer,^{7,8} suicide,⁹ Parkinson’s disease,¹⁰ birth defects,¹¹ fetal death,¹² ADHD¹³, and even a lowered IQ.¹⁴ And this isn’t just a concern for those who live on or near a farm. Eight years after the US ban of DDT, researchers still found the chemical or its byproducts in the blood of 99% of Americans tested.¹⁵ In Europe, where pesticide protections are generally stricter than they are in the US, scientists studying the breast milk of 130 mothers in Finland and Denmark from 1997 to 2001 found pesticides present in *every sample*. And that wasn’t just a trace amount of one random pesticide or another. Eight separate organochloride pesticides each showed up in *all 130 samples*.¹⁶ In other words, harmful pesticides are not just inside all of us but are there at such a high concentration that they reliably spill over into our bodily fluids. And given that pesticide use has quadrupled worldwide since 1961,^{17,18} it’s hard to imagine that health complications from pesticide use will do anything but proliferate in the future.

This low-level pesticide consumption is a classic example of a motivation problem. To fix it we would need to do more than just set some limits on pesticide use. We would need to motivate farmers to completely phase out such toxic pesticides.

It's also a classic example of a motivation problem created by the partial failure of minimum bar laws. An urgent problem arises (in this case human death and the near extinction of predatory bird species). Minimum bar laws are created to limit the bad thing our companies are doing that created that problem (unchecked use of toxic pesticides). The immediate problem dies down (birds come back, fewer people die). However, companies can still *mostly* do that same bad thing, just less of it, so they keep doing as much as they can (continued industrial use of synthetic pesticides). Less of the bad thing still ends up causing plenty of other problems (widespread long-term health effects of pesticide consumption). Bad thing is deemed too important to totally outlaw (pesticides seen as critical to high crop yields and feeding the world). Lawmakers bicker only about whether to make minimum bar laws stricter or more lax. Little changes. No one proposes different kinds of laws that better motivate companies to do less of the bad thing (to use fewer toxic pesticides). The motivation problem steadily grows with no solution in sight.

This pattern is typical of minimum bar laws. And if we are to ever break this pattern, we need to recognize the difference between baseline and motivation problems and stop trying to use the same fixes for both of them. Minimum bar laws simply aren't designed for motivation problems. Thus, to properly address motivation problems, *we need to abandon the minimum bar law for laws that instead give those who are behaving irresponsibly a much stronger motivation to improve*. We need, in other words, a law like Corporate Responsibility Rankings.

The Tragedy of the Commons

It gets worse, though. To help fully appreciate the need for laws that better motivate companies to improve, we should here note that income inequality, global warming, and the other major conundrums we face don't just qualify as motivation problems. They really belong to the thorniest type of motivation problems: *the tragedy of the commons*. Popularized by Garret Hardin in his famous 1968 article in the journal *Science*, a tragedy of the commons occurs when some sort of common good is open for everyone in the community to use. In the classic example, anyone's cattle can graze on a public pasture (a.k.a. a commons) and enjoy the common good of free grass. But when too many cows graze for too long, the grass becomes overeaten and over-trampled and dies off.

You're likely thinking that this can't be that tough to fix. Each herdsman should limit the number of cattle he lets onto the commons. After all, doing so benefits everyone. Then the grass comes back and all is well. It's that simple, right?

Not quite. See, each herdsman gains more from putting each new cow onto the commons (a gain that only he receives) than he loses due to the overgrazing destruction caused by his one cow (a loss that's spread out and shared by everyone). The selfish math therefore encourages each herdsman to add more cows. What's more, any herdsman who tries to be altruistic by limiting his cow-on-pasture

time only hurts himself, watching his herd stagnate while everyone else's herds flourish. Consequently, each herdsman inevitably makes the same self-interested (yet short-sighted) decision, adding more and more cows until the common good of the pasture is destroyed.

Sound far-fetched? Take a look at global warming. For decades almost every country in the world has recognized the grave danger of climate change and signed on to global treaties pledging to reduce greenhouse gas production. And yet, the problem continues to get worse and worse. Why? Because it's a *commons motivation problem*. Each of us—each country, each business, each individual—gains much more from using



Simone Ramella/Flickr

fossil fuels to drive our cars and power our buildings (a gain each individual solely enjoys) than each of us loses from the seemingly abstract, far off problem of a warming planet (a loss that's spread out among everyone, no less). On the other hand, investing time and money to try to stop climate change (by, say, switching to biodiesel cars and solar power-run offices) drains the do-gooder financially (a loss solely absorbed by the do-gooder) while spreading out among everyone the very abstract, miniscule-seeming gain of slightly less CO₂ in the atmosphere.

The math of a commons motivation problem is simple and unavoidable. It pays to not care. Hence, almost no one does (in any meaningful way, at least).

It's that selfish math that explains why so many otherwise good people in business routinely make incredibly selfish, destructive decisions—to do little to nothing to cut their business's huge carbon footprints, to pay their lower level employees as little as possible, to keep their money offshore to avoid billions in tax payments, to suck up as much water from dying rivers and aquifers as they can, to worry little about the illness and death caused by the toxic chemicals they've created. Why care about the bigger problems you're feeding into if caring will only cost you more money while giving you no tangible benefit?

Commons motivation problems aren't just the tough task of losing weight. At least when you lose weight *you* directly gain from it. To fix a commons motivation problem you have to motivate everyone not only to fight the long fight to turn around entrenched bad behavior, but also to do so for what is most likely a personal loss. That's quite a tall order.

GCM Problems

But...you want a challenge, you say? You want to make the commons motivation problem *even harder* to solve? Well, for one last level up in difficulty, try adding more people. With commons problems, the more people the more selfish the math. Imagine you're one of just two herdsmen on the commons. Add another cow to your herd and you'll reap a full half of the loss from overgrazing. Not great. That loss might even convince you to hold back. Up it to ten herdsmen on the commons, though, and now you still get the whole gain of one new cow but only absorb a tenth of the overgrazing loss. That's a much more enticing deal. The more people involved, the lower the cost each individual faces for being selfish.

Simultaneously, making a pact to cooperate becomes all the harder with more people due to inevitable trust issues. Let's say you and I make a pact to put no more than ten cows per day on the commons. Since it's just the two of us then I can probably trust you, if only because I can look you in the eye when we shake hands and I can watch your herd from next door. But what about when there are ten herdsmen, a hundred, or even a thousand? How can I trust so many others not to cheat? And if they're going to cheat...then why shouldn't I, too?

Basically the more people involved, the less any of them will want to work together towards a common good. Take this progression to its logical conclusion and the toughest commons problem is the one that involves the maximum number of people—all seven billion. That's seven billion people who face almost zero individual loss from being selfish and who have almost zero trust in one another. To solve such an impossible problem as global warming, that's seven billion people you'll have to keep extra motivated to all go against what they naturally, quite strongly want to do. Hence, the *global commons motivation* (GCM) problem is arguably the hardest problem humanity has ever faced.

It should therefore be of little surprise that that slew of thorny problems that we consistently see blowing up in the news these days—corporate tax evasion, water shortages, outsourced jobs, inhumane working conditions, antibiotic resistance, non-biodegradable waste accumulation, toxic chemical exposure, and the biggest two, global warming and income inequality—are all GCM problems.

How to Stop the Unstoppable

So, again, what's to be done? It sure sounds like a good defeated shoulder shrug is the best option on the table.

But as hard as any motivation problem is to solve—GCM problems included—the key is really quite simple. *Find those who have the power to fix the problem and then give them a strong, consistent motivation to do so.*

Think of what human drive and ingenuity have accomplished when sufficiently motivated to do so. Domesticated crops, controlled fire, spoken and written languages, climate-controlled homes,

electricity, and magical machines that can accomplish almost anything we set them to do. We can now fly in hours what once took thousands of years of migration to traverse. We can now access all of historical thought on a pocket-sized device. Such accomplishments are mind-blowing. Shifting to renewable energy sources and paying everyone decent wages should be nothing by comparison. All we have to do to squash problems like climate change and income inequality is to motivate people in the right direction.

So why have we fallen so flat against GCM problems? Minimum bar laws, our main line of attack against corporate irresponsibility for over a century, aren't fixing GCM problems because they weren't designed to do so. They curb excessive bad behavior and thus solve baseline problems. They don't motivate companies to wipe out that bad behavior all together and thus don't solve motivation problems. Upgrade those to global commons motivation problems—the most entrenched, difficult motivation problems humanity has ever faced—and these laws go from ill-suited to hopelessly outmatched. And just as our current minimum bar laws have failed us, so too will newer versions, no matter how many such laws we pass or how strict we make them. Pesticide tolerances will never keep people from getting sick from pesticides. Raising the minimum wage will never wipe out income inequality. A carbon tax will never stamp out global warming.

In recent decades, other attempts to tackle GCM problems have arisen outside of the traditional minimum bar law: watchdog websites like Dow Jones Sustainability Index, phone apps like Good Guide, and other product labels like USDA Organic and Fair Trade. While these *voluntary transparency programs* have novel strengths, they also still have critical weaknesses (which we'll discuss in greater depth later). Just like minimum bar laws, they fall far short because they don't give companies the strong motivation needed to beat the selfish math of the GCM problem.

The only option on the table that can seriously address our motivation problems is Corporate Responsibility Rankings. CR Rankings would give companies that strong motivation needed to consistently work toward being more socially responsible. That consistent improvement would in turn put us on the unprecedented path to wiping out a wide slew of GCM problems.

If we are to fully appreciate the critical need for Corporate Responsibility Rankings, we must first fully appreciate a.) the failure of all other approaches to motivate businesses to improve and b.) how CR Rankings would be different. So let's take a closer look. Minimum bar laws and voluntary transparency programs tend to fail to motivate businesses to improve in predictable ways. That is, they share one or more of five key flaws: being *absolute*, *pass/fail*, *localized*, *voluntary*, and *specific*. These are the flaws of motivation that doom such well-intentioned attempts to fail.

Why Minimum Bar Laws Fail

1. Absolute vs. Relative

For now let's stick with minimum bar laws (we'll get to voluntary transparency programs later). The first flaw of the MBL is that it's almost always *absolute*. This means that companies are judged by how they compare to a minimum bar, not by how they compare to each other. A state math exam is absolute. It judges a class of students by how many of them can get a minimum number of algebra and geometry questions right. Basketball teams, on the other hand, are judged *relatively*. They are, in other words, compared to each other. There is no set level of basketball performance that makes a team "good," like shot percentage or how high they can jump. Instead, being good means winning more than the other teams in the league.



Daniel Hughes/Wikimedia Commons

So what's the problem with being absolute? Well, to understand, let's first look to how a free market works, which is inherently *relative* rather than absolute. In other words, in the capitalistic marketplace we judge the quality and cost of a product by how they compare with the quality and cost of similar products. This TV looks okay, but a rival model costs less, has a clearer picture, and is several inches wider. Easy choice. We don't, that is, judge a television by some arbitrary, absolute standard set by, say, a government. Imagine if Congress had decided how big, expensive, and technologically advanced TVs needed to be back when they first hit the market. They would have been required to be bulky boxes with tiny black and white screens and ten thousand dollar price tags. Even worse, TVs would have stayed that way until Congress got past its typically endless bickering and raised the standard.

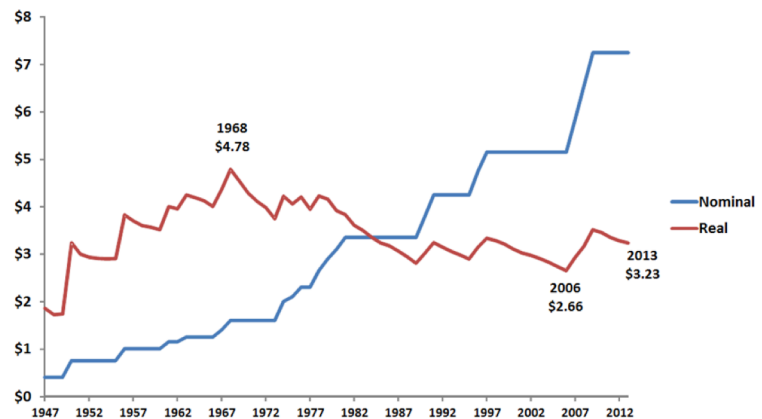
This idea is clearly absurd.

However, real absolute standards suffer the same problem of not keeping up with a changing world.

The minimum wage, for example, is always steadily falling behind inflation and the rising costs of living. Note in the graph on the right how every time Congress raises the minimum wage its real value (in red) slants back down again until the next legislative bump. Because of such slants, its overall value has actually been steadily declining since the late 1960's (a 33.2% percent drop, to

be specific).^{19,20} Making this drop in value even more ridiculous, it took place while the inflation-adjusted GDP created by the average US worker doubled.^{21,22} Our workers are twice as valuable yet somehow paid less. Clearly the minimum wage hasn't kept up with economic reality at all.

U.S. Federal Minimum Wage 1947-2013



Source Data: Department of Labor, Federal Reserve Economic Database (FRED)
Real rate in 1984 dollars

What's more, absolute minimum bar standards tend to be pretty arbitrarily set in the first place and therefore tend to be even more insufficient to address systemic problems. Why set the federal minimum wage at \$7.25 an hour, for example? Few economists would argue that working full-time at for \$7.25 an hour is enough to support a family most anywhere in the United States. The \$7.25 minimum wage, like most absolute standards, seems much less motivated by what makes economic sense than by what politicians thought would pass in Congress at the time.

Because they're pretty arbitrarily set and easily become stuck in time, absolute standards don't motivate companies to improve much at all. Just like an absolute standard of boxy, expensive TVs would have failed to push TV makers to make better TVs, the minimum wage has failed to encourage businesses to pay their workers much better.

The Never-Ending Competition of Relative

CR Rankings, on the other hand, would all be relative. There would be no set standard of how well a company should pay its workers. Instead, a company's pay would be judged by how it compares to the pay of all other companies in the market.

Why does this difference matter? Well, when judged relatively companies constantly fight to outdo each other. Think back to those TVs from before. Just like in any industry today, TV companies had to fight for sales from the get-go in the 1940's. That pressure led to a constant stream of innovations, such as cable TV in 1948, remote controls in 1950, color TV in 1953, wireless remote controls in 1956, taped broadcasting in 1956, signal sent by satellite in 1962, plasma display monitors

in 1964, VHS recording in 1976, home theater surround sound in 1982, widescreen TV in 1993, flat screen TVs in 1995, DVD players in 1996, high definition broadcasts in 1996, and the DVR in 1999, just to name a few. All of these innovations and more took place while TV screens and resolutions grew tens of times larger, and yet while the average inflation-adjusted price of a television simultaneously dropped just as precipitously. Think about that. A product that became arguably hundreds of times better became drastically *less* expensive, not the other way around. Living in a capitalist world, we're so used to such dramatic transformations that they almost seem banal, but really the evolution of the TV is nearly miraculous.

And what caused this miraculous transformation? Every day for the last seventy years, TV companies have had to fight tooth and nail to beat out their competitors, all because when you the customer walk into a store to buy a TV, you compare the available TVs and pick the best one. Because their products are judged *relatively*, TV makers can never rest on their laurels. If one company slacks off and stops innovating, its rival will get ahead with a better and cheaper product and start beating the slacker for sales. A relative market creates such constant competition, which consequently leads to constant improvement.

Now imagine how the market would work with Corporate Responsibility Rankings. Customers would still compare TVs based on quality and price, but now also based on their CRR. Higher rankings would inevitably attract more customers, forcing companies to find ways to boost their rankings and beat out competitors. Less plastic wrap packaging could be a start for one business, followed by small raises for lower level employees. The next year rankings competition heats up, leading to bigger raises and new, regular donations to the local food bank. Corporate headquarters might even decide to take last year's surplus in the R&D department and plug it into research for a new biodegradable plastic packaging material. Bit by bit such improvements would build up, and just like with the television, many of our huge intractable problems we've been facing could see miraculous transformations over the years.

In other words, because they're relative, CR Rankings would push companies to constantly strive to do better and not stagnate along with arbitrary, stuck-in-time absolute regulations.

2. Pass/Fail vs. Incremental

The second major flaw of minimum bar laws is that they are almost always *pass/fail*. In a pass/fail system, you pass when above a minimum standard and fail when below it. A driver's license test decides whether you can drive, and a bouncer decides whether to let you into the club. For both, you either pass or fail. There is no middle ground. An *incremental* system, on the other hand, has many levels of success. School grading, for example, has quite a few number and letter grades possible.



Jason T. Poplin/Wikimedia Commons

Pass/fail systems have their place, of course. Beyond driver's licenses and getting into clubs, pesticide restrictions keep people from dying of overdose, and overtime restrictions keep most of us from working marathon hours. OSHA's 25-parts-per-million limit on methylene chloride prevents most unnecessary deaths among bathroom refinishers. Those are great achievements. For such baseline problems, pass/fail regulations work just fine.

However, pass/fail systems fall far short with motivation problems for a pretty simple reason: they encourage you to just barely pass.

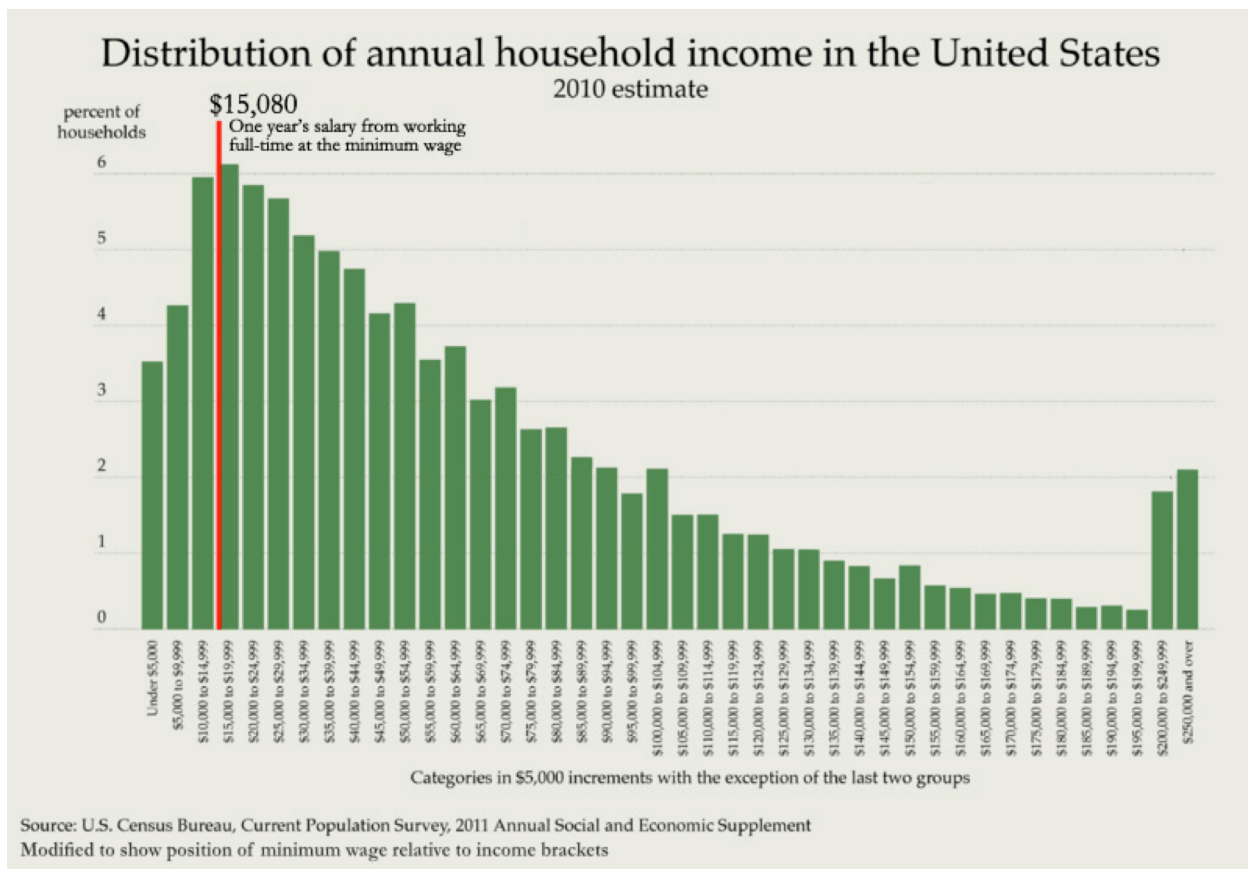
Aiming To Just Barely Pass

Imagine if tomorrow all schools changed from the incremental system of letter grades to pass/fail instead. No A's, B's, C's, D's, or F's anymore, much less the plusses and minuses. Just pass or fail. What do you think would happen? How many students do you honestly think would keep diligently studying, taking notes, and sweating over the perfection of their essays once they knew they had done just enough to pass? You get the idea. It's obvious that at that point most would toss the books aside and go straight for the TV.

Our regulatory system for businesses, meanwhile, is almost entirely composed of pass/fail measures: pesticide tolerances, the minimum wage, overtime pay, income taxes, CO₂ emissions limits, ozone standards, CAFE standards, etc. Why, then, should we expect our businesses to strive to improve any more than students in a pass/fail class? In pretty much every regard, each company's motivation

is for their labor and environmental practices to just barely pass. Doing any more—by using fewer pesticides, by paying their workers more, by installing solar panels on their roofs—will actively hurt businesses by costing them more money. That will in turn drive up the price of their products and then make them vulnerable to defeat by their rivals. If your clothing store gives raises to the clerks, all the customer is going to see is the higher price tag (so it's likely she'll go buy that new shirt somewhere else). Thus, pass/fail regulations tend to create a race to the bottom, with businesses fighting to do less than (or just as little as) their competitors, as can be seen with the compliance of most corporations with most labor and environmental laws.

Take the minimum wage. An employee working full-time at the US minimum wage in 2017 makes \$15,080 a year.²³ Notice how, in the graph below, income in the United States clusters just above that minimum wage mark. This is pretty typical for any country with a minimum wage.



Or take CAFE Standards. CAFE (Corporate Average Fuel Economy) refers to the average fuel efficiency of all cars sold by a particular car manufacturer. In the US, each car company must meet a minimum pass/fail standard for fuel efficiency each year or else pay fines. From their beginning in 1978 up to 2013, CAFE Standards slowly rose from 18 to 33.5 mpg for passenger cars. During those 36 years, the actual industry-wide CAFE consistently just barely passed, hovering an average 2.04 mpg above each year's standards.^{24,25} In fact, as evidence of how just barely passing these results are, the EPA runs its own more rigorous tests of fuel economy every year, tests which include more

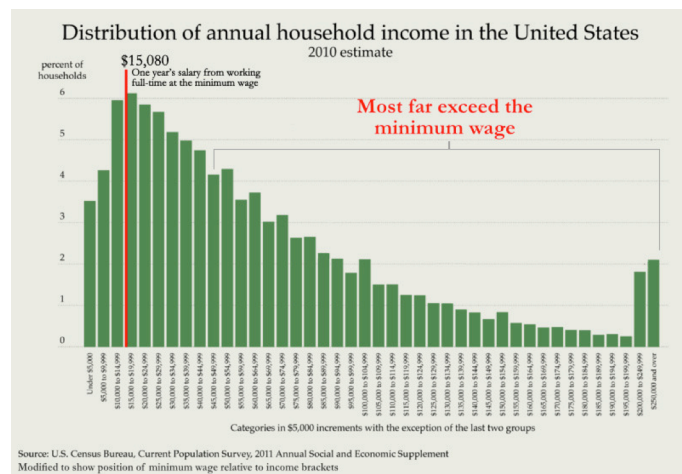
realistic driving conditions like cold weather, more aggressive gas pedal accelerations, and use of air conditioning in the test car. Using those slightly adjusted numbers, the average fuel economy of all passenger cars sold in the US has only ever passed the CAFE standard once in 1980. Every other year they have fallen short.^{26,27}

So if pass/fail laws only encourage companies to just barely pass, what happens when we push such laws to fix our motivation problems? Unsurprisingly, not much. From the time CAFE Standards passed in Congress to the year when they had become nearly twice as strict (1975–2013), gasoline consumption did drop a bit per person in the US...but gasoline use still grew a sizeable 21.89% overall (thanks to population growth).^{28,29} Meanwhile, petroleum use for transportation—which includes gasoline but also other oil-based fuels like diesel and jet fuel—actually *increased* 1.27% per person in that same span, and ballooned by 48.27% overall.^{30,31,32} Whatever the impact CAFE Standards have had on oil consumption, it's clear that that impact is not nearly enough even if our goal is just to somewhat slow down global warming, much less completely eliminate it.

And what about the minimum wage? Since the US minimum wage was instituted in 1938 and has been raised twenty-two times since, pretty much every major index of income inequality shows it to have grown here. Whatever the benefits of the minimum wage, it is clearly an insufficient tool to attack income inequality.

Now, to be fair, the supporter of pass/fail measures would likely bring up two points to defend them. The first is that, even though those subject to pass/fail measures often cluster just above the passing mark, often there are plenty that exceed the mark comfortably. Let's look back at the minimum wage and the graph of US income distribution from above.

Although pay clusters just above the minimum wage, the vast majority of workers still make more than the minimum. This is entirely true. However, such situations still reveal the inherent weakness of these pass/fail bars because even when companies safely exceed these bars, the bars then exert *all the less pressure* on those companies to improve. The minimum wage may force a company to pay more to the workers at the very bottom of the pay scale, but what about workers making \$20 an hour or \$30 an hour? The law does just about nothing to pressure companies to raise the pay of such employees. Once again we see that pass/fail regulations let companies get complacent and stop improving.



The same goes for companies below a *high* minimum bar. USDA Organic, for instance, is only awarded to the elite food makers that use 95% or more pesticide-free ingredients. For any food maker well below this standard, what good would it do to try to get a little better by dropping your

pesticide use by, say, a couple percent? You aren't going to get the USDA seal either way, so forget it. Whether with a low or high minimum bar, the only companies motivated to get better are those right around the bar. The rest have little motivation to improve.

The second likely defense of the pass/fail regulation is that if companies stop improving under such a regulation, then we can just raise the bar to pass. The Obama Administration recently raised CAFE Standards quite a bit, for example. This isn't the worst option but it isn't all that great either. We address this issue much more in **But...Isn't It Impossible?**, but for now suffice it to say that pass/fail regulations tend to be raised quite sluggishly thanks to the sluggish governments that run them. We've already seen how the minimum wage gets raised so infrequently that it has fallen behind the slow rise of inflation. As far as CAFE Standards go, before the Obama Administration raised them in 2011 they had sat unchanged for *twenty years*. If that's the reality of how often political gridlock will allow pass/fail regulations to go up, then it sounds like a pretty poor option to rely on. And no matter what, even when pass/fail regulations do get raised more regularly, the pace of improvement it encourages still pales in comparison to the swift change seen under incremental systems.

When No Grade Is Ever Good Enough

With no one passing grade, incremental systems encourage bit-by-bit improvements. Remember those lazy students from the pass/fail class? Give them back the full range of scores from 0 to 100 and you'll see a constant struggle to learn the formulas, finish the homework, and master every concept so as to bump that grade a little bit up and then a little bit more. The vast majority of our schools use an incremental grading system and for a very good reason: to much better motivate our students.

It's the same with those television makers from before. There's no pass/fail line for what makes a good TV—it can pretty much always be made better. A company trying to outdo its rivals might streamline its remote control, drop the price a bit, and make the screen a bit bigger. But why not expand the screen even more and add an internet connection too? Then it'll sell even better. Because each little positive change bumps up sales a little bit, incremental systems like the TV market encourage almost limitless improvements. Such improvements can then build into miraculous transformations, like turning a kindergartener into a college graduate or the small, black and white box into the giant, flat screen TV.

Corporate Responsibility Rankings would be similarly incremental. By ranging from 0 to 10 and going down to the tenths place, CR Rankings would effectively give 101 possible grades for each company. While still simple and easy-to-understand, this incremental system would encourage businesses to always strive to do better with bit-by-bit improvement, much like students in a letter-grade system. And those improvements would build up. With pass/fail CAFE Standards, General Motors only has the incentive to barely boost the Cadillac's miles per gallon efficiency until it just passes that year's standard. But with incremental CR Rankings, it would have the incentive to continually boost that efficiency more and more for better and better rankings until the efficiency is

as high as the company's engineers could push it. With the pass/fail minimum wage, McDonalds only has the incentive to pay its cooks and cashiers at or near \$7.25. But with CR Rankings, it would have the incentive to pay them \$9, then \$12, then \$15, and then even higher. Each bump would get them better rankings, which would in turn help get them more customers.

So where pass/fail regulations encourage companies to just barely pass, the incremental CRR would encourage companies to continuously make bit-by-bit improvements to be more responsible. And just like with students and TVs, those bit-by-bit improvements could build into miraculous transformations, only these transformations would bring fleets of super-efficient vehicles and millions of well-paying restaurant jobs.

3. Localized vs. Universal

Any new system that fixes these first two problems, though, would still be deeply flawed if it did not address the third and arguably most difficult problem with minimum bar laws: that they are *localized*. They are, in other words, stuck in one place, in one country, state, or even city. The EPA's regulation of lead paint, for instance, stops at the nation's borders.



A Foxconn electronics factory in Shenzhen, China, where workers reportedly earn less than US \$20 a day.

Steve Jurvetson/Wikimedia Commons

And yet in an ever-globalizing economy, corporations are not stuck in one place. As communication and transportation technologies continue to improve, companies can more easily than ever move some or even all of their operations to another state or country, depending on the economic winds of the season. Headquarters in New York, finances in Switzerland, and manufacturing in India, Malaysia, and the Dominican Republic. Sound familiar? Such multinational corporations (MNCs) make up an ever-growing portion of our economy. While still tallying less than 1% of the actual number of US companies, MNCs have accounted for 31% of overall gains in US GDP since 1990 and now make up a whopping half of all US exports.³³ And with multinationals dominating the global economy, jobs move more easily than ever. An estimated half-million jobs migrate every year from the US to China alone.³⁴

Now, there's no doubt that globalization partly stems from benign economic needs. Businesses may do so to boost sales in foreign countries or to gain other strengths such countries have to offer, like better IT resources, a stronger manufacturing infrastructure, more plentiful raw materials, or more plentiful workers.

But there's also little doubt that the number one reason to globalize is that it's cheaper. Why so cheap? Because companies can spend less on wages, taxes, and environmentally sound practices wherever regulatory laws are laxer. Pretty simple. Note how so many American companies like Apple and Verizon keep their money offshore so as to pay next to nothing in taxes. Or how the garment industry has shifted en masse to Bangladesh, where the minimum wage is a paltry \$19 *a month*^{35,36} and workplace safety standards are almost nonexistent.

Or for a perhaps even uglier consequence of the globalization profit motive, look to Baotou, China. Most of the world's rare earth metals—metals needed for electronics like smart phones and flat screen TVs—are now processed in Baotou. Why Baotou? Because processing rare earth metals leaves behind one heck of a cocktail of toxic chemicals, and the Chinese government does almost nothing to regulate what's done with them. It's hard to imagine a cheaper disposal method: pipes pour such leftover chemicals straight into a massive manmade lake of black radioactive sludge on the outskirts of the city, a lake constantly growing and already so large that it's easily visible on Google Maps.³⁷ Reports have begun to filter out of sheep and crops dying out nearby³⁸ as well as the locals having their teeth fall out and hair turn prematurely white.³⁹ Official studies confirmed that nearby residents have especially high rates of cancer, skin and respiratory diseases, and osteoporosis, but the Chinese government has since stopped publishing the results of toxicity tests to squelch any bad press.⁴⁰

So what do we have to thank for these shady corporate practices? Localized laws. Because most of our regulatory laws are localized, our increasingly mobile companies can now just pick up and move to wherever the local laws are the laxest (and therefore cheapest to obey). For the tax avoidance game, that's places like Ireland and Cyprus. For textiles, that's Bangladesh. For rare earth metals, that's China. And the more companies can move to avoid localized laws, the more ineffective those laws become at stopping our global problems. Someone gets paid poorly, just somewhere else. Fossil fuels still get burned, just somewhere else. Stopping GCM problems therefore becomes a

game of global whack-a-mole. Make the laws stricter in one place, and then the problem just pops up somewhere else.

What's more, this law avoidance makes it all the harder to enact new minimum bar laws or make the current ones stricter. Who, after all, wants to pass stricter laws if doing so might scare away more companies (and their jobs) to another country? This is a fair concern. It's largely why politicians of the last few decades have mostly run and hid under the covers whenever anyone has suggested raising the minimum wage, closing corporate tax loopholes, or enacting tough greenhouse gas emissions standards. It's also largely why the governments of countries like China and Bangladesh *want* those antiquated regulatory laws. Businesses flock to them because of their laxer pollution and labor laws, so why fight that huge boost to the economy?

Thus, localized laws feed this race to the bottom and have arguably become the most glaring weakness in our policy approach to fighting GCM problems.

With Universal Laws There's Nowhere to Run to (Baby)

Corporate Responsibility Rankings, though, would be *universal*. A universal law is one that regulates your actions wherever they take place. And the advantage of the universal law is pretty simple. You can no longer avoid that law by going somewhere else.

Imagine, for example, a mother dealing with a teenage son who has gotten some less than impressive grades at school. Her first line of attack is to rule out TV and cell phone use until homework is done each school night. This localized rule sounds pretty good at first, but it's limited to the house and more specifically limited to the parts of the house where she can physically watch him. He plays nice at the dinner table, but who knows what he's doing up in his room and at friends' houses? Another lackluster report card later, she wisely institutes a universal rule instead: from now on his grades will be tied to cell phone and car privileges. The better the grades, the bigger the data plan and more unlimited car use. D's or lower mean the cell phone and car get revoked altogether. Notice it doesn't matter *where* he does his work. He just has to get it all done and done well if he wants to get the things he wants at home. Because of this new universal rule, he should likely be in for some better grades next quarter.

In a similar way, CR Rankings would incorporate the wages a company pays, the pollution it creates, and the taxes it pays, wherever it may do so. It'll be cheaper to keep your money offshore in a low-tax haven, sure, but your CR Community Ranking will tank because of it. The same goes for that Bangladesh sweatshop labor you employ and the toxic pollution you're dumping in that Chinese reservoir. Avoid local laws to lower your bills, great, but you're also going to lower your CR Rankings (which in turn means fewer customers). Consequently, in order for businesses to keep their rankings up and keep customers happy, they would have to *actually stop* such irresponsible behavior altogether, not just move it somewhere else to avoid stiffer localized laws. This change would in effect end that globalization whack-a-mole game and allow us to finally start fixing GCM problems, not just appear to be fixing them.

Now, as good as that sounds, some will no doubt object here. But you can't make a universal law without all countries agreeing to pass that same law! Right?

Well, not necessarily. While ideally a universal law would be adopted and enforced by all nations (and CRR is no exception), it doesn't have to be. Here's how it works. Localized laws deal solely with what's done within that jurisdiction. You must pay your workers X dollars when working in this state. You must filter your smokestack emissions to X degree while generating power in this country, etc. A universal law, on the other hand, says that in order to do something here in this jurisdiction, *you must first do X wherever you are coming from*. In order for a company to sell its goods in the US (and any other country that adopts CR Rankings), the CRR system would require that company to first provide all required data, such as where it gets its resources and how much it's paying its employees, wherever it's doing so.

If you're suspicious of how this would work, we actually already have some universal laws on the books. CAFE standards are a great example. In order to sell its cars in the United States, a company must first abide by the minimum fuel efficiency required here or else face fines. Note that the law doesn't state that all cars *made* in the US have to abide by the standards, but instead all cars *sold* in the US. That's the key difference. The former would be a classic localized law; the latter is universal. So instead of just forcing American car manufacturers like Ford and General Motors to abide by the rule, this setup means all carmakers around the world who want to sell cars in the US have to abide by it, from Toyota to Volkswagen. Because of this setup, CAFE standards affect the fuel economy of cars made pretty much everywhere, not just those made here in the US. (Therefore, if it weren't for their inherent weaknesses from being absolute and pass/fail, CAFE Standards might have been a model law in the era of globalization.)

And it works. Today there are many stricter fuel economy laws on the books elsewhere in the world, but in the 1970's and 80's CAFE standards were the only sheriff in town. And even in those first years, fuel efficiency from foreign carmakers jumped nearly as much as it did for domestic carmakers (imports went up 5.1 mpg in the first five years of CAFE versus 5.7 mpg for American-made cars).⁴¹

It's All About Leverage

Of course, in order to make such a universal law work—a law that hasn't actually been passed in the rest of the world's countries—there's a bit of a catch. It needs quite a bit of leverage.

See, if carmakers didn't really care about selling cars in the US then they might turn up their noses at CAFE standards and say, well, thanks but no thanks. If you're going to pass a law like that then we'll just sell our inefficient cars somewhere else. It's the same idea with that slacking teenager's homework rules. If he didn't care about being able to use his phone and car, then he'd probably keep right on slacking. To make these rules work, you need leverage. You need to offer something that the one behaving badly will really want.

But that's the beauty of making universal laws like CAFE Standards in a high-consumption country like the US (i.e. a place where people buy a ton of stuff). The US car market is the second biggest in the world. Any decently large car company would be crazy to avoid the US market, so it more or less has to abide by such rules if it wants to sell cars and stay competitive. Thus, to get all of those American car sales, they have to put up with American rules for fuel efficiency. So long as a universal law has such leverage, it only needs to be passed in one country to have a huge global impact.



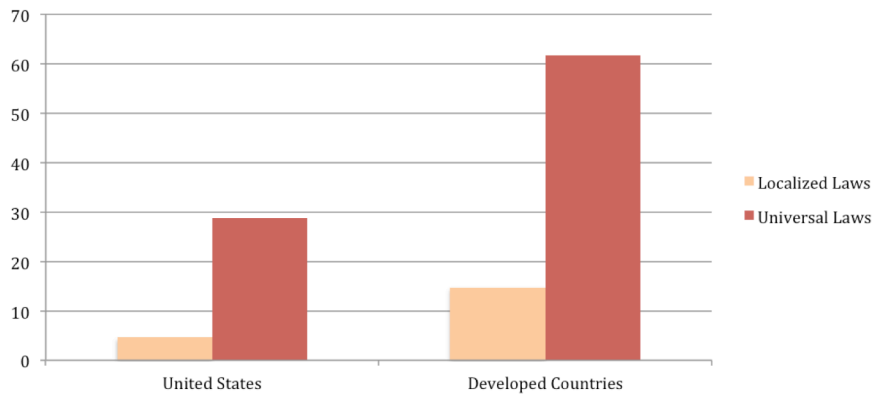
Before dawn on Black Friday, a crowd stretches all the way across the front of this Target store.
djLicious/Flickr

But while on the topic, there's an even more important point to make about leverage. Universal laws like CR Rankings don't just have enough leverage to work—they should actually have *much more leverage* than localized laws do, and accordingly have much more power to effect change. The reason is that universal laws target consumption, not work.

Let's break that down. The classic localized law targets *work*. That is to say, laws like the minimum wage and the Clean Air Act regulate the work being done at offices and factories to make sure that this work is done responsibly. This would seem to make good sense. If you want to stop undesirable behaviors like low pay and pollution, aim for them directly at the source. The problem with this approach, however, is that the affluent nations more likely to pass such stricter localized laws don't constitute that much of the global workforce. And because these stricter laws exist where less work is being done, they therefore aren't able to regulate that much of the wages being paid and the pollution being produced. The United States, for example, hosts only 4.61% of the world's workforce.^{42,43} That isn't very much. So no matter how strict we make our localized laws, they are inherently limited in how much corporate irresponsibility they can stop.

On the other hand, the US tallies up a whopping 28.72% of global consumption.^{44,45} That is, we buy over a fourth of all stuff sold in the world. That may be a headache for those running our landfills, but it's great for universal laws like CAFE standards and CR Rankings that target our consumption. By regulating all of those sales, such laws affect roughly a fourth of the world's pollution, wages, and other corporate behavior. That gives universal laws roughly five times the leverage of localized laws here in the US. Meanwhile, that same leverage gap extends across other more affluent countries. If we lump together what are often called the "developed nations" (the European Union plus the United States, Iceland, Norway, Switzerland, Canada, Australia, Israel, Japan, and New Zealand),

Maximum Percent of Global Workforce Affected



these countries combine to form just 14.7% of the global workforce^{46,47} while amassing 61.73% of global consumption.^{48,49} That's still over four times more buying than working.

The takeaway? When trying to reduce corporate irresponsibility in an affluent nation like the US,

localized laws (e.g. most of our labor and environmental laws) operate from a place of weakness. Universal laws, on the other hand, operate from a place of much greater strength.

If our goal is to attack GCM problems then the difference is pretty clear. Localized laws, instead of actually stopping the bad behavior that feeds these problems, just tend to scare it away to somewhere else. Universal laws stop that bad behavior, no matter where it tries to hide. Plus, because universal laws focus on consumption instead of work, they regulate much more of that bad behavior than localized laws do, even if the law is only passed in one country. Universal laws are therefore the much stronger, more reliable choice to get the job done. And because CR Rankings are universal, they would regulate much more of that corporate bad behavior that feeds GCM problems than localized laws like the minimum wage and Clean Air Act do.

The Motivation to Improve Scorecard

Now that we've gotten through the first three of five flaws to our current approach, take a look at the following table to see how all of the minimum bar laws we've discussed so far stack up.

<u>Minimum Bar Laws</u>	<u>Relative</u>	<u>Incremental</u>	<u>Universal</u>
Minimum Wage	X	X	X
Overtime Pay	X	X	X
Environmental regulations through Clean Air and Water Acts	X	X	X
OSHA Regulations	X	X	X
Pesticide Tolerances	X	X	✓
CAFE Standards	X	~	✓
Ground level ozone limits	X	X	X
Income Taxes	X	~	X
Plastic bag bans	X	X	X
<i>Corporate Responsibility Rankings</i>	✓	✓	✓

Obviously, the results don't look too good for minimum bar laws. Because such laws are *absolute*, they stay stuck in time at arbitrary, usually insufficient levels. What's more, because minimum bar laws are usually *pass/fail*, businesses have no incentive to do any better once above such bars. And because minimum bar laws are *localized*, the only real

incentive businesses have is to do even less than the minimum bars require by moving somewhere else in the world and avoiding them completely.

Given how thoroughly our regulatory laws fail to motivate businesses to improve, it's no surprise that they fail to fix the motivation problems that arise largely from corporate irresponsibility. If we are to ever seriously address global warming, income inequality, and so many other seemingly impossible worldwide problems, minimum bar laws will never really do the job, no matter how many we pass nor how strict we make them. To fix these problems we instead need to motivate businesses to constantly improve with a system that is *relative*, *incremental*, and *universal* and Corporate Responsibility Rankings meet all three criteria.

Why Everything Else We're Doing Fails, Too

Of course, we the advocates of CR Rankings definitely aren't the only ones to abandon the minimum bar law and try to find better ways to motivate companies to be more responsible. Since the 1990s, there has been an explosion of alternative options. The US government has begun passing a new breed of environmental laws like USDA Organic and Energy Star, laws that aim more to reward the good companies than to punish the bad. Meanwhile, non-governmental organizations (NGOs) have arguably led the pack, creating a slew of corporate social responsibility (CSR) product labels like Fair Trade Certified and Rainforest Alliance, green building certification systems like

LEED, and CSR ratings systems like the Dow Jones Sustainability Index. To simplify, let's call this new breed of laws and NGOs *voluntary transparency programs*, since they most all aim to foster corporate transparency with companies that voluntarily opt in.



A sampling of the Voluntary Transparency Program product labels that have proliferated in recent years

One main advantage of these approaches is that they tend to be universal. So whereas the US minimum wage does nothing to ensure that the cell phone you buy really benefits the Chinese factory workers who made it, a Fair Trade label can pretty well assure that your banana does benefit the Brazilian farmers who grew it.

Beyond that, though, these new programs sadly still fall quite short. For starters they tend to be absolute and pass/fail just as much as normal government regulations do. USDA Organic doesn't compare one company to another, and either a

product passes Fairtrade International's standards or it doesn't. Right off the bat these new approaches still give a critical lack of motivation for businesses.

4. Voluntary vs. Mandatory

Arguably even worse, though, is the fact that voluntary transparency programs are almost all *voluntary* (hence the name). No business *has* to don the Rainforest Alliance label or join the Dow Jones Sustainability Index. Instead, it can volunteer to do so if it meets the standards of the particular program (like using 95% or more organic ingredients to get the USDA Organic seal).

On the surface, being voluntary sounds like such a pleasing, nonthreatening word. It sounds much better, in fact, than the alternative: a *mandatory* system, wherein everyone has to participate. (Your natural reaction to hearing the word "mandatory" is probably to shrink back and think, eesh, that can't be good.) But voluntary systems share a simple, somewhat obvious problem. If you're trying to get people to volunteer to do something they don't want to do, then hardly anyone will actually volunteer to do it. Ask people to voluntarily pet puppies, drink free beer, and get paid to boot, and you'll never once have trouble finding willing participants. But what about when you want volunteers to dig a ditch in the hot sun? Or take a 10% pay cut? Or...spend big money to switch over to greener wind power? Good luck with that (you're gonna need it). Almost no one volunteers to do things they don't naturally want to do. It's pretty simple.

Which brings us back to GCM problems. Remember that fixing GCM problems requires everyone to do exactly that, to do the hard things they don't naturally want to do. So why should we ever expect a voluntary system to get people to make those needed sacrifices? You want me to give my employees more money and pay even more to lower my carbon footprint...but this is totally up to me? Okay, no thanks then! Trying to fix GCM problems with a voluntary system is an almost perfect recipe for failure.

When We Need Everyone To Volunteer

But wait a second, you might say. Aren't there plenty of voluntary systems out there that ask people to make sacrifices...and actually succeed in doing so? National Public Radio, for example, gets most of its funding from voluntary donors. Joining the US military means years of hardship and possibly death, and yet for decades it has filled its rolls solely with volunteers (enough volunteers to make it by far the largest army in the world, no less). Maybe voluntary isn't so bad after all. Could voluntary CSR product labels, apps, and watchdog websites work just as well?

Unfortunately no. If we examine the voluntary systems that require sacrifice and yet actually succeed, there is an obvious trend. These voluntary systems succeed when only *some* of the whole group is needed to volunteer. Despite the massive size of the US military, less than 0.5% of the overall population actually serves in it.⁵⁰ And when it comes to public radio, listen to the frustrated desperation of any pledge drive and it's pretty clear that the vast majority of listeners don't donate.



Sabrina Johnson/U.S. Air Force

But, luckily for them, that low level of volunteerism is really all that NPR and the military need to work. If *everyone* had to voluntarily join the military or donate to NPR for them to work, then, well, we could forget about seeing camouflage uniforms and hearing Ira Glass’s voice on a regular basis.

But remember that the issues like global warming and income inequality that bedevil us are GCM problems. For such a commons problem, we really do need everyone to chip in, not just a kind-hearted few. Why? Well, those few volunteers may generously cut back their use of the common good, but what then? Everyone’s motivation in a commons problem is to be selfish. The less altruistic ones will, at best, shrug their shoulders and do nothing to pitch in. Even worse, some of the non-volunteers will typically then swoop in and use up that newly up-for-grabs portion of the common good that the few volunteers are no longer using. Joe kindly kept his cows from eating too much grass this month, which means—jackpot!—more grass for Jane’s herd to gobble up instead. Therefore, any small gains made by the volunteers are wiped out and nothing really improves.

Take CSR labels, like those of the fair trade movement. Fair trade labels generally ensure that the product was made ethically—with decent pay for workers, no child labor, etc. The makers of Fair Trade Certified (one of the most widespread of such labels) boast that over one billion pounds of coffee have been sold with the label since its inception in 1998,⁵¹ one of the label’s signature achievements thus far. That total sounds pretty impressive, but it only amounts to 0.36% of global coffee bean sales over those years.^{52,53} Fair Trade International, the other of the biggest two fair trade organizations, prides itself on now protecting 1.5 million workers through its labels.⁵⁴ Again, that’s something, a huge boost to those particular workers, but that tally still only amounts to about

0.044% of the global workforce.^{55,56} Seeing the picture? Each of these voluntary product labels only draws a tiny sliver of the overall market. Perhaps the most successful of the voluntary labels is USDA Organic. Since the beginning of the organic seal in 2002, sales have boomed. Organics now make up a whopping 4% of all US food sales.⁵⁷ But in the grand scheme of things 4% is still only a sliver. The vast majority of the food sold in the US still does not qualify for the organic logo.

The issue here is, as usual, one of motivation. If the vast majority of companies don't participate in these voluntary programs, then what motivation do these programs give most companies to be any more responsible? The answer is pretty much none. Companies that opt out of voluntary programs get no punishment for doing so. (Think about it. How can you punish a business—with, say, fines or a product label that criticizes it—when that business can just un-volunteer to avoid the punishment?)

Therefore, when we look to these voluntary programs to help fix GCM problems, unsurprisingly not much happens. Despite fair trade labels, child labor and awful wages are still endemic on coffee plantations worldwide. Despite the success of the USDA Organic's first decade of existence, global pesticide sales have continued to boom, up an estimated 45.2% during that span (from 2001 to 2012)^{58,59} and projected to grow another 76% by 2019.⁶⁰

Volunteering to Stop Global Warming

For perhaps the biggest, most frustrating failure of a voluntary system, we have the world's response to global warming. Since 1995, the United Nations has hosted twenty-three massive global conferences on climate change with delegates from virtually every world nation present. (The latest few were in Paris, Marrakech, and Bonn, as you may have seen in the news.) The major achievement of these conferences up until Paris has been forging the Kyoto Protocol in 1997 and updating it multiple times since. The treaty commits virtually the entire world (currently 192 of the world's 206 sovereign states) to pledge to reduce greenhouse gas (GHG) production.

On the surface that sounds like a major achievement. A hundred and ninety-two countries all agreed to anything? That's huge! But, alas, the Kyoto Protocol is completely voluntary. Each country can more or less do or not do whatever it wants to try to curb its GHG emissions with no real threat of punishment if it comes up short. No fines, no tariffs, no loss of trade access, etc. Some countries set specific "binding" targets within the treaty (such as, "we pledge to reduce carbon emissions 15% by 2020"), but, if they don't achieve their targets by the deadline, all the "binding" part makes them to do is then create new targets for a later deadline. In terms of punishments, that's it. Kyoto's approach is like trying to get a smoker to cut her pack-a-day routine in half just by having her sign a pledge to do so. If that isn't weak enough, with no actual punishments or rewards to motivate her, the only consequence if she fails to cut down is she then has to sign a new pledge to cut her smoking even more, down to a fourth of a pack a day. If she couldn't achieve the first target, though, what good will it do to have her just make up another target (much less a stricter one)? Any smoker would tell you that plan isn't gonna cut it. And yet with Kyoto, we put the fate of the world's ecosystems in the hands of similarly weak enforcement mechanisms.

So after two decades, how has the climate pact fared? To its credit, some altruistic volunteers have stepped forward and legitimately cut their greenhouse gas emissions (notably many members of the European Union). However, most of the rest of the world's countries have continued to churn out CO₂ as usual, and an opportunistic few (notably China) have drastically *increased* their CO₂ production, largely by gobbling up all of the dirty manufacturing work that fled Europe during that span. In other words, Kyoto has followed the classic script of a voluntary program trying (and failing) to fix a commons problem. For such a voluntary system to work we would need everyone to step up and make big sacrifices, but there's no motivation for the more selfish ones at the bottom end of the spectrum—i.e. the bad boys—to shape up. So those bad boys haven't. Of the ten largest GHG producing countries in 2010—countries which all together account for 62.2% of global GHG production⁶¹—only one has met its Kyoto reduction targets (Germany).⁶² All nine others have either set targets initially then backed out (Russia and Japan),⁶³ never set targets at all (China, India, Brazil, Indonesia, and Iran), completely left the treaty altogether (Canada), or never ratified the treaty in the first place (United States).⁶⁴ Hence, the end result shouldn't be surprising. Since these global UN conferences began in 1995, yearly global carbon dioxide production has continued to soar, up over 53% overall since.^{65,66}

Of course, in December 2015 the world came to a new agreement in Paris at COP-21. This time, every country made its own target for GHG reductions, a major improvement over Kyoto (where only 37 of the 192 ratifying countries made reduction targets). But...the agreement is still completely voluntary. And with it come the problems of any voluntary approach. First, no country has to sacrifice more than it cares to. Even though every country has volunteered its own reductions targets this time around, those targets aren't enough. Even if every country meets its Paris target, climate scientists estimate that global temperatures will still increase by another 1.7-2° Celsius by 2100.⁶⁷ That far exceeds the 1° Celsius increase over current temperatures that is widely seen by scientists and governments worldwide as the line we must not cross, as roughly the point at which the damage from global warming will go from merely awful to cataclysmic. And that's only if every country meets its Paris target, a prospect that is itself almost laughably unrealistic. Just like Kyoto, Paris has no rewards for those who follow through and no punishments for countries that fall short. As New York Times columnist David Brooks imagined how economic-mastermind Alexander Hamilton would have put it, it's a system “perfectly designed to ensure cheating.”⁶⁸ And the first cracks have already shown. After historically offering its first GHG reduction target in 2015, China shortly thereafter was forced to admit that its government had lied and the country is burning 17% more coal than it previously reported.⁶⁹ Then there's the United States, which is now poised to withdraw from the Paris Agreement altogether after conservative backlash to the plan. And in November 2017, the New York Times reported that “no major industrialized country is currently on track to fulfill its pledge.”⁷⁰ Déjà vu, anyone?

In short, to fix GCM problems like climate change people must do that which is very much against their own interest, to take one for the team, so to speak. And no voluntary system will ever push people nearly enough to take one for the team.

Making Everyone Pitch In, Not Just The Kindhearted Few

Where voluntary systems fail to fix GCM problems, though, *mandatory* systems do much better. If asking for donations were the government's voluntary option to fund our schools, roads, and police stations, then taxes are the mandatory approach. It's easy to pooh-pooh a mandatory system like taxes, but taxes are extremely effective. No one wants to be taxed, but we collectively realize that it's the only effective way to pay for the things that we all collectively need.

To see some mandatory muscle being flexed, take a look at sanitation grades. Similar to other such initiatives around the country, the New York City health department mandated in July of 2010 that all restaurants post a sanitation grade in their front windows. The city reviews the restaurant's cleanliness then assesses something similar to a school grade, peaking at A but only going down to C. And most



Ryan Farr/Corporate Responsibility Association

importantly the grades are mandatory—any restaurant with an embarrassing C grade to still put it up in the window. It therefore stands to reason that almost any such restaurant would then do everything it could to turn that ship around, improve its cleanliness, and get its grade bumped up so as not to scare away potential customers. And as the FiveThirtyEight blog reported in 2014, the system has been quite effective. Through the first three years of New York's sanitation grade program—a blink of an eye in the normal timeline of public policies—B grades were roughly cut in half and C grades dropped from around 15% of all restaurants to almost 0%.⁷¹

Like taxes and sanitation grades, CR Rankings would be mandatory. Any company that sells its products or services in the United States would have to give the required data to the government and then print the rankings on its products and storefronts. Should CRR be adopted in other countries, the same would go for any businesses looking to sell their goods there, too.

And being mandatory, CR Rankings would operate from a place of much greater strength than voluntary programs. First, it would affect a much wider breadth of businesses. Specifically that's something on the order of twenty-five times more farmers than USDA Organic, eighty times more coffee bean growers than Fair Trade Certified, and at least 650 times more of the world's workers than Fair Trade International.⁷² And just like mandatory sanitation grades, CR Rankings would excel in motivating those on the low end of the performance scale (i.e. those businesses behaving the

most badly) to improve. If the embarrassing C grade is enough to get a restaurant to start regularly scrubbing its counters and floors to perfection, an embarrassing 2.9 Workers ranking would push that same restaurant to give long-awaited raises to its cooks and wait staff. An embarrassing 3.3 Environment ranking could motivate a shipping company to roll out new biodiesel engines and more aerodynamic trucks. And an embarrassing 1.7 Community ranking would encourage a tech company to stop avoiding its taxes with offshore accounts and start donating more of its profits to Habitat for Humanity.

Because it is mandatory, CRR would affect much more of the market than voluntary programs do. And because companies in the lower end of the market couldn't just opt out, they would have to suffer through the embarrassment of low rankings and thus have a painfully strong motivation to improve.

Why Not Just Make an App?

Before we move on from the voluntary vs mandatory debate, we should first discuss the smart phone app. We often get the question: CR Rankings sound great, but why involve the government at all? Why not just make an app that rates companies? An app sounds like a sleek, easy solution, especially compared to the monumental task of getting a major piece of legislation passed in this country. For now let's ignore some of the other glaring weaknesses with just making CRR an app—it would be limited to those with the money for a smart phone, and you'd have to annoyingly dig through your phone for rankings every time you'd want to buy something responsibly. Instead, let's focus on a much bigger weakness. If it were just a phone app, CRR would have to be voluntary.

See, to adequately assess a company's level of responsibility, we have to use quite a bit of data that is currently not made known to the public: how much a business pays all of its employees, what chemicals are used in its products, how much electricity it uses, how much gasoline it burns, how much it recycles, what other companies it uses to ship its products and mop its floors, etc.

Now, let's say we were to abandon the legislative approach. Forget the government. Let's join the trend and just make Corporate Responsibility Rankings a smart phone app. Well, remember that we would still need to get all of that data about companies to adequately assess them. To do so without an act of law that would make companies give that data to the government, though, we'd have to rely on companies to voluntarily step forward and give the data. Just like other CSR product labels and apps, CR Rankings would then become voluntary and would thus be forced to work only with the tiny group of all companies that would want to volunteer. CRR would then inevitably have just as little oomph as other voluntary programs.

What's more, the hidden, extra reason why a voluntary system is inherently flawed is that it pretty much also has to be absolute. Remember how absolute and relative systems work? In a relative system, each company is compared to each other (not to a set standard). However, in order to compare two companies, say Pepsi vs Coke, you need them both to participate. It'd be pretty hard to say if Pepsi has a lower carbon footprint than Coke does if Coke decides, "eh, no thanks" and

doesn't participate in the rankings system. Without Coke's data, we couldn't adequately compare the two companies, a problem that would of course only compound when we go from one company deciding to opt out to the vast majority of all companies doing so. So the only real remaining option to assess Pepsi's carbon footprint (and that of any other volunteering companies) would be to set an absolute standard. And as an absolute standard, the CR Ranking of "good" would suffer the usual problems of an absolute standard, becoming fairly arbitrary and likely also awkwardly stuck in time.

So why not just make an app and skip the government? Because CRR would have to be voluntary and absolute to do so, pretty much guaranteeing that the program would be just as impotent as its predecessors.

5. Specific vs. Comprehensive

The fifth and final flaw in our efforts to solve GCM problems is that they tend to be *specific*. A specific law or NGO program is one that targets one single problem. Child labor laws, for example, target hours worked by children. One problem—that's it. When it comes to the environment, there are now over four hundred different eco-labels in existence,⁷³ stemming in large part from the specific nature of each label. USDA Organic focuses on synthetic pesticide and other harmful chemical use. Carbon Trust labels exclusively deal with carbon footprint. Green-e even more specifically tracks a company's percentage of electricity coming from renewable energy sources. You get the idea.

A *comprehensive* approach, on the other hand, aims to tackle many issues at once. The Clean Air Act, for example, targets *all* air pollutants that someone could create, not just one specific pollutant. The law currently regulates 187 different hazardous air pollutants, to be precise.⁷⁴

Of course, calling specificity a flaw seems counterintuitive. Shouldn't specific approaches be the best? *Shouldn't* we focus our energy on one issue at a time? After all, the more we carefully tailor each law or program to one specific problem, the more effectively we should eliminate that problem. Try to do too many things at once and you'll only do a worse job with each of them. Right...? Yet strangely enough, specific is easily the worse option for several reasons.

Damned With One, Damned With A Ton

The first downfall of the specific approach is that it tends to present a bad choice. One specific program won't accomplish very much. But try to fix that by making more and more specific programs and you'll potentially create something worse: a giant mess of confusion.

Voluntary transparency programs, you'll recall, aim to create more transparency with businesses and thus help consumers make better choices. Buy this box of crackers because it's USDA Organic. Don't buy that air conditioner because it doesn't have the Energy Star seal, etc. Each label adds

transparency, and that's something. But because each one only focuses on one specific thing it doesn't really add all that much transparency.

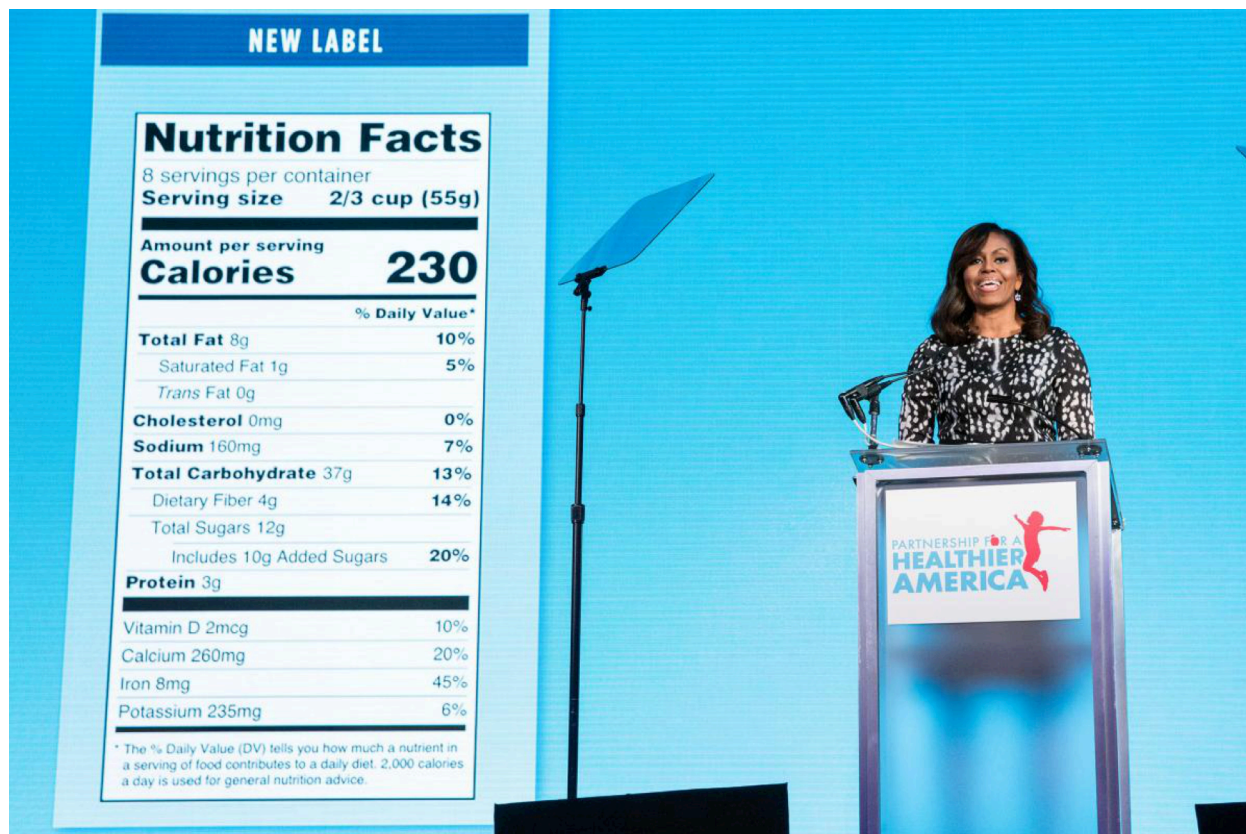
Take USDA Organic. It'll plainly tell you that the milk you're buying was made with no synthetic pesticides. That's great to know. Next time you drink a glass you can rest easy, knowing you're treating your body and the environment that little bit better. But if you really care about the environmental impact of that bottle of milk, the USDA Organic seal is just the beginning. For starters, how much water is used on the farm? What's the farm's carbon footprint, including the gas burned by the tractors and the methane produced by the cows? Were the cows fed antibiotics their whole lives, a practice that helps further the problem of antibiotic resistance? And what about the other social costs of that milk, like, how much the farmhands got paid to make it, how safe their working conditions were, whether any of the money you paid went to charity, etc?

Hence, a specific approach just doesn't really do very much. For the same space a USDA Organic label takes up on a box of cereal, a comprehensive label like CR Rankings would tell us many, many times more information. That's a huge missed opportunity.

Now, the proponent of the specific approach would probably say here that all we need on that cereal box is just more specific labels like Carbon Trust, Green-e, and Fair Trade International. Each one shows a little more of the picture that that first USDA Organic label missed. But to even come close to fully gauging the social responsibility of that milk company it would take hundreds of such labels. And there's the rub. When it comes to specific labels, the fewer a product has, the less we really know about its social impact. The more it has, the more maddeningly overwhelming and confusing it becomes to try to look to the labels for guidance. Thus, such labels can never really be all that helpful. This is one big reason why the social impact of products hardly factors into anyone's purchases, and as a result why such labels give businesses little motivation to be more socially responsible.

Imagine instead a product label that would be comprehensive, one that would combine everything a company does behind the scenes into one simple ranking. Carbon footprint, worker pay, working conditions, money given to charity, tax evasion, pesticide use, other air pollution. It would all be there in one place. Corporate Responsibility Rankings would wipe away the confusing clutter of specific product labels, apps, and websites and therefore be almost infinitely more helpful.

In this respect CR Rankings are pretty similar to Nutrition Facts. Imagine if, instead of one comprehensive Nutrition Facts label that tells you the level of every nutrient in your food, each food item sported some random accumulation of separate labels that told you a few bits about the nutrients within. Low Sodium Guarantee! High Protein Certified. USDA Vitamins Gold Star! Some products might have three such labels, some might have none. Trying to assess the nutritional content of any food that way would be a nightmare. Nutrition Facts makes the process much easier and the information much more accurate. By being similarly comprehensive, CR Rankings would do the same vitally important job.



Like the Clean Air Act, the Nutrition Facts label uses a comprehensive approach to help foster better health.

Chuck Kennedy/White House

To be fair, Nutrition Facts can be a bit confusing in its own right. To really use them well, you'd have to know how your body uses protein and sodium, how vitamin C is different from D, what the heck Riboflavin is, and how to navigate the other dozens of bits of information on the label. Comprehensive systems can run the risk of being fairly confusing too. CR Rankings, however, avoid this pitfall. Like Nutrition Facts, they contain a ton of good information, and yet they would then synthesize all that information into one simple ranking. CR Rankings would thus contain vastly more information than the typical specific product label and yet do so while being incredibly easy to understand. That's the beautiful simplicity of a well-designed comprehensive system.

Comprehensive Depth

Specific laws aren't just flawed because they focus too much on one narrow issue, though. They also focus too much on one narrow part of a product's lifecycle.

To explain, let's take another look at that dairy farm. Earlier we discussed the need to address many issues at once if we are to accurately assess a company's environmental impact. We don't just want to know about pesticide use, but also about the carbon footprint, water use, and antibiotic use at the farm.



A milk truck in Finland.
David Smith/Wikimedia Commons

But to fully assess the milk company's environmental impact, we really have to go much deeper. That is, we have to take into account the impact of *all* of the companies that worked together to create that jug of milk in your fridge. The farm matters, obviously, but so does the processing plant that evaporates, separates, pasteurizes, and then bottles the milk. Don't forget the trucking company that brought the milk from the

farm to the plant and then from the plant to the grocery store. The store itself matters, too, as do the businesses that made the tractors, the pasteurizing equipment, the plastic bottles that hold the milk, the trucks that did the trucking, and all of the grain and corn needed to feed the cows. All of those pieces of the milk puzzle required plenty of gasoline, water, coal-powered electricity, non-biodegradable plastic, mined metals, toxic cleaning chemicals, and much more. In other words, that gallon of milk leaves behind an extensive, complicated environmental impact.

If addressing many issues at once we can call *comprehensive width*, then simultaneously addressing all of the hands that came together to make one product we can call *comprehensive depth*. And if ratings programs need to have comprehensive width to accurately rate a company's impact on the world, they must also have comprehensive depth. The Dow Jones Sustainability Index, for example, has comprehensive width because it rates companies on dozens of different sustainability factors. That's great, but the index doesn't have any comprehensive depth. When the DJSI rates a company, it specifically focuses on the direct actions of that company, not on the other companies that work with it to produce a single product or service.

Enter CR Rankings. CRR would have a complete comprehensive depth never before seen. Each company's rankings would include its own *responsibility data* (RD)—how much it pays its workers, how much it pollutes, etc—but would also include the RD of all of the other companies that helped to bring its products to the market. This would be accomplished with a process called *branching*.

For a more in-depth look at how branching would work click [here](#), but for now let's briefly discuss the basics. Imagine that one trucking company transports all of that milk company's finished bottles to stores. If that job requires 20% of all of the trucking company's services one year (i.e. 80% of its work went to shipping other products), then in a way the trucking company is really just a part of the milk company 20% of the time, its trucks and drivers and support team all working as part of the process of getting the milk to its customers. Therefore, 20% of the trucking company's RD would

be absorbed by the milk company into its RD to make its own CR Rankings. That's twenty percent of the wages paid to truck drivers and twenty percent of the trucks' gas burned, all factored into the rankings you read on the milk bottle. But branching would actually go much deeper than that. Beyond the truck company's wages and gas use, it also matters how responsibly the metal was mined that built the truck in the first place. That's part of what brought you that bottle of milk, too. As such, part of the mining company's RD would have been absorbed by the trucking company *before* the trucking company's RD was absorbed by the milk company. Thus, the environmental impact of the mining would also factor into the milk company's rankings, too. The same would go for every other big and small factor that went into making the milk. CRR would therefore have an unparalleled level of comprehensive depth, reflecting all of the companies that worked together to make any product, not just the one whose name is on the box.

Comprehensive depth matters for a couple big reasons. First, it creates an accuracy to any ratings program that would otherwise be sorely missing. Do we want a product label that actually tells the whole impact of the product we're buying or just one small part of it? Only telling one small part of that impact is a frustrating insult to the concerned shopper. And yet, that is essentially what we get with the current product labels and other ratings programs available. With the comprehensive depth that branching brings, CR Rankings would provide an exponentially more accurate view of a product's social impact.

The Effectiveness of Group Punishments

Another huge impact of comprehensive depth is that it allows for a more effective form of punishment—punishment that affects the whole group.

To explain, let's first look to the Harry Potter books. What do the professors at Hogwarts school generally do when a student behaves in an unbecoming way? *Ten points off from Gryffindor!* That is, they levy a punishment to the entire group in the form of points off from a yearlong house competition. Sometimes Hogwarts students do get detention, a punishment given only to the offending individual, but not nearly as often as losing points for the whole house that the student belongs to, be it Gryffindor, Hufflepuff, Slytherin, or Ravenclaw. This is quite a clever punishment strategy, one that no doubt accounts for much of the relatively good behavior of the students there (and one which real schools might be wise to copy). But why?

Well, let's also look to an example that might be a bit more relatable. Imagine you're on a high school sports team with a bit of a troublemaker. She sometimes shows up late, wisecracks, and even directly disobeys the coach. At first the coach punishes the troublemaker with a slew of unpleasant tasks: pushups, laps around the field, etc. But, unsurprisingly, the troublemaker keeps at it, continuing to act up each practice. The next week, the coach tries something different and, each time the troublemaker acts up, punishes the whole team. Everyone has to run laps each time she shows up late.

Which punishment strategy do you think would be more effective? The answer, to anyone who's ever experienced a situation like this, should be obvious. Punishing the whole team works much better. First, by making twenty people run laps instead of one, that obviously deals out twenty times the pain to the team. The team now has all the more of an incentive to behave. Second, though, group punishments also make the appeal of misbehaving disappear. Try to see it from the troublemaker's perspective. She acts out because it benefits her. By utilizing her above average boldness and wit, she comes to look cool in front of her peers. That's well worth the punishment of doing a few pushups. But what happens when everyone else has to do the pushups, too? They quickly come to resent her and that coolness evaporates. If acting out means she has to do pushups *and* be despised by her peers, what motivation does the troublemaker now have to continue? The same goes for any would-be troublemakers at Hogwarts, who would almost always rather behave than punish their peers and, in so doing, make themselves unwanted outcasts.

Comprehensive depth, meanwhile, allows for similar group punishments. With CR Rankings, each company's rankings are tied to all of the other companies it works with. Consequently, a low ranking for one company lowers the rankings of its associates. And with similar group punishments to those at Hogwarts and on the practice field come similar group benefits. Each dock in rankings would motivate not just one company to shape up, but maybe more like twenty. That gives CRR more bang for its buck. Even better, these group punishments would end the cool appeal of a different troublemaker: the badly behaving business partner.

Imagine a cleaning service business that pays its workers poorly, uses cheap (but more toxic) cleaning chemicals, and cheats on its tax bills by paying workers under the table. This irresponsibility sounds bad when you hear it stated pointblank like that, but it allows the company to keep its hourly charge low, which means lots of office buildings in the area hire its crews to regularly clean their offices at night. Of course, the cleaning business may face some individual punishments for its bad behavior—higher turnover of employees, the occasional strike, employee complaints that need to be hushed, and the threat of an audit from the IRS—but these punishments are nothing compared to the benefit of steady business. Therefore, the cleaning business carries on.

Now imagine how things would look with CRR on the scene. That bad behavior would earn the cleaning business a low CR Ranking. More importantly, though, each of the companies that use that cleaning service would then have its own CR Rankings drop thanks to the cleaning service. Suddenly the cleaning service no longer looks like such an attractive option to other local businesses, and it gets dropped by many if not most of its previous customers. Because the whole group gets punished for the cleaning service's bad behavior, that bad behavior turns from an asset into a liability. For the first time, the cleaning service would then have a strong motivation to turn its act around. Thus, because comprehensive depth leads to group punishment, it gives much stronger motivation for companies to improve.

With CR Rankings, any company that behaves badly would suddenly find not just fewer customers willing to buy its products, but also fewer fellow companies willing to work with it. That's quite a potent combo to push it to be more responsible.

Overall, the difference between specific and comprehensive programs is pretty significant. The specific law or NGO program tends to do little while often confusing the consumer. The comprehensive does more while giving greater clarity. And by combining comprehensive width and depth, CR Rankings would give consumers the most accurate possible view of the behind-the-scenes behavior of companies while affecting every possible aspect of that behavior with all of the companies that work together to form one product. In other words, because CRR would be comprehensive, it would give maximum clarity to the consumer and maximum motivation to businesses to be more responsible.

How to Best Fix Motivation Problems

Now that we've come this far, let's take a look back at our Motivation to Improve scorecard. This time, however, we've expanded the chart to include our final two flaws (voluntary and specific) as well as a sample list of voluntary transparency programs and other new attempts to deal with our GCM problems:

<u>Minimum Bar Laws</u>	<u>Relative</u>	<u>Incremental</u>	<u>Universal</u>	<u>Comprehensive</u>	<u>Mandatory</u>
Minimum Wage	X	X	X	X	✓
Overtime Pay	X	X	X	X	~
Environmental regulations through Clean Air and Water Acts	X	X	X	~	✓
OSHA Regulations	X	X	X	X	✓
Pesticide Tolerances	X	X	✓	X	✓
CAFE Standards	X	~	✓	X	✓
Ground level ozone limits	X	X	X	X	✓
Income Taxes	X	~	X	X	✓
Plastic bag bans	X	X	X	X	✓
<u>Voluntary Transparency Programs</u>					
USDA Organic	X	~	✓	~	X
Kyoto Protocol	X	X	~	X	X
Paris Agreement	X	X	~	X	X
ENERGY STAR	X	X	X	X	X
Recycling symbol	X	X	✓	X	X
Fair Trade Certified	X	X	✓	~	X
EPEAT	X	~	✓	~	X
LEED Green Building	X	~	~	~	X
Rainforest Alliance Certified	X	X	✓	~	X
Green-e	X	X	X	X	X
Whole Trade Guarantee	X	X	✓	~	X
Eco Logo	X	X	✓	~	X
Green Seal	X	X	~	✓	X
Carbon Trust	X	~	✓	X	X
Good Guide	X	✓	✓	~	~
Dow Jones Sustainability Index	~	~	✓	~	X
<u>Proposed Legislation</u>					
Raise the Minimum Wage	X	X	X	X	✓
Raise the Minimum Wage (with value automatically tied to future inflation and cost of living increases)	~	X	X	X	✓
Cap and Trade program	X	✓	X	X	✓
Carbon and methane taxes	X	✓	X	X	✓
<i>Corporate Responsibility Rankings</i>	✓	✓	✓	✓	✓

Looking to the chart, we see some obvious trends. Minimum bar laws tend to do a good job of being mandatory. Voluntary transparency programs tend to do a pretty good job of being universal. But aside from that, pretty much all options soundly fall flat across the board.

Keep in mind that these laws and NGO programs still do plenty of good. But that good is primarily in addressing baseline problems. To fight motivation problems—particularly GCM problems like global warming and income inequality, the thorniest, most persistent problems humanity has ever faced—we need to give those creating the problems a strong, consistent motivation to turn their selfish behavior around and start fixing those problems instead. And what should be clear from this chart is that our current approaches to GCM problems don't come anywhere close to giving this needed motivation.

So this is our time to face reality. Should we continue to look to minimum bar laws and voluntary transparency programs to address GCM problems, we will continue to be dismayed at their failure, no matter how strict, how numerous, or how newly designed we make them. As long as they still harbor the same flaws of motivation, they will fail. Because the market forces of capitalism so profoundly push companies towards selfish irresponsibility, using these flawed approaches to combat GCM problems is like trying to swim upstream against a powerful, consistent current. Try as you may to make some bits of progress, you'll note after time that you've really always been falling behind overall.

However, we do have one powerful option that would finally avoid these flaws. Because Corporate Responsibility Rankings would be *relative*, companies would always struggle to outdo each other for the higher ranking. Because CRR would be *incremental*, no company could ever get complacent with a mere passing grade, always pushing instead for more bit-by-bit improvements. Because CRR would be *universal*, companies would finally have to face the consequences of their bad behavior and not just avoid stricter regulations by moving somewhere else in the world. Because CRR would be *mandatory*, all the less responsible companies would still have to participate, giving them reason to turn things around, raise their rankings, and win back customers. And because CRR would be *comprehensive*, it would influence every aspect of a product's creation and all the hands that came together to make it, all while giving consumers the clearest, simplest possible picture of a company's behind-the-scenes behavior.

In other words, because Corporate Responsibility Rankings are relative, incremental, universal, mandatory, and comprehensive, they would give companies a thorough, never-ending motivation to be more socially responsible, a motivation much stronger than we've ever seen. Where the alternatives have failed to tackle GCM problems for so long, CRR would succeed.

So we have two options. We can try to swim harder and faster upstream and never slacken for a second—with more minimum bar laws and more voluntary transparency programs and more charities and more taxes on the rich and more government programs for the poor—and assume that someday this will be enough to nullify the constant, overwhelming current of capitalism. Or we can step back and realize that this exhausting approach, which the collective progressive movements across the globe have pursued consistently for the past century, is simply not enough for GCM problems. Instead, we can finally end this exhausting fight. Instead, we can unleash an equal and opposite force, a powerful current to push companies to be ever more, not less, responsible. By joining Corporate Responsibility Rankings with a free market forever focused on the bottom line,

we can finally calm the waters and bring real balance to the currents of capitalism—thrift, efficiency, and quality products balanced by responsible care for our workers, environment, and communities.

This is our choice. It really shouldn't be much of a choice, though. Exhausting failure versus graceful success. Which would you prefer? To fix global commons motivation problems, enacting CR Rankings is our only viable option.

III. Problems CRR Would Help Fix

As we just discussed at length, CR Rankings would give businesses the motivation to improve—to better treat their Workers, the Environment, and the Communities in which they operate. That motivation would then spark major societal change.

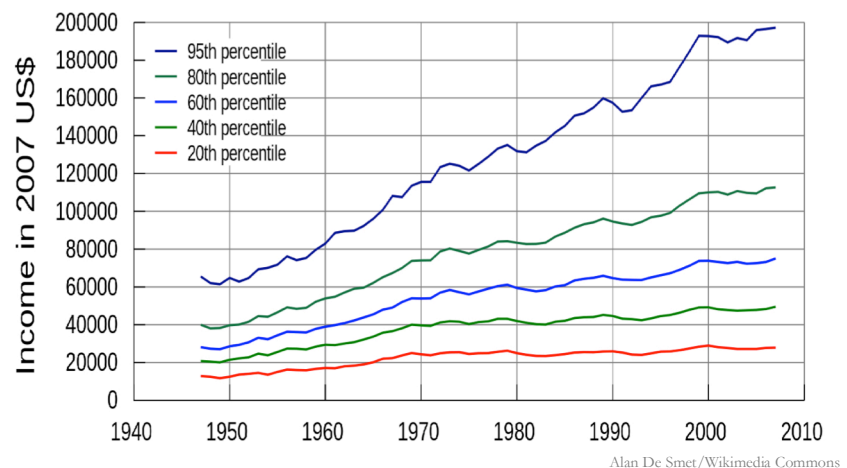
In short, with CR Rankings our companies would be motivated to help fix a host of massive problems that currently seem impossible to solve, the *global commons motivation problems* that bedevil us. We have here included a sample of many such problems to get a sense of how CRR can make the world a much better place.

Income inequality

The Problem: The gap between the rich and the poor has consistently grown, for the last few decades here in the US and for the last two centuries across the globe. Excessive inequality makes it quite hard for low and middle-income workers to get by. It also weakens and slows down the economy as a whole, thereby making life all the harder for the bottom half.

Income inequality refers to how unevenly pay is distributed among workers. The more that pay gets skewed toward the wealthier few, the higher the inequality. For quite some time now inequality has been on the rise—that is, the rich have gotten much richer while everyone else, well, hasn't. Back in the 1960's the average CEO made

about 24 times as much as the average worker.⁷⁵ Now the average CEO makes over 200 times as much.⁷⁶ But really such disparities have been growing for much longer. The World Bank estimates that global inequality has continually crept higher and higher since 1820 (i.e. since around when modern capitalism was born).⁷⁷ In other words, despite the many obvious benefits of free market economies, they have always steadily widened the gap between the rich and the poor. And by now this inequality has reached absurd levels. The eight richest people now own the same amount of wealth as the poorer half of all human beings combined.⁷⁸



Of course, the point here isn't to criticize rich people for being rich. It is, instead, to note that high

inequality does a lot of harm. On the most basic level, high inequality makes it all the tougher for the lower and middle classes to get by, to afford food, rent, health care, and education for their kids. Nearly half of the world lives on less than \$2.50 a day.⁷⁹ About one person in nine worldwide doesn't have enough to eat.⁸⁰ Such poverty is heartbreaking, and while its causes are complex, income inequality easily tops the list.

Even here in the United States—by many measures the richest country in the world—decades of rising inequality have made it incredibly hard for large portions of the population to get by. In 2016, a Federal Reserve study found that, if confronted with a surprise \$400 bill—for an injury, car accident, etc—47% of Americans say either that they could only pay it off by borrowing money or selling something, or that they could not afford to pay it off whatsoever.⁸¹ Almost half of all Americans are that close to being broke. Meanwhile, 83% of Americans currently say they cannot afford college (a.k.a. the ticket to most good, well-paying jobs in the 21st century).⁸² And then there are those living on minimum wage. According to a 2016 analysis of housing prices, someone working full-time at the federal minimum wage can effectively afford to pay a family's rent in *zero* out of fifty US states.⁸³ High income inequality is making life tough for people everywhere.

Inequality doesn't just create problems because it leads to more poverty, though. As UNC professor of psychology Keith Payne recently detailed in his book *Broken Ladder: How Inequality Affects the Way We Think, Live, and Die*, the sheer divide in society itself wrought by inequality creates all kinds of psychological problems for those towards the bottom of that divide. Research shows that places with higher inequality have (on average) lower rates of reported happiness,⁸⁴ higher rates of drug abuse and alcoholism,⁸⁵ a lower life expectancy,⁸⁶ and even higher rates of implicit bias⁸⁷ (i.e. perhaps the biggest reason that African-Americans get fewer job callbacks and get shot more often by the police). In fact, the negative effects of inequality are so deep and pervasive that they can be rather surprising. Recent studies, for example, show a strikingly high correlation between income inequality and political polarization.⁸⁸ In other words, to fix the perpetual dysfunction of our governments, the data seem to say that, instead of ridding politics of money or preaching about reaching across the aisle, we'd be better served finding ways to decrease income inequality.

There is the persistent idea, of course, that we should be thankful if inequality leads to mega-rich corporate titans. They're the ones who make the jobs. The richer they are the more jobs they can afford to make and the stronger the economy, right? Numerous studies show that isn't the case, though. High inequality consistently hurts the economy, decreasing GDP and slowing down growth.^{89,90} Research also shows that high inequality leads to a higher likelihood of financial crises. In other words, inequality was likely a major cause of the economic crashes that gave us the Great Depression and the Great Recession.⁹¹ All told, rising income inequality hurts the lower and middle-classes and slows down the economy. (Translation: it's bad for pretty much anyone who isn't in the market for a yacht.)

Meanwhile, the deeper problem is that while inequality continues to rise, our efforts to stop it are falling flat. For all its amazing benefits, capitalism will by default always widen the gap between the rich and the poor. If we want to strike a better balance with the world's distribution of wealth, we

need to find a way to keep all of the vital good of capitalism while creating a better opposing force to drive inequality back down.

How CRR Would Help: Because 80% of the Workers ranking comes from how fairly a company pays its employees, CR Rankings would strongly push companies to reduce inequality.

Most of the Workers ranking (80%) stems from how well a business pays its employees. The *Distribution of Wealth* metric would rank all corporations by their GINI coefficient, that is by how evenly their pay is spread out. The more even the pay distribution, the higher the ranking. The more top heavy—with low salaries at the bottom and million-dollar bonuses at the top—the lower the CR Ranking. Meanwhile, the *Pay Relative to Local Standard of Living* metric would rank businesses by how much their employees are paid compared to how much it costs to live where they work. So if everyone's paid well enough to easily afford rent, health care, and all other basic needs, then the company should score well. The more employees have to struggle just to pay the bills, the lower the ranking. Put those two metrics together and companies would now have a very strong motivation to pay all of their workers enough to make a good living. This would be a game changer, a huge boon to the lower and middle classes. Thanks to CR Rankings, capitalism would for the first time start pushing the corporate world to *reduce* inequality, not increase it (as it naturally does now).

Global warming

The Problem: Human activity is driving a major increase in average global temperatures. It is destroying the world's ecosystems and costing us trillions of dollars, and the problem still stands to get much, much worse. On top of that, nothing we're doing to stop global warming is coming anywhere close to working.

Global warming (a.k.a. climate change) refers to the gradual warming of the planet's atmosphere over the past two centuries. While Earth's average air temperature has always fluctuated, this recent shift has been mostly if not entirely manmade, largely thanks to burning oil, coal, and other “fossil fuels.” These carbon-based fuels have, over many millions of years, stored up most of the atmosphere's carbon in the ground. When we burn fossil fuels we suddenly spew that CO₂ back into the air all at once, and because CO₂ traps in heat from the sun more efficiently than the other gases in the atmosphere, we thus dramatically heat up the planet's atmosphere. Since 1880, the average global air temperature has increased by 0.85 degrees Celsius,⁹² and Earth keeps setting record temperatures each year. 2014 was the hottest year ever recorded on Earth...until 2015 broke that record...and then 2016 broke *that* record...



Brocken Inaglory/Wikipedia

This might all sound like small potatoes, though. Who cares about slightly warmer temperatures? The problem is that while daily temperatures can jump up and down and everything will be fine, changing the *average* global temperature is actually a really big deal. It melts glaciers and raises sea levels. It brings more droughts, more floods, and more hurricanes. It destroys all kinds of habitats, wipes out crops, and kills off scores of species. It acidifies our oceans, destroying our coral reefs and decimating the world's phytoplankton population, which in itself speeds up global warming by taking out the biggest consumers of CO₂ we have. Experts estimate that global warming currently costs us around \$2 to 11 trillion each year,^{93,94,95,96} a figure that's only poised to balloon over time. At best, global warming is an extremely expensive nuisance that will greatly harm our economies. At worst, it could quite literally do our species in.

But all of that being said, we haven't even gotten to the real problem with global warming. *The real problem is that nothing we're currently doing to stop global warming is working.* For decades now we have installed more efficient dishwashers and lightbulbs at home. We have cheered as solar and wind power technologies have made huge strides. Meanwhile the vast majority of the world's nations have met every year at United Nations conferences and signed global treaties all promising to reduce their carbon emissions. And what has happened during that time? Exactly what was already happening. Carbon emissions have continued to skyrocket. Since those UN conferences began in 1995, global CO₂ production is up over 53%.⁹⁷

Global warming is a runaway train. It is already arguably the defining problem of this century. If we don't find a way to legitimately stop it soon, it will become the defining problem of humanity throughout all time.

How CRR Would Help: 40% of every company's Environment ranking would come from its carbon footprint. CRR would thus give the strongest financial incentive ever given to businesses—who are the biggest producers of greenhouse gases—to reduce those gases and turn global warming around. To give even more motivation to improve, CRR would reward any company that develops new technologies that reduce carbon emissions *outside* of the company, too.

As 40% of the Environment ranking, the *Carbon Footprint* metric ties for the largest impact of any of the metrics on a company's CR Ranking. This metric would include all the major ways a business could warm the planet—electricity used, fuel burned, forests cut down, livestock kept, etc. To get a higher ranking with the Carbon Footprint metric, a business would therefore be motivated to improve across the board. That could mean more fuel-efficient vehicles, better office insulation, on-site solar panels, you name it. With such a huge rankings influence, the Carbon Footprint metric could very likely set off a war in the business world to see who could lower their carbon footprint the most.

Just as climate change would have an outsized importance over other societal problems, it would also create the highest *innovation point* bounties. With CRR, any corporation could earn innovation points—points that would then raise its rankings through the *Additional Factors* metric—for new discoveries that help the world but that don't earn that company any profit. So if a business created a promising new carbon capturing device that it had no plans to use itself for financial gain, it could get innovation points that would boost its Environment ranking. The same would go for, say, creating a new electric engine with twice the efficiency, so long as that technology goes on to be used by millions of vehicles produced and used by other businesses. Such innovations normally would not influence a company's CR Rankings, so by awarding them innovation points we ensure that that company would still be motivated to shoot for such beneficial discoveries. As far as the number of points given, innovation points would be given in greater and smaller numbers based on the need for those innovations. Since climate change is about as important a need as possible, some of the highest bounties would be given to new emissions-reducing technologies.

With the Carbon Footprint metric and innovation points, CRR would fundamentally change the market with respect to global warming. Instead of the current competition to be as cheap (and therefore carbon-dirty) as possible, CR Rankings would turn companies around. For the first time ever, the market would continuously push corporations to lower their greenhouse gas emissions until there would be no carbon footprint left.

Water scarcity

The Problem: Because we use more freshwater than we get back in precipitation, our stores of water are steadily drying up around the globe. With less water for crops, food prices soar. And with less clean water to drink, diseases spread that kill millions.

When we use water at home or on the farm, that water comes from rivers, lakes, and aquifers (i.e. vast underground pools of water that store the rainwater that seeps down from above). While the amount of rain and snow that replenishes these sources remains about constant each year, the amount that we use each year continues to go up. Increasingly around the globe we are thus now using more water than we get back in precipitation. That isn't favorable math. It means our rivers, lakes, and aquifers are drying out, and the more people on Earth the worse it's going to get. Almost



The Euphrates River snakes through the now desertous Iraq, the once-fertile region where human agriculture likely first began.

NASA/Unsplash

one-fifth of the world's population currently lives in areas suffering from water scarcity. By 2030 the UN estimates that it will be one half.⁹⁸

Here in the US that means water rationing in an agriculture-heavy California, as well as a Colorado River so over-tapped that none of its water has naturally made it to the Gulf of Mexico since 1998.⁹⁹ Perhaps the biggest water shortage in the US,

however, is one you've probably never heard of: the Ogallala aquifer. Stretching across eight states, the Ogallala irrigates farms all across Middle America. Thanks to overuse, though, its water level is dropping fast, by as much as two feet per year in parts of Kansas.¹⁰⁰ Food production is therefore likely to peak in parts of the Midwest within a few decades,¹⁰¹ which means higher food prices for everyone in the country.

In other parts of the world, water scarcity is already much worse. Because of the lack of clean freshwater in much of Africa and southern Asia, people there don't just have a hard time irrigating their crops. They are regularly forced to drink fecally contaminated water. As a result, they regularly contract diseases like cholera, typhoid fever, and diarrhea. 3.4 million people—mostly children—die every year from such water-related diseases,¹⁰² making them one of the leading causes of death worldwide.

At best, water scarcity means we all lose a lot of money from higher food prices and expensive infrastructure projects. At worst, it means struggling to survive or even death. Even if we were to solve global warming tomorrow, water scarcity is the looming environmental disaster on the horizon. As our population continues to grow exponentially, we will drain our water stores faster and faster. Water scarcity stands to be one of the biggest challenges humanity will face in the 21st century.

How CRR Would Help: Most of the world's freshwater is used by agriculture and industry, and with the *Water Use* metric CR Rankings would push those sectors to become much more water efficient.

It's definitely helpful that we citizens try to cut back our water use with quicker showers, low-flow toilets, and less lawn watering. However, we are inherently limited in how much we can accomplish at home. Agriculture and industry account for about 88% of the world's water consumption¹⁰³—that is, they use the lion's share. If we really want to make a serious dent in water scarcity, we should focus less on our home toilets and more on our farms and factories.

CR Rankings would do just that. The Water Use metric would rank all companies by how much water they use and count for 15% of a business's Environment ranking. Any business that uses a lot of water would thus have a strong motivation to start using less and less of it. Given that an estimated 60% of the water used in farming gets wasted,¹⁰⁴ there should be a quite a good amount of room for improvement. There's also a lot of improvement to be made by switching to more water-efficient products. Coffee, for example, takes about four times as much water to make as tea does. Making a pound of beef requires about *a hundred times* as much water as making a pound of tomatoes.¹⁰⁵ With CR Rankings, that environmental impact would start to show in products and naturally start to move us towards using more water-efficient products.

All told, CRR would over time push our farms and factories to use much less water. And that's a great thing. It would save us plenty of money and could also save many thousands of lives.

Corporate tax avoidance

The Problem: In recent years, companies have increasingly moved their money around the globe to avoid paying billions in taxes. Such tax avoidance is unfair to the companies that play by the rules, and it inevitably leads to some combination of bigger budget deficits, cuts in government services, and a bigger tax bill for the rest of us.

The details can be rather tricky, but basically this kind of tax avoidance works by operating the actual business in one place while stashing the money somewhere else. So even if your retail store chain doesn't extend beyond the borders of Ohio, an affiliated company handles all of your money in Ireland. Why Ireland? Because the corporate tax rate there is just 12.5%, almost two-thirds less than what it is in the US. This just-barely-legal tax avoidance is especially prevalent in the US, where it costs an estimated \$100 billion in lost tax dollars every year.¹⁰⁶ Combine this shifting of money with other tax breaks and loopholes and many corporations don't really pay taxes at all anymore. A 2014 study by Citizens for Tax Justice reported that, of the 288 Fortune 500 companies that have each been consistently profitable from 2008 to 2012, 39% of them paid *zero* federal income taxes at least one year in that span.¹⁰⁷

The problem here is pretty simple. Those taxes are supposed to fund the government, that is, to fund public schools, police stations, road construction, the military, health care for the elderly, etc. If our companies don't pay their share of the bill, then some mix of the following three things must happen: a.) we citizens have to pay more in taxes b.) the federal deficit grows and c.) government services get cut. And by forcing cuts in government services and creating higher tax bills for the lower classes, corporate tax avoidance also helps increase economic inequality.

Some might wonder, though, why businesses pay taxes at all. *Shouldn't* it just be citizens who pay taxes? After all, the way things are a business owner pays taxes twice, as a business *and* as a citizen. Isn't that unfair? An important thing to remember when it comes to corporate taxes, though, is that businesses quite legitimately owe them in return for the government services they use.

Companies need roads for driving on; airports and seaports for transferring shipments; power lines to supply electricity to their offices; sewage systems to remove their waste; public schools to educate the children who later become their employees; government-subsidized health care to keep



The Panama News

its poorer employees healthy; and the police, military, prisons, and court system to ensure that the communities in which they work are safe for business. All of that costs a *lot* of money. Businesses all benefit immensely from these services, but many are now skipping out on the tab.

Others defend tax avoidance not because it's morally defensible, but because businesses simply have to. If such tax loopholes exist, then someone is going to take advantage of them. All other businesses then face a choice: avoid taxes too or, by nobly paying their taxes, put themselves at a disadvantage against their competitors, competitors who now have extra millions or even billions of dollars to go towards beating them with lower prices, better advertising, and/or flashier products. It's that simple.

The troubling part of this defense...is that it's right. And here's where things really get bad. If corporations have backward incentives with paying taxes, governments have just as bad incentives in making them pay. Fighting to raise corporate tax rates and close loopholes may scare away businesses (and their jobs) to some other country with a lower tax rate. So few politicians have the appetite to do so (lest they be voted out of office when the local economy tanks). As a result, what we've actually been seeing is governments doing the opposite, steadily *lowering* their corporate tax rates. From 2003 to 2015, the global average corporate tax rate (weighted by GDP) steadily decreased from 35.5% to 29.8%.¹⁰⁸ Instead of trying to stop corporate tax avoiders, governments are

cowering before them and begging them not to leave altogether, if only because they know fighting would likely be a losing game. Without some better way to make companies pay the taxes they owe, corporate tax avoidance stands not just to continue, but to steadily grow.

How CRR Would Help: 40% of the Community ranking would stem from how well a company pays its fair share of taxes, giving all companies a strong financial incentive to stop the tax avoidance game.

The *Shouldering the Tax Burden* metric ranks businesses by how much they pay in taxes relative to the corporate tax rate where a.) they do business and b.) where they sell their products. In other words, companies are judged by how much they're paying compared with how much they should be paying. The higher the resulting ratio comes out, the higher the Community CR Ranking. Corporate Responsibility Rankings would thus motivate businesses to go beyond just doing what's barely legal and instead fully pay the taxes they truly owe.

Note that using CRR to push corporations to pay more in taxes would, as with the rest of the issues CR Rankings combat, align their financial interest with the interest of the community at large. Shaming such companies (a current favorite approach of many politicians) is accomplishing nothing. Neither is trying to raise corporate tax rates and/or closing loopholes getting anywhere. These efforts fail because they don't fix the underlying perverse incentives of businesses to do the bad thing that is to avoid taxes. CRR would address that underlying motivation, and that's why it would work.

Workplace harassment and assault

The Problem: Workplace violence and harassment are all too common, sexual or otherwise.

If the #MeToo movement has shown us anything, it's that sexual harassment and assault are shockingly widespread in the workplace. One in three women, for example, reports having been sexually harassed at work¹⁰⁹ (although some estimates put that percentage much higher).¹¹⁰ And while #MeToo has made great strides outing



Ashley Bell/DoDLive

many sexual predators, the almost certain reality is that the vast majority of sexual misconduct cases involve people who aren't famous enough to make big news headlines—those in textile factories, fast food restaurants, farms, mid-level office work, etc. And without big headlines to out these offenders, it's pretty likely that they will keep right on harassing and assaulting. Meanwhile, the only other main recourse for most victims is to report their abuse to their boss or to the police...but that could easily backfire. 75% of harassment victims say they experienced retaliation after reporting their experiences.¹¹¹ It therefore shouldn't be any wonder that most victims don't report such abuse at all.¹¹²

Of course, workplace violence extends far beyond sexual acts. Almost one fifth of all violent crimes in the US—including crimes like robbery and aggravated assault—take place while that victim is on the job.¹¹³ That amounts to almost two million violent workplace crimes reported every year.¹¹⁴ Some of this no doubt stems from inherently violent jobs (police officers experience the highest rates of violent crimes, for example). Many if not most workplace crimes should be preventable, though, especially more common acts like sexual harassment. All employees should be able to feel safe at work, and yet a staggeringly high number of them don't, even here in arguably one of the safest countries in the world.

How CRR Would Help: By ranking businesses by how well they prevent harassment and assault, CR Rankings would motivate businesses to take much more serious steps to eliminate them from the workplace.

CR Rankings would fight harassment and assault in the workplace in many ways. First, half of the *Worker Safety & Health* metric would rank companies by how many work-related injuries, illnesses, and deaths they incur per 100 employees each year. Each incidence would be weighted by severity (e.g. a work-related death would count much more than a work-related broken finger). Assault and harassment wouldn't just count in this list—they would be weighted quite heavily. If an employee or two are harassed at one office, much less sexually assaulted, then that company's rankings would be hit hard. All such incidents reported to the police or to the company itself would count towards this tally.

Beyond the sheer tally of such incidents, it also matters how safe the employees of a company feel to never be harassed or assaulted in the first place (much less a second time). This feeling of safety would thus factor into the second half of the *Worker Safety & Health* metric. As part of this metric, all US employees would be asked several questions about their companies. One would have employees rate how well they feel their employers prevent and punish harassment and assault. With this Safety & Health question built into CR Rankings, corporations would thus have all the more incentive to crack down on a workplace culture that leads to assault and harassment, as well as the acts themselves.

Of course, all of this wouldn't amount to a hill of beans if employees were still intimidated into silence. A boss who's harassing a subordinate, for example, would have a particularly high motivation to threaten to fire them if they report anything. To discourage such manipulation, the CR

Bureau would use the *Additional Factors* metric to heavily dock the rankings of any company that tries to distort their CR Rankings. Any employee that feels she has been threatened against or punished for reporting such incidents could directly report this to the CRB. Her company would receive lower CR Rankings and then think twice next time before trying to block the truth or punish victims.

All together, CR Rankings should greatly reduce assault, harassment, and other workplace violence. CRR should furthermore reduce the ever-present *fear* of such behaviors that women especially have to live with all the time. It should also make women feel more empowered to simply do their jobs and earn promotions based on merit, not based on any sexual favors for the boss.

Food waste

The Problem: About a third of all food produced in the world gets thrown away, all while one in nine people regularly goes hungry. This awful reality unfolds in large part because it's cheaper for businesses to throw away excess food than to donate it.



Food waste activist Rob Greenfield demonstrates the food he and friend Dane Gottschall found in two days of dumpster diving in Madison, WI.

Sean Aranda/Food Waste Fiasco

According to the Food and Agriculture Organization of the United Nations, 32% of the food produced worldwide in 2009 was either lost or wasted.¹¹⁵ In the United States, that figure is as high as 40%.¹¹⁶ The tragedy is that, simultaneously, many people go hungry. There are an estimated 42 million “food insecure” people here in the US¹¹⁷ (i.e. those who don’t reliably get enough affordable, nutritious food) and almost 800 million hungry worldwide.¹¹⁸ We should already be growing enough

food for everyone. Where is the disconnect? Why do we let so many become malnourished or even die of hunger?

Quite a bit of the blame rests on us the consumers. We aren't careful enough to eat everything we buy and are also unnecessarily paranoid about expiration dates (thus tossing plenty of still good food).

However, a large portion of the food we waste falls off somewhere along the production line—unharvested at the farm or thrown out at the grocery store or restaurant. The reasons why vary. First, here in the US the USDA has arguably pretty strict grading standards for the foods that make it to the grocery store, standards that are based almost entirely on the appearance of the food, not the safety of eating it. Those standards make much of the safely edible food a farm produces unprofitable to sell. Go to any orchard and you'll see a blanket of perfectly fine fruit on the ground because each piece of fruit was deemed too aesthetically imperfect to garner a No. 1 USDA grade.¹¹⁹ The grocery store, meanwhile, overstocks items like produce to make them look more appealing—who wants to buy an apple when it's the last one lying there? Restaurants overstock, too, to make sure they don't run out of any dish each night. Both then usually end up tossing the extras.

The question then, of course, is why not donate all of that extra food to food banks? Some stores and restaurants do, but plenty don't. In an interview with PBS News Hour, Harold McClarty, owner of HMC Foods, perfectly explained why most businesses don't donate. "Getting it into the hands of somebody to eat it isn't free. There's got to be an economic incentive to move more of this into...the food banks. ... It's a lot easier and cheaper to just—basically throw it away."¹²⁰ Thus, food companies don't donate much. Until farms, grocery stores, and restaurants have a bigger economic incentive to donate that food, they won't. And in the meantime many millions of people will continue to unnecessarily go hungry.

How CRR Would Help: By giving food businesses a financial incentive to donate their excess food, CRR would simultaneously reduce food waste and hunger.

Currently there are some state and federal tax breaks to encourage corporations to donate surplus or "damaged" foods. However, there clearly isn't enough of a financial motivation to donate food. If there were, we wouldn't waste a third of what we produce and food banks would be bursting at the seams with donations.

With the *Charitable Giving* metric, CR Rankings would rank all businesses by how much of their income they give away to charity. In addition to money, though, goods and services would count, too. So the more excess food a farm, restaurant, or grocery store donates, the higher its Community ranking would rise. That would give businesses the financial incentive to finally start donating food instead of just throwing it away. Thus with CR Rankings, we should see food waste drop quite a bit, along with the number of people going hungry.

Rainforest destruction

The Problem: We are cutting down the world's rainforests so quickly that they are on pace to completely vanish within a century.¹²¹ Destroying rainforests eliminates a major source of pharmaceutical drugs, hundreds of thousands of species, one of our best tools in the fight against global warming, and some of the most beautiful places on Earth.



Rainforest Action Network/Flickr

As you likely learned in school at some point, the world's rainforests are the most richly biodiverse ecosystems on the planet. They're also being cut down at an extremely rapid rate. While rainforest destruction was a much more talked about problem back in the 1990's, the problem has actually accelerated since to about 80,000 acres cut down per day,¹²² largely for space to graze cattle and grow crops. We humans, meanwhile, drive an estimated 50,000 species to extinction every year.¹²³ Because about half of all of Earth's species live exclusively in rainforests,¹²⁴ roughly half of those extinctions come from cutting down rainforests. And as the rainforests go, so does a major absorber of the world's carbon dioxide and one of our best sources of new pharmaceutical drugs. They're also simply one of the coolest places the world has to offer. Try to tell me that you don't care that the home of the chimpanzee, gorilla, parrot, toucan, jaguar, anaconda, and poison-dart frog is being methodically destroyed and, frankly, I'll question whether you are in fact a real human being.

How CRR Would Help: Cutting down rainforests (or working with anyone who does) would lower a company's CR Rankings on multiple metrics. Businesses would thus be

strongly encouraged to stop destroying our rainforests and start protecting them instead.

With the *Carbon Footprint* metric, deforestation would lower a company's CR Environment Rankings. This would motivate corporations to limit if not completely stop their contributions to deforestation. What's more, as part of the *Environment Additional Factors* metric, logging in forests designated as rainforests would earn a company extra ranking losses for contributing to irreparable damage to the environment, given the higher warming effect per acre plus the species endangerment and extinction involved. Such ranking reductions would give businesses an added incentive to switch to logging elsewhere or to reduce logging in general and switch to more recycled paper products. They would also motivate locals living in and among rainforests to switch from slash and burn agriculture to more environmentally friendly pursuits like ecotourism. Overall, with CR Rankings the alarmingly fast destruction of our rainforests should slow down quite a bit, if not stop altogether someday.

National deficit and debt

The Problem: Almost every year our government spends more than it takes in in taxes, leading to trillions of dollars of debt. That debt endangers the long-term health of the economy and forces us to spend hundreds of billions just to pay off its interest every year.



Jesper Rautell Balte

74 of the last 86 years the US federal government has run a deficit¹²⁵—that is, the amount of money the government took in with taxes was less than the amount it spent. For 2017, that shortfall will be a projected \$693 billion.¹²⁶ That money has to come from somewhere, of course, so the government borrows it—from other countries, US citizens, companies, and even itself.

Each year that we borrow from others, we add to the national debt. As of summer 2017 the total US national debt was closing in on \$20 trillion.¹²⁷

Believe it or not, owing money like this is a fairly standard practice around the world. So long as that debt doesn't get out of control, many if not most economists argue it's a reasonable course of action

that won't sink the economy. Sometimes debt can sink economies, however. Greece, Portugal, Italy, and Spain so went bankrupt during the recent financial crisis in Europe.

Even without causing an economic crisis, though, relying too much on deficit spending will inevitably create two unavoidable problems. First, your citizens are eventually going to have to pay the money back. Second, just paying the interest on the debt alone can make quite a hefty bill each year. The US paid about \$240 billion in interest on the national debt in 2016.¹²⁸ This yearly interest payment on the debt has grown to over 6% of federal spending each year,¹²⁹ taking a huge chunk of money that could otherwise be spent on better schools, military research, the space program, tax relief, you name it. Getting the deficit under control and paying back our debt would be a huge boon to cash-strapped taxpayers and to many shortchanged government priorities each year.

However, most politicians have little appetite for deficit reduction. Cutting the deficit almost has to require a.) higher taxes, b.) cuts in government services, or c.) both. That's quite an unpopular set of options. If you raise taxes, everyone will be mad. If you cut services, everyone will be mad. Politicians also get a lot more credit for what's happening now than what happens twenty years from now, so why make the unpopular sacrifices needed to ensure better government finances twenty years from now? All that will do is get you voted out of office. It's therefore no wonder that we run deficits almost every year.

How CRR Would Help: By fighting corporate tax avoidance and reducing the need for government welfare programs, CR Rankings could cut the federal deficit by hundreds of billions of dollars.

CR Rankings would help reduce the federal deficit in two key ways. First, with the *Shouldering the Tax Burden* metric, companies would be rewarded for paying their fair share of taxes. The more that incentive helps eat away at the gap between what companies *should* be paying in taxes and what they *actually are* paying—a roughly \$100 billion gap per year in the US¹³⁰—the more money the government can take in to help reduce the federal deficit. Close that tax evasion gap entirely and you've taken a giant bite out of the deficit.

Meanwhile, CRR would perhaps have an even bigger impact on the deficit by lifting up the working poor. The *Distribution of Wealth* and *Pay Relative to Local Standard of Living* metrics (representing 80% of the Workers ranking) would push companies quite a bit to increase pay for their lower-level employees. One huge, easily unnoticed benefit with all of this better pay is that it would take away much of the financial burden on the government to care for the poor. In 2014, US state and federal governments spent about \$680 billion on the five main welfare programs for the poor: Medicaid, Children's Health Insurance Program (CHIP), Supplemental Nutrition Assistance Program (a.k.a. food stamps), Earned Income Tax Credit, and Temporary Assistance to Needy Families.^{131,132,133,134,135,136} Note that a majority (approximately 56%) of that money goes to working families.¹³⁷ Thus, raise the pay for those impoverished working families, and the government would not need to spend nearly so much on welfare programs. In this respect alone, CR Rankings could save the government tens if not hundreds of billions of dollars each year.

Combine the welfare program savings and the decrease in corporate tax avoidance, and we should at the very least see the US federal deficit shrink quite a bit. We could possibly even see the deficit completely disappear. Again, keep in mind that the economy and our political climate are incredibly complex, making it rather difficult to predict with much accuracy how much we could realistically see the deficit cut. It's especially difficult to predict because the moment more money starts to come in, politicians tend to want to spend it. What we can say, though, is that there are enormous, real sums of money—hundreds of billions of dollars each year—that CR Rankings would help push the government to save instead of spend. And that's just in the US. CRR would really help any country ailing from high deficits, corporate tax avoidance, and expensive welfare programs (for example Canada, Japan, most of Europe, and really most any of the other more affluent nations of the world).

Diseases of poverty

The Problem: Many diseases ravage the poor simply because the poor don't have adequate access to clean water, food, health care, and safe home heating. Many more diseases ravage the poor because developing medical treatments for them is too unprofitable. Thanks to diseases of poverty, millions die each year, while millions more suffer.

A disease doesn't care how much money you have. Given the chance, it will infect anyone all the same. However, money can still make a huge difference in who gets sick and how badly. "Diseases of poverty" disproportionately affect the poor because it's the poor who don't have the basic resources needed to fight them. Malaria, for instance,



Dtfman/Wikimedia Commons

still kills almost a half million people a year,¹³⁸ largely because the insecticides, mosquito nets, and medicines needed to stop the disease aren't widely available in poorer tropical countries. Similarly preventable, nearly 95% of those infected with HIV/AIDS live in so-called developing countries¹³⁹ where the education and contraceptives needed to slow the spread of the virus are lacking.

Diseases of poverty hit children particularly hard. Half a million children tragically go blind each year simply because malnutrition has led to an easily treatable vitamin A deficiency.¹⁴⁰ Diarrhea kills another half million kids worldwide each year, mostly just from a lack of clean drinking water.¹⁴¹

Children are even more devastated by lower respiratory tract infections like pneumonia, the leading cause of death in those under the age of five. Why are so many afflicted? Largely because the poorer half of the world's population have no better way to cook and heat their homes than by burning biomass (wood, charcoal, coal, manure, food waste), a practice that often means breathing in unsafe levels of smoke in poorly ventilated houses. Breathing in those harmful fumes leads to higher rates of infection, which then leads to another four million prematurely dead per year.¹⁴²

Getting the idea? Diseases of poverty are devastating, and tragically it isn't even because the diseases themselves are especially dangerous. It's only because the poor can't afford to properly deal with them.

Meanwhile, diseases of poverty also arguably receive a disproportionately small portion of medical research funding. Out of the 1,393 new drugs approved for use between 1975 and 1999, only 13 (less than one percent) were for tropical diseases, i.e. those that affect the relatively poor inhabitants of the tropics in South and Central America, sub-Saharan Africa, and Southern Asia.¹⁴³ Why wouldn't pharmaceutical companies want to develop new drugs for diseases of poverty? Well, really the better question is *why would they?* New drugs and vaccines can cost millions of dollars to research. If ultimately your goal is to make money, why would you put all of that money into a drug that goes to the poor, that is, to people who can't really pay you back? Why not develop a new cholesterol drug instead and reap in billions from European and American customers? The same logic goes for, say, the kind of cheap, easy-to-use filtration systems that could sanitize water for poor rural villages. If it won't make someone money to make it, then it's highly unlikely that it'll ever be made.

Anyone keeping up with the news in 2014 got to see this tragic financial reality play out live. As an Ebola epidemic spread like wildfire through West Africa, we were all left to collectively wonder why no one had yet developed a vaccine. Ebola is one of the most potentially deadly diseases on the planet. It's also one that we've all known exists for decades. Why on Earth would no one have created a vaccine yet? Seen through the lens of a profit motive, though, it totally makes sense. Ebola has almost exclusively affected the relatively poor inhabitants of West and Central African countries. Thus, why put money into developing a vaccine when the poor countries that need it probably won't be able to pay you enough to cover the costs of the research? Let someone else worry about such noble work. We the pharmaceutical companies need to make a profit to stay in business! Thus, only after many thousands of West Africans died and panic spread globally did the money surface to research a vaccine. (And so we now already have one that is reportedly 100% effective.)¹⁴⁴

Now, to be fair, many argue that this funding discrepancy is not so big of a problem, that really we have the drugs needed to combat most diseases of poverty—it's just more of the poverty itself that we have to fight. The World Health Organization, for example, says that there are only three truly "neglected" diseases that don't receive nearly enough research funding: African trypanosomiasis, leishmaniasis, and Chagas disease.¹⁴⁵ Even if that somewhat rosy characterization is true, though, these three diseases still infect millions and kill tens of thousands each year. Erectile dysfunction kills no one, but that doesn't stop the wealthy from spending over a billion dollars on medications to

combat this quite unserious problem.¹⁴⁶ However big the discrepancy, it still exists. As the system currently stands, not nearly enough is money is put towards ending diseases of poverty.

How CRR Would Help: CR Rankings would go a long way towards reducing the poverty that allows diseases of poverty to thrive. It would also reward companies that develop new vaccines, medicines, and other innovations that help fight these often-neglected diseases.

The first thing CR Rankings would do to combat diseases of poverty is to combat poverty itself. 80% of the Workers ranking would stem from how fairly a company pays its workers. That would strongly push businesses to better pay their lower-wage workers, whether here in the US or in China, Bangladesh, the Dominican Republic, wherever. With more money, impoverished workers around the world could better afford basics like food, plumbing, water filters, medicine, airtight chimneys, and cook-stoves. That would all go a long way towards eliminating the diseases of poverty that thrive only from a lack of such basics.

In fact, CR Rankings would be especially helpful in combatting poverty where it is most concentrated. The key would be the *Pay Relative to Local Standard of Living* metric. Specifically, the PRLSL metric would rank companies by how well their wages compare with the local median cost of living. (So if your employees don't make enough to comfortably pay for food, rent, and utilities near where they work, then your Workers ranking will be in the trash.) Now, included in that median cost of living calculation would also be access to clean water, indoor plumbing, and basic health care—exactly the kinds of infrastructure that are lacking in many areas of concentrated poverty. Thus, if a business wants to enjoy cheap labor in such an area (by, say, operating a garment factory in Bangladesh) and doesn't want low CR Rankings, it would need to find a way to make sure its employees then get those basic needs covered. That could mean paying its workers enough that they could afford to build plumbing and pay for medical care on their own. Or it could mean providing proper housing and doctors itself. Or it could mean working with the local government to build that needed infrastructure. With that last option, the business would boost its Workers ranking (by making sure its employees are healthy) *and* its Community ranking (by putting in charitable work). The company flourishes, the impoverished country booms, and its inhabitants can now more legitimately escape poverty. Win-win-win. And as better access to food, clean drinking water, sanitation systems, and health care abound, diseases of poverty should steadily fade away.

CR Rankings would further help wipe diseases of poverty out with *innovation points*. As part of the *Additional Factors* metrics, innovation points would be rewarded to any company that makes any new discoveries that would help the world's workers, environment, and/or communities. These points would then raise that company's rankings—the bigger the global impact, the higher the raise. Breakthroughs for diseases of poverty like new vaccines, medicines, and cheap water sanitation devices would garner big time innovation points. With that profit motive dangling before them, pharmaceutical and other medical corporations would actually now have the motivation to go make all of those life-saving new discoveries. Imagine the major global health improvements we could

thus make with innovation points. All told, by reducing poverty and incentivizing new medical innovations, CR Rankings would become a major force in eliminating diseases of poverty.

Gender pay gap

The Problem: Women make, on average, about 78 cents for every dollar made by men.¹⁴⁷



Seattle Municipal Archives

This gap has shrunk quite a bit over the last fifty years. There's also disagreement about why this gap persists, exactly—are employers discriminating against women or are women choosing less lucrative professions? However, the simple fact is that a wide gender pay gap still exists, which is definitely an awful state of affairs. Any time one

broad demographic group earns significantly less than another, millions suffer and our meritocracy is undermined. (What man could say he is okay with earning 78% of what a peer does because of something that has nothing to do with how good he is at his job?)

Part of the problem now, though, is that we have laws on the books prohibiting wage discrimination against women...but the pay gap persists. The lion's share of employers throw up their hands, insisting that they don't discriminate and that it must be someone else. What then?

How CRR Would Help: By reducing income inequality in general, pushing companies to increase flexibility in employee hours, and tracking gender pay equality in all companies, CRR should do quite a bit to close the gender pay gap

The first, most basic way that CR Rankings would help reduce the gender pay gap is by reducing income inequality overall. When you shrink the pay gap between those at the top and those at the bottom, any groups that are paid less on average should benefit more than others. Hence, because women are on average paid less than men, women stand to gain more from shrinking income inequality.

CRR would also take a more targeted approach to gender inequality, though. According to research by Harvard economist Claudia Goldin, the biggest driver of the gender pay gap is a lack of “temporal flexibility.”¹⁴⁸ Temporal flexibility means how flexible a business is with how many hours

its employees work and when exactly they put in those hours. Because women tend to get stuck with more family obligations—e.g. child rearing and caring for elderly relatives—they tend to need more of that temporal flexibility. They might still put in the same number of work hours overall, but they need certain times off to pick up kids from school or deliver medication to a sick parent. Most businesses discourage this kind of flexibility, though, especially for higher-power, higher-paying jobs. Thus, to get the flexibility they need, women often end up taking lower-paying positions.

As part of the Worker Safety & Health Questions, CRR would rank corporations by how well they give temporal flexibility, according to their employees. The more flexibility businesses give with when and how long to work, the better the Worker rankings. Companies would also be ranked by how overworked and overstressed their full-time employees rate themselves to be, encouraging companies to relax their emphasis on long workdays. That would mean less-stressed, happier employees across the board, but also a more hospitable work environment for the women who simply can't stay at work for twelve hours straight. (And by giving men more time off, it might also get men to help more with those family obligations, thereby giving women more freedom to work more, too.)

On top of these features that would automatically factor into each company's CR Rankings, CRR would also create gender *shadow rankings*. These rankings would track the gender disparity in pay and raises in every company. The "shadow" rankings part means that they would not automatically factor into a company's CRR (for fear of creating perverse incentives, as described in greater length in **Additional Notes**). What they would do is help the CR Bureau more easily identify any businesses engaging in discrimination and then dock their rankings within the *Additional Factors* metric.

All told, by reducing general income inequality, pushing companies to increase temporal flexibility, and tracking the gender equality in all companies, CRR should help close the gender pay gap.

Racial pay gap

The Problem: Blacks and Hispanics make far less than whites and Asians in America. What's worse, though, is that this pay gap hasn't really changed much over the last four decades.

As of 2015, black and Hispanic men earned 73 and 69 cents for every dollar earned by white men, respectively.¹⁴⁹ Unsurprisingly, women of color fare even worse. Black and Hispanic women respectively made 65 and 58 cents for every dollar earned by white men.¹⁵⁰ While those figures have improved a bit for women of color in the last few decades, they haven't for men. Black men made the same portion of what white men did in 1980 as they do now.¹⁵¹

As with the gender pay gap, this is a complex problem with debatable causes and solutions. What should be clear, though, is that it's a very real problem that it isn't going away.

How CRR Would Help: By boosting the pay of all low-wage workers and lowering the rankings of any company found discriminating by race, CR Rankings should do more to shrink the racial pay gap than anything else we've done in the last half-century.



Adam Linker/NC Policy Watch

The two main metrics factored into the Workers ranking—*Distribution of Wealth* and *Pay Relative to Local Standard of Living*—would go a long ways towards combatting income inequality. Because these metrics would help boost the pay of all low-wage workers, CRR should help blacks and Hispanics more than everyone else because blacks and Hispanics disproportionately occupy those lower-wage jobs. Thus, the Workers CR Ranking can do a lot help people of color catch up to everyone else in pay.

A secondary but also quite important impact of these metrics would be better education. Public schools are funded in large part by local property taxes. Poor neighborhoods tend to have less funding for their schools simply because the people there are poorer and thus pay less in those property taxes. This means poorer children usually go to worse schools than everyone else, a big barrier if you want them to get a good education and go on to better jobs than their parents had. With CRR pushing companies to better pay those low-wage workers, though, those higher wages would steadily bring in more funding to local schools. Not only would people working lower-wage jobs make more money, their kids would also go to better schools and thus have a better chance at getting even higher-wage jobs themselves. Again, this should disproportionately help those races

more concentrated in lower-wage jobs, i.e. blacks and Hispanics. Making more money also gives those families a better chance of then sending their kids to college, reducing another of the critical roadblocks to people of color in advancing to better-paying jobs.

On top of these measures, CRR would also create two shadow rankings to track the racial pay gap at all corporations. One would track *pay*, the other *pay raises* by race. These racial pay shadow rankings would not automatically factor into all companies' CR Rankings (for fear of creating perverse incentives, as described in greater depth in Additional Notes), but they would provide invaluable evidence to the CR Bureau in discovering and punishing clear pay discrimination. As part of the *Additional Factors* metric for the Workers ranking, the CRB would have the power to dock the rankings of any companies it viewed to be racially discriminatory in the payment of its employees, using direct testimony from employees, these shadow rankings, and any other available evidence.

The racial pay gap is no doubt a tough problem to break down and fix, but CR Rankings should start making great strides towards doing exactly that.

National health care bill

The Problem: We pay more in the US for health care than anywhere else in the world, and that price tag continues to rise. These soaring prices make insurance too expensive for many to afford and it's adding huge sums to our national debt.

Here in the US we have some of the best doctors and technology in the world, but our health care system is also a tangled, expensive mess. We now pay over \$10,000 per American citizen per year for health care,¹⁵² easily the highest cost per capita in the world. That being said, we aren't necessarily healthier than those countries that spend

less. According to a 2015 ranking of health commissioned by the United Nations, the US ranked just 28th globally, well behind plenty of countries that spend a small fraction of what we do each year.^{153,154}



Kristopher Radder/US Navy

How CRR Would Help: By encouraging companies to produce fewer toxic chemicals, pay their workers more, and better protect their workers' safety and health, CR

Rankings would help make millions of workers healthier. These steps should also take a big bite out of our country's massive health care bill.

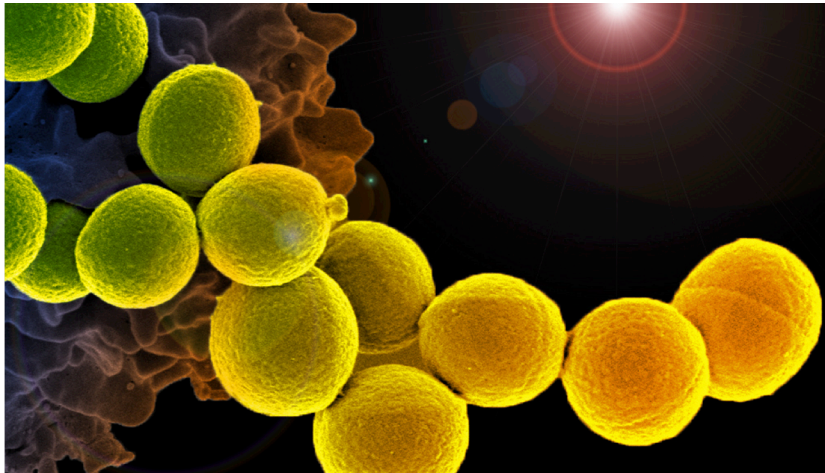
There are plenty of reasons our health care costs have spiraled out of control. CRR wouldn't help many of these factors, like keeping doctors from overusing expensive tests and procedures. However, there are plenty of ways it would significantly help.

- Fewer toxic chemicals – Our modern world surrounds us with all kinds of chemicals that can do us harm. Pesticides from farms, smog from factories, exhaust from cars, leaks from landfills, and all the things we buy and put in our homes—these all contain plenty of toxic chemicals. These chemicals can then lead to higher incidences of all kinds of health problems, from asthma to Alzheimer's, lower IQ to cancer.¹⁵⁵ According to a 2016 study, such chemicals cost the United States alone an estimated \$340 billion a year in health care costs and lost wages.¹⁵⁶ Because CR Rankings reward companies that use (and sell) fewer harmful chemicals, over time we should see a large reduction in the harmful chemicals around us. Simultaneously, we should see a reduction in the huge medical costs that those chemicals bring.
- Better pay – One of the often-ignored byproducts of poverty is poor health. When you're working twelve hours a day to just barely scrape by, you don't really have the time to go jog in the park or the money to buy more healthful food. By encouraging bigger paychecks for lower-wage employees, though, CRR would make a huge difference in the health of the poor. They could then afford more nutritious food and, by not having to work so many hours, have the free time to exercise more and take better care of their bodies. As an added bonus, they could also much more likely afford health care. Health care costs often rack up when the uninsured make frequent emergency room visits. Give that person health insurance, have them come in for cheaper preventative care, and those expensive emergency room visits plummet. It's a win-win. Better health for the people, and lower costs for the health care system.
- More Concern for Employees' Health – Another big way CR Rankings should lower the nation's health care bill is by incentivizing companies to better promote their employees' health. Currently most businesses tend to see their role in their employees' health as, well, if there's anything extra we can do to help, great...but the job definitely comes first. This account is due in three weeks, so you can come back to the whole sleeping, jogging, and eating well idea after all those pizza lunches and twelve hour days hunched over your desk are over. CRR would turn that picture around by tying the health of a company's employees to its profits. As part of the Worker Safety & Health Questions, CRR would have every US employee answer how well its employer:
 - o Provides nutritious food and beverage options
 - o Allows free time and scheduling flexibility to fit in physical exercise
 - o Manages stress levels
 - o Keeps the workplace free of toxic chemicals
 - o Provides safe housing and equipment

How high employees rate their employers on these questions would be factored into the Workers CR Ranking. To get higher rankings (and thus make more money), companies would begin to make their employees' good health an integral part of their business strategy. That should mean workers across the land getting better food, more time to exercise, lower stress levels, and fewer workplace related illnesses. If that doesn't sound good enough in and of itself, it should also mean many billions in health care savings. Another win-win.

Antibiotic resistance

The Problem: Bacterial infections are becoming resistant to the antibiotics we have to treat them, killing hundreds of thousands a year. Meanwhile, drug companies don't want to research new antibiotics because it doesn't really make them money, so the problem is only poised to blow up in the coming decades.



NIAID

Antibiotics are medicines that kill or inhibit the growth of bacteria. Used properly, they can stamp out harmful bacterial infections and make otherwise dangerous operations safe, like surgery and childbirth. Since their first discovery in 1928, antibiotics have saved tens if not hundreds of millions of lives.¹⁵⁷

Bacteria evolve quite quickly, though. Put them in the presence of an antibiotic and any of the bacteria that live to tell the tale may have developed a resistance to that antibiotic—that is, an immunity to it. Get an infection with those resistant bacteria, and that antibiotic will be worthless.

Because antibiotics are used regularly worldwide, antibiotic resistance has also unsurprisingly become a huge problem worldwide. The World Health Organization has reported widespread resistant bacteria found to drugs for tuberculosis, pneumonia, malaria, gonorrhea, urinary tract infections, bloodstream infections, and even HIV.¹⁵⁸ Around 700,000 people die from antibiotic resistant infections each year.¹⁵⁹ If that sounds bad, the problem looks to get much, much worse in the coming years. According to a two-year study of antibiotic resistance commissioned by the United Kingdom, annual deaths are on track to balloon to ten million by 2050, at which point the problem will cost the world an estimated \$3 trillion a year.¹⁶⁰

The scariest thing about antibiotic resistance, though, is that we're doing almost nothing about it. New antibiotics take a lot of research (a.k.a. a lot of time and money) to discover, and in the last couple decades pharmaceutical companies have essentially decided that it isn't worth all the money. So hardly anyone is working on creating new ones. Meanwhile, early in 2017 a Nevada woman died from an infection that was resistant to all 26 antibiotics available in the US.¹⁶¹ Luckily it didn't spread to anyone else, but when one does we could be in for a deadly pandemic.

How CRR Would Help: By classifying antibiotics used without a prescription as *Non-Greenhouse* pollutants, CR Rankings would discourage their overuse. Also, because innovation points would be awarded to companies that develop new antibiotics, the dwindling global supply should steadily replenish.

One of the biggest drivers of antibiotic resistance is unnecessary antibiotic use on farms. Currently, 80% of the antibiotics made in the US are consumed by livestock, not people.¹⁶²

You might be thinking, oh, well that probably isn't so bad. Bless those kind farmers for trying to keep their cattle, chickens, and pigs so healthy! But the rationale for antibiotic use on farms isn't kind; it's lazy and cheap. The modern farm utilizes most of its space and resources with such breathtaking efficiency that it hardly gives its animals the room to move inside tight pens and cages. Have stressed, unhealthy animals stand around all day inside poorly ventilated buildings on a floor littered with their own feces, and you've just created a perfect breeding ground for bacterial infections. Rather than take the slightly more costly route of giving their cows and chickens the proper space, nutrition, and veterinary care to prevent such infections, though, modern farms tend to instead give their animals regular doses of antibiotics in their water and feed. These regular antibiotic doses stave off what would no doubt be quite frequent infections (and, as an added bonus, spur the animals to grow faster), but they also creates a breeding ground for antibiotic resistance in every antibiotic-fed farm animal.

With CR Rankings, antibiotics used without a medical prescription would be considered pollutants under the Non-Greenhouse Pollution metric. The more farms use them, the more it would lower their CR Rankings. This would finally give agribusinesses a strong financial incentive to phase out heavy antibiotic use on its livestock (which would in turn slow the creation of antibiotic resistant bacteria).

Then of course there is the other major driver of the antibiotic resistance crisis: the lack of new antibiotics. With CR Rankings, innovation points would be awarded to any companies that develop effective new antibiotics. Those points would then translate to higher CR Rankings. Thus, CRR would revitalize the otherwise dying profit motive needed to ensure that new antibiotics are made. Thus, by reducing the overuse of antibiotics and encouraging the production of new ones, CRR would become a major force in ending antibiotic resistance.

Nuclear waste

The Problem: Nuclear power is greener than some alternatives, but its waste is incredibly dangerous and expensive to store.



D5481026/Wikipedia

footprint compared to quite dirty coal and oil. The problem, though, is those halves of atoms left over are still quite radioactive—and will continue to be for thousands of years to come. Anyone exposed to that waste will acquire a much higher risk of cancer. While we have developed quite safe ways to store that nuclear waste, it's also extremely expensive (\$38 billion so far in the US¹⁶³), creates a massive headache for finding places to put it, and creates a terrorism risk for anyone looking for something to extra harmful to blow up.

How CRR Would Help: The radioactive waste of nuclear power plants would lower the Environment score of companies that use that power. Businesses would thus be motivated to locate near greener power plants like wind and solar. In turn, governments would be motivated to build more such greener power plants and eventually phase out nuclear.

Thanks to the *Non-Greenhouse Pollution* metric, the more hazardous pollution a company creates, the lower its Environment ranking. That includes the pollution of any power plants that those companies use for electrical power. Your factory's located near a coal power plant? Sounds like some cheap electricity, sure. But for whatever percent of that coal plant's electricity you use, you'll be held accountable for the same percent of that plant's pollution, too. Businesses that use nuclear power wouldn't be docked much for carbon dioxide, but they would be docked for the nuclear waste. CRR's Environment rankings would thus push businesses away from the dirtiest power sources like coal, but also away from the still hazardous nuclear. All that money we spend burying radioactive waste could thus go into building safer, greener power plants. Sounds like an all-around win.

Nuclear power plants work by exploiting nuclear fission. Take some giant, unstable atoms like uranium, whack 'em with some tiny little neutrons, and the giant atoms split in half. That releases a ton of energy, energy that can then be used to boil water, spin turbines, and thus generate electricity. The benefit of nuclear power is an almost nonexistent carbon

Child labor

The Problem: Many millions of children worldwide work jobs that keep them out of school and thus stuck in poverty.

“Child labor” isn’t just anytime a young person has a job. It isn’t, in other words, voluntarily working the register at mom and dad’s restaurant for a couple hours after school. We instead call it child labor when it’s harmful for the child. That means work children are simply too young to be doing or, as UNICEF puts it, work that “may



IRRI Photos/Flickr

compromise their physical, mental, social or educational development.” That can be anything from child prostitution to twelve-hour days on a coffee plantation to a factory job that exposes kids to chemicals that stunt their growth. The International Labour Organization estimates that 168 million children age 5-17 fit that bill in 2013.¹⁶⁴ That’s the equivalent of every other person in the entire United States working in child labor.

Of course, we shouldn’t just lament the loss of playground time and childhood innocence. Child labor is probably the easiest way to keep someone from getting an education and rising up from poverty. It also frequently leads to developmental disabilities, malnutrition, physical mutilation, drug abuse, depression, and other psychological problems.

How CRR Would Help: Any company found using child labor would have its Workers ranking docked.

Child labor is generally an off-the-books kind of problem. Most businesses employing children for long hours won’t report that they’re doing so to any government. To some degree, this limits what CRR can do to help. If businesses don’t report something, that something won’t make it into CRR’s automatically calculated metrics.

That being said, any evidence showing that a business uses child labor will lead to rankings deductions through the *Additional Factors* metric. (And deductions for any unreported, most likely hidden irresponsible behavior like child labor will be much steeper than deductions for honestly reported behavior.) One important priority with CR Rankings will be a simple, publicly anonymous online system through which anyone worldwide can submit information about a company and how

responsibly it is acting. This can be in the form of photos, video, quotes, observed data, testimonials, etc. Any company trying to hide widespread child labor will find it a bit hard to do so in an age of CR Rankings and ubiquitous camera phones.

Cancer rates

The Problem: Cancer causes one in every six deaths, making it the second leading cause of death in the world.¹⁶⁵ It is also our most expensive disease, costing us an estimated \$895 billion each year.¹⁶⁶



Foundation Vanessa Isabel/Wikipedia

How CRR Would Help: CR Rankings would lower cancer rates by encouraging businesses to first stop selling cigarettes and produce fewer carcinogens overall. It would also encourage them to give their employees more healthful food, more time to exercise, better protection from toxic chemicals, and better pay. With these steps, CRR would reduce many of the biggest risk factors for cancer.

Much of what determines your cancer risk falls to your own choices—what you eat, how much you exercise, how much exposure you get to the sun, how much you smoke. Lowering the risk of cancer is therefore largely up to you. You choose whether or not to smoke. You choose whether or not to exercise, to put on sunscreen, etc.

However, there is still quite a bit that our businesses do that influences those cancer rates. CR Rankings would push companies to lower risk factors in many ways, which should overall lower the rate of new cancers developing each year.

- Carcinogens – Perhaps the most important way CRR can fight cancer is to encourage businesses to phase out the use of carcinogenic substances, that is, ones that increase the risk of cancer. With the *Non-Greenhouse Pollution* metric, the more toxic chemicals a corporation produces and/or buys, the lower its Environment ranking. Businesses would thus be motivated to produce less of a wide variety of such chemicals: synthetic pesticides, dioxins, vinyl chloride, benzene, formaldehyde, heavy metals. That change would most directly benefit the employees who work around these chemicals every day, but would also benefit the rest of us, too, though. Most of these synthetic chemicals we manufacture don't break down easily in nature (or at all). They thus continue to build up in our atmosphere, oceans, soil, groundwater, and, yes, our bodies too. By limiting the number of carcinogens companies produce, we should over time start to see fewer harmful chemicals in the environment and thus fewer new cancer cases.
- Cigarette sales – Corporations wouldn't just have their rankings docked for producing carcinogens. They would also get lower rankings for selling them, too. Probably the biggest consumer product this would affect is cigarettes. For selling carcinogenic products, tobacco companies would get low CRR marks, sure, but so too would any store that chooses to sell them. Some stores have already made the bold choice to discontinue the sale of cigarettes given their ill effects on health, CVS being a prime example.¹⁶⁷ With CR Rankings, many more stores would no doubt follow suit once it became clear that dropping cigarettes would mean higher rankings. Fewer stores selling cigarettes means fewer people smoking and thus, less cancer.
- Giving time for physical exercise – As part of the *Worker Safety & Health* metric, all US employees would be asked how well their employers allow them the free time and scheduling flexibility to fit in physical exercise. Companies would thus have good reason to make sure their employees get that free time and flexibility. The more people we would then have exercising more often, the lower the cancer risk.
- Ensuring employees have access to healthful food options – Another question given to all US employees would be how well do their employers provide healthful food and beverages at work (and/or make it easy for the employees to provide those healthful options themselves). The higher the marks, the higher the Workers ranking. It would therefore benefit companies to move towards healthier lunch, snack, and drink options around the office, which could make a big impact on our nation's diet. More healthful diets mean a lower cancer risk.
- Give employees better protection from toxic chemicals – According to the Centers for Disease Control, 3-6% of cancers are caused by workplace exposure to such carcinogens, meaning hundreds of thousands of deaths each year.¹⁶⁸ However, even as companies decrease toxic chemical use thanks to the Non-Greenhouse Pollution metric, they will still no doubt have to use some such chemicals. That means there will still be some workplace exposure. To help combat this remaining cancer risk, all employees would be asked how

well they feel their employers keep the workplace safe from hazardous materials and chemicals. Their answers would then factor into all Workers rankings. That would give businesses not only an added bonus to remove all potential carcinogens, but also the motivation to better protect their employees from the chemicals that must be used. That could mean better facemasks and better ventilation systems. It could also mean better separation from those chemicals, e.g. spraying them with robotic equipment while the human operators sit far away.

- Higher pay – Perhaps the least obvious way CR Rankings would impact cancer rates is by increasing the pay of lower-wage workers. Getting paid more should mean those workers would, on average, be able to a.) buy more healthful food, b.) physically exercise more often, c.) afford health care, and d.) have more time for more preventative cancer screenings. All of these changes would mean these now better-paid workers should develop fewer instances of cancer. There is also a fairly high correlation between income and smoking. Those living at or below the poverty level are over 50% more likely to smoke cigarettes,¹⁶⁹ likely to cope with the added stress of being poor. Increase their pay and they would be less likely to smoke (and thus less likely to develop the respiratory cancers associated with smoking).
- More money for research – With the *Charitable Giving* metric, companies would be encouraged to give more money to all kinds of good causes. That includes charities that fund cancer research. With more money, such research could no doubt move more quickly to better, more effective treatments and possibly even someday outright cures.

Put all of these influences together, and CR Rankings should provide a big push to lower cancer rates. That would mean in the long run saving many billions of dollars and, more importantly, saving many thousands if not millions of lives.

Funding for charities

The Problem: The problems here are any of the various problems our charities fight against – homelessness, hunger, sickness among the uninsured, inadequate education, environmental conservation, cancer research, etc.

How CRR Would Help: US corporations made almost two trillion dollars in 2015 but only gave a tiny sliver of those profits (0.98%) to charity.^{170,171,172} With the *Charitable Giving* metric



Canadian Foundation for AIDS Research

in the Community ranking, CR Rankings would encourage companies to compete to see which of them could give the largest percentage of their profits to charity. That should mean a huge boost in funding for all kinds of great causes.

Outdoor air pollution

The Problem: Over three million people die prematurely every year thanks to outdoor air pollution, a number that is set to double by 2050 if the current trend continues.¹⁷³



JuergenPM/Pixabay

We often refer to outdoor air pollution as “smog,” the brownish haze that settles over so many large cities. Outside of cities our air is still quite full of pollutants, though, even when we cannot see them. Burning fossil fuels in our power plants, homes, and cars creates most such pollution, while ammonia from farms and a random assortment of chemicals from factories and from incinerating trash don’t help. This pollution leads to higher rates of all kinds of illnesses, from the mild (like asthma) to the deadly (like heart attacks).

How CRR Would Help: By encouraging companies to burn fewer fossil fuels, produce less ammonia, and create fewer other air pollutants, CR Rankings would make huge progress in reducing outdoor air pollution.

Many deaths from outdoor air pollution arguably fall outside of CRR's reach. Natural pollution like dust is a big problem in drier areas of the world like the Middle East. In Asia, the smoke from burning wood, diesel, and coal at home can be particularly dangerous.

However, CR Rankings would address many of the major sources of outdoor air pollution. About forty percent of the deaths from outdoor air pollution stem from the combined emissions of farms, power plants, and cars.^{174,175} On farms, fertilizers and the urine from livestock both create ammonia gas. That ammonia then combines with nitrogen and sulfur byproducts—which are created by burning fossil fuels in power plants and cars—to form tiny, harmful particles called PM2.5s. These PM2.5 particles (i.e. particulate matter smaller than 2.5 microns wide) are especially dangerous because, by being so small, they can penetrate deep into the lungs and be absorbed into the bloodstream. Such harmful particles, as well as NO₂ from diesel engines, all increase the risk of premature death from heart and lung failure, as well as from cancer. There's also ozone, the common byproduct of sunlight plus air pollution, which creates respiratory problems when created near the surface of the earth. Add in all of the other assorted pollutants created by our vehicles, power plants, and factories, and we have another classic GCM problem in outdoor air pollution. To fix it we need to give people the proper motivation to stop contributing to the problem.

With the *Non-Greenhouse Pollution* metric, CRR would push businesses to reduce their production of these harmful gases and particulates. Specifically, companies would be rewarded for:

- **Reducing fossil fuel consumption** by driving and flying less, by switching to hybrid or electric vehicles, and by using less electricity. Companies would also be pushed to cut fuel consumption all the more by the *Carbon Footprint* metric.
- **Locating near renewable power plants** (because by not burning fossil fuels they wouldn't produce nitrogen and sulfur oxides). This would in turn reward municipalities that switch to more renewable energy because doing so would attract more businesses to set up shop there.
- **Using less fertilizer** to reduce the amount of ammonia gas released into the atmosphere
- **Shifting from livestock to more plant crops** to as well reduce ammonia gas production
- **Stop incinerating trash** to stop producing dioxins, carbon monoxide, carbon dioxide, mercury, lead, nitrogen oxides, and other harmful pollutants
- **Producing less of every other type of air pollution**

By encouraging all businesses to take these steps bit-by-bit, year-by-year, CR Rankings would over time greatly reduce the amount of outdoor pollution being created. CRR could also in the process save thousands if not millions of lives.

Cultural Eutrophication

The Problem: When businesses dump nutrient-rich fertilizers and wastes into our rivers and lakes, algae and plants grow out of control and kill off everything else. That

spoils our waterways, hurts fishing and tourism industries, and costs us a ton of money.

Cultural eutrophication occurs when—thanks to us humans—too many nutrients enter a body of water. This most often happens when farms put too much fertilizer on their fields (which then washes downstream) or when sewage pipes pour directly into rivers and lakes. Plants and algae in the water gobble up those excess nutrients, grow explosively, block out the sunlight, and use up all of the oxygen. Some, maybe even all, of the other aquatic organisms then die out. And as we travel



F. Lamiot/Wikimedia Commons

closer to the ocean the effects get much worse. As rivers combine their waters, they also combine all that fertilizer and sewage.

Because of eutrophication, bodies of water like the Chesapeake Bay have for decades now had large “dead zones,” i.e. areas of the water with such low dissolved oxygen levels that

very little can live there. And these dead zones are rapidly growing. After the number of dead zones has roughly doubled every decade since the 1960s, we now have hundreds of them.¹⁷⁶ They now cover about 95,000 square miles of ocean¹⁷⁷ and dot the entire US Gulf of Mexico and Atlantic Ocean coastlines.¹⁷⁸

Eutrophication is obviously bad for the body of water in question, but it’s also plenty bad for us humans by association. Fish, crabs, lobsters, shrimp, and any other species we harvest as seafood get hit pretty hard by eutrophication, which means the fishing industry gets hit pretty hard by it, too. Tourism takes a hit when your local waters look a murky brown and green (and are thus bad for swimming). Also, when those freshwater sources give you your drinking water, all of that algae means much more expensive filtration. All told, the estimated cost of cultural eutrophication in the United States alone is \$2.2 billion annually,¹⁷⁹ and with the continuing growth of fertilizer use worldwide, the problem of eutrophication only stands to get worse.

How CRR Would Help: Fertilizers, livestock waste, and industrial sewage would, like any other pollution, bring down a company’s Environment CR ranking. Farms and factories would thus be motivated to produce less and better manage each of those main causes of eutrophication. That means far healthier rivers, lakes, bays, and oceans.

CR Rankings would motivate businesses to produce less of and better manage the substances that lead to eutrophication: synthetic fertilizers, animal waste, industrial sewage, and nitrogen oxides.

- Synthetic fertilizers – Farms regularly use much more synthetic fertilizer than they need because it's cheap and they want to make sure their crops get enough nutrients. That's a problem, though, when the excess washes into the nearby stream. Meanwhile, there are plenty of things farms can do to minimize this erosion—contour farming, riparian buffers—but why go to all that trouble when the effects of eutrophication a hundred miles downstream won't affect you? CR Rankings would change all of that by considering excess fertilizer a pollutant under the *Non-Greenhouse Pollution* metric. Farms would thus be motivated to use less fertilizer and to take whatever steps necessary to make sure that what fertilizer they do use doesn't wash downstream.
- Livestock waste – When you raise cows, chickens, pigs, and other livestock, you inevitably get plenty of unwanted feces. There's simply no way around it. And as meat production has reportedly tripled worldwide over the last forty years¹⁸⁰ that means triple the manure to deal with. Farms tend to use that manure as fertilizer on fields or to pool it up in a lagoon, but the more of it there is the more easily it can wash down into streams and lakes. CRR would consider any manure used beyond an appropriate level of fertilizer as a pollutant under the Non-Greenhouse Pollution metric. To raise its Environment ranking, farms would be motivated to better manage that manure and/or make less of it (i.e. switch to more plant crops).
- Aquaculture waste – Just like other livestock, fish and shrimp grown on farms produce plenty of nitrogenous waste too. Fish farming has boomed in recent decades—worldwide production is up 1160% in the last thirty years^{181,182}—meaning much, much more waste that gets dumped straight into our aquatic ecosystems. As with other manure, aquaculture waste would be considered pollution for a company's Environment ranking, provided it finds no productive, non-harmful way to use that waste.
- Industrial sewage – Just like a city has wastewater it has to dump somewhere, industrial sites like paper mills and food processing plants do too. When that sewage is rich in nutrients and dumped straight into waterways, it can cause eutrophication. Such unprocessed nutrient-rich sewage would be considered pollution under the Non-Greenhouse Pollution metric, thus motivating such businesses to better manage their waste.
- Nitrogen Oxides – Last but certainly not least we have nitrogen oxides, a byproduct when we burn fossil fuels. Coal-fired power plants and automobiles pump these chemicals up into the air, after which they inevitably come back down in rain, snow or dry deposition (i.e. simply falling back down on their own). These nitrogen oxides then enter our bodies of water, at which time they feed plants and algae and drive more eutrophication. Thanks to the Non-Greenhouse Pollution metric, nitrogen oxides would bring down a company's Environment ranking. So too, of course, would burning fossil fuels in the first place thanks to the *Carbon Footprint* metric. Businesses would thus have a strong incentive to reduce their nitrogen oxide production.

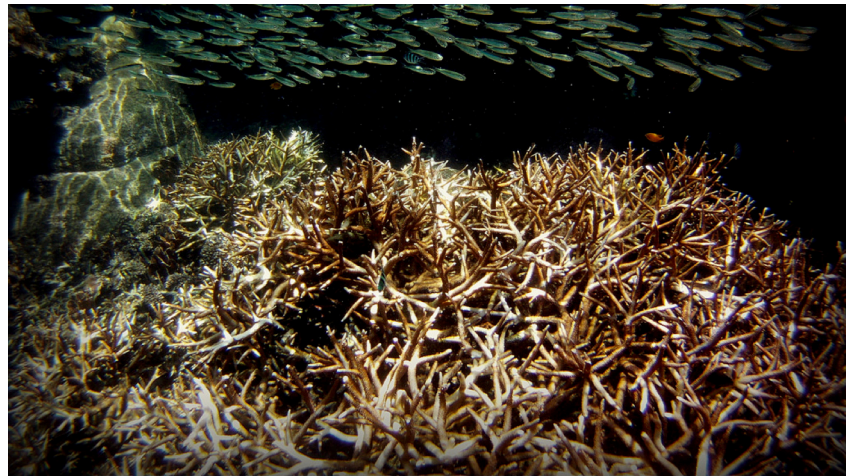
All told, CR Rankings would push businesses quite a bit to reduce and better manage their fertilizer, animal waste, sewage, and nitrogen oxide production. That in turn would do quite a bit to reduce eutrophication. We should therefore see fewer new eutrophic dead zones, if not many dead zones

coming back to life. That should save us quite a bit of money and greatly improve the health of our lakes, rivers, bays, oceans.

Ocean Acidification

The Problem: The CO₂ we create from burning fossil fuels is making our oceans much more acidic. That higher acidity hurts marine ecosystems and could eventually lead to the complete destruction of our oceans' coral reefs.

Increased CO₂ in the atmosphere hasn't just led to warmer temperatures. It has also increased the carbon dioxide levels in our oceans. And the problem this time isn't warmth—it's acid. Combine CO₂ and water and you get carbonic acid. Thus, the more carbon dioxide in our oceans, the lower the pH levels. NOAA estimates that Earth's ocean water has become about 30% more acidic since the beginning of the industrial revolution and that it is poised to become another 150% more acidic by 2100, should current fossil fuel-burning CO₂ trends continue.¹⁸³



Petchrung Sukpong/Flickr

While we don't know the full effects of such a huge jump in acidity—one that would make our oceans more acidic than they have been in over 20 million years¹⁸⁴—we do have a fairly good idea. Increased acidity first hits many marine species that depend on calcium carbonate for hard, shell-like protection (e.g. oysters, clams, sea urchins, coral, and some plankton). That kills many members of those species, which then kills whatever eats them, plus whatever eats what eats them, and so on. Plankton in particular are the foundation of the oceanic food web, and a recent study by researchers at MIT showed that acidification could drastically disrupt the world's plankton populations,¹⁸⁵ a change that would likely in turn drastically disrupt everything else living in the oceans.

Meanwhile, perhaps still the biggest impact of acidification is the destruction of the world's coral reefs. Our coral reefs are already steadily shrinking. Most of the blame goes to the warming of our oceans (which, not surprisingly, is caused by climate change). Half of the Great Barrier Reef's living coral, for example, has died since 1985.¹⁸⁶ Higher acidity is another major cause of the problem, too, though. Scientists recently found that at pre-industrial pH levels the GBR's coral would be growing about 7% faster.¹⁸⁷ As acidification is poised to accelerate in the coming years, the destruction of our

coral reefs is poised to follow. In addition to losing some of the most beautiful places on our planet, losing our coral reefs would also mean losing a vital habitat for fish populations, food for many marine species, and shoreline protection from erosion. In 2014, the U.N. Convention on Biological Diversity released a report estimating that the costs of losing ecosystem protections like coral reefs could reach \$1 trillion per year by the end of the century if we don't change course.¹⁸⁸

How CRR Would Help: CR Rankings would strongly discourage the production of carbon dioxide. By doing so, CRR should help dramatically slow, if not one day totally stop, the acidification of our oceans.

The *Carbon Footprint* metric ranks companies by how much they contribute to global warming. Most of that contribution, of course, comes from carbon dioxide gas. With CRR in place, companies would be financially encouraged to steadily produce less and less CO₂. Less CO₂ in the air would directly lower the CO₂ levels in our oceans, thus slowing the increase in acidity. Given enough time, this acidification trend could even stop or reverse (with any corporate-funded initiatives to capture carbon from the atmosphere and oceans), putting our oceans on track to restore their pre-industrial pH levels. That would save our coral reefs, revitalize our marine ecosystems, and save us what could be many trillions of dollars.

Wetland destruction

The Problem: Wetlands like marshes and swamps filter our water, prevent flooding, trap carbon, and host an incredible variety of life. Thanks to global warming and new development, though, our wetlands are steadily being destroyed.

A wetland is any place where water covers the soil: marshes, ponds, swamps, bogs, deltas, frequently flooded lowlands, and the edges of lakes and oceans. While wetlands may just seem like muddy, gross, and unimportant places, they are actually one of our most vital ecosystems. Wetlands filter pollutants out of water. They greatly lessen flood damage by acting as a sponge and soaking up excess water. They protect coastlines from erosion, and they absorb carbon dioxide that otherwise exacerbates climate change. Similar to rainforests and coral reefs, wetlands also teem with a much greater biodiversity than most ecosystems. That abundance of life makes wetlands vital to the vast number of species that live there, sure—from cranes to crocodiles—but also makes them especially critical to the greater health of the world. Nearly half of all endangered species depend on wetlands for habitat and food.¹⁸⁹

Meanwhile, thanks to human activities our wetlands are disappearing. Global warming raises sea levels and thus drowns many wetlands with seawater. New housing, retail, and farming developments frequently fill in wetlands with dirt and/or pave them over. An overabundance of pollution in our water—sediment, fertilizer, pesticides, road salts, sewage, heavy metals, and more—can exceed the natural number of toxins a wetland can filter out, and thus start to kill off the species

that live there. Despite conservation efforts by the government, the United States is losing about 90,000 acres of wetland each year and rising,¹⁹⁰ a relatively quite high amount given the rarity of these ecosystems.



Karney Lee/USFWS

Of course, as usual we don't just mourn the destruction of the environment because it mars beautiful places. It also quite directly hurts us. Lose wetlands and you have to build more dikes to protect from floods. You have to build more water filtration systems. Climate change becomes that much worse. Water recreation, fishing, bird-watching, rice farming and other industries dependent on wetlands also take big hits. All of that costs a lot of money. Hurting our wetlands hurts ourselves.

How CRR Would Help: Destruction of wetlands would lower a company's CR Rankings, as would adding to the pollution that weakens the wetlands that still exist. Over time, CRR could thus spark a major turnaround for our disappearing wetlands.

As part of the *Additional Factors* metric for the Environment rankings, the direct destruction of wetlands would lower a company's CR Rankings. Helping to preserve wetlands by leaving them alone—that is by building farms, factories, office buildings, roads, and parking lots somewhere other than on wetlands—would improve any business's rankings. Actively contributing to wetland restoration projects would raise that business's rankings even more.

The *Carbon Footprint* metric would also help to protect wetlands. Slowing climate change would mean slowing sea level rise, which would protect all of the low-lying wetlands vulnerable to higher sea levels. As well, the *Non-Greenhouse Pollution* metric would encourage companies to gradually phase out

all toxic chemicals. That would ease the excessive number of toxins that our wetlands currently have to filter out and thus improve the health of the wetlands still in existence.

With all of those metrics put together, CRR would give companies a financial incentive to help preserve wetlands, a potential game changer for this fragile but quite necessary ecosystem.

Obesity rates

The Problem: Currently, more than a third of adult Americans are obese. Obesity leads to a host of other health disorders, soaring health care costs, and high rates of premature death.



Tibor Vegh/Wikimedia Commons

If asked about the negative effects of obesity, most would say it's embarrassing to be so overweight. That may very well be true, but the long-term consequences are much worse. Obesity leads to a higher risk of high blood pressure, type II diabetes, heart disease, stroke, mental illness, cancer, and death (among others).¹⁹¹ In fact, one of the

best ways to shorten your lifespan is to carry excess body fat. According to a joint study by Stanford and Cambridge universities, every increase of 5 points in BMI above normal is associated with, on average, a 31% higher risk of mortality.¹⁹² Given that two-thirds of Americans are overweight and one-third are obese, that amounts to a public health crisis.

The misery caused by obesity's secondary ailments and premature death are reason enough to do everything we can to combat the problem. However, the economic picture makes the cause all the more necessary. Estimates put the annual health care cost of obesity at somewhere from \$147 to \$210 billion in the US.¹⁹³ That's up to a \$650 yearly bill for every American to pay for the health complications of the obese.

How CRR Would Help: Poverty, unhealthful food, and a lack of movement in our lives are three of the biggest causes of widespread obesity. CR Rankings would raise the pay of the poor, push companies to offer more nutritious food at work, and push them to give more time for their employees to exercise. CRR should likely therefore make a big dent in the obesity epidemic.

Obesity has a clear correlation with higher-income countries. The United States, for example, is one of the richest countries in the world and is also one of the most overweight. Ironically, though, it's *the poor within those wealthier countries* who are most likely to be obese. One recent study found, for example, that especially poor American counties (with a poverty rate over 35%) have obesity rates 145% higher than wealthier American counties.¹⁹⁴ The exact reasons are complex, but one big one is that in the US the cheapest foods have the most calories. Also, our culture has us sitting much more than moving, and the poor don't have the spare time or money to go join a gym. However the causes rank exactly, it's clear that the poor in the US and other affluent countries are the center of the obesity epidemic.

By attacking income inequality with the *Distribution of Wealth and Pay Relative to Local Standard of Living* metrics, CR Rankings would reduce poverty. By combatting poverty in poorer countries, CRR would help alleviate hunger and malnourishment. By also combatting poverty in richer countries like the US, though, CRR would do quite a bit to reduce obesity. The poor here would have more money to buy more nutritious food and could spare more time off to exercise.

CRR would also target obesity by more directly encouraging better food and more exercise. With the *Worker Safety & Health* metric, CRR would question all employees about how well their employers offer nutritious food and beverage options. It would also ask how well their employers give the free time and scheduling flexibility to fit in physical exercise. All businesses would be ranked by how well their employees rate them on those two questions. Thus, businesses would be motivated to start providing more nutritious food options at the workplace and a more flexible schedule to fit in regular exercise. With the cumulative effects for workers across the United States and beyond, these questions would provide a big push towards reducing obesity.

Mountaintop removal

The Problem: Coal companies regularly now get their coal by blowing up the tops of mountains. This mountaintop removal (MTR) method permanently destroys the mountain, devastates the surrounding environment, and poisons the people living nearby.

What you no doubt picture in your mind when you think of coal mining are traditional mines, tunnels that bore into the side of a mountain. These days, though, many coal companies opt for the easier and cheaper method of "mountaintop removal." It literally means exactly what it sounds like. Explosives blow up the top of the mountain, crews remove all of that earth, and voila. The coal inside is exposed for easy extraction.

However effective this approach may be for mining coal, it's pretty across-the-board awful otherwise. For starters, MTR takes some of the most majestic, beautiful places we have and turns

them into wastelands. By 2009, mountaintop removal had been used to alter or permanently destroy over 500 Appalachian Mountains.¹⁹⁵ And it isn't just the mountains that are destroyed. After removing the top five hundred feet or more of the mountain, the coal company generally then dumps that massive pile of often-toxic mining waste into surrounding valleys and rivers. This is referred to as a "valley fill" because it can literally fill the entire valley and flatten it. All told, the area's mountain, valley, and aquatic ecosystems are devastated in the process. Forests there will likely take centuries to fully recover from being so wiped out. Even bird populations are affected, poisoned by eating poisoned fish.¹⁹⁶



Allen Arthur/USFWS

That isn't all, though. Coal slurry—the leftover liquid sludge from coal processing, a mix that includes coal dust, water, and toxic heavy metals like arsenic, lead, mercury, and chromium—is also then left to sit in "impoundments" (a.k.a. giant open pits) somewhere in the area nearby, pits where the chemicals can seep into the groundwater or surge out all at once into the nearest stream if

the dirt walls fail. In Kentucky in 2000, one such impoundment failure dumped an estimated 306 million gallons of slurry into the nearby Tug Fork River,¹⁹⁷ making it over 30 times the size of the Exxon Valdez oil spill.¹⁹⁸

All of coal slurry's bad chemicals then (surprise surprise) end up making their way back to people. Twenty-one studies from 2007-2012 combined to show that those living near mountaintop removal sites were 42% more likely to be born with birth defects and 50% more likely to die of cancer than those living elsewhere in Appalachia.¹⁹⁹

How CRR Would Help: Any company that uses mountaintop removal would have its Environment ranking lowered. CR Rankings would also push businesses away from using coal in general. Together, CRR would have a strong effect in ending MTR.

With the *Additional Factors* metric for the Environment ranking, corporations would be penalized for actions that permanently destroy the environment. Mountaintop removal would be high on this list of destructive actions. Thus, any business that gets its energy from MTR-mined coal would have its CR Rankings heavily docked. MTR is also an act almost impossible for any coal company to hide, thereby guaranteeing that any company mining this way would be punished with lower rankings.

Perhaps even more importantly, though, the *Carbon Footprint* metric would heavily punish companies the more they rely on power sources that contribute more to global warming, coal especially. That

would eventually push coal power plants out of operation, thereby cutting off the economic demand for coal and therefore also the method of mountaintop removal used to get it. The *Non-Greenhouse Pollution* metric would furthermore dock the rankings of companies that dump the sediment and toxic metals left over after mining into nearby valleys and streams. All told, energy companies would have a quite strong motivation under CR Rankings to eliminate the practice of mountaintop removal once and for all.

Acid rain

The Problem: Air pollution can make rain abnormally acidic, after which the rain then disrupts ecosystems, damages buildings, and affects human health.

Fossil fuels like coal and oil contain small amounts of sulfur and nitrogen. Burn those fossil fuels and you then create sulfur dioxide and nitrogen oxide byproducts. Those byproducts can then float up into the atmosphere, combine with water, and form the highly acidic sulfuric and nitric acids. Just a little bit of those two present can be enough to lower the pH (i.e. raise the acidity) of the rain that then comes down.

This acid rain then disrupts ecosystems on the Earth's surface, especially lakes and rivers. If you've ever owned a fish tank, you'll know that fish are very sensitive to pH levels. (Don't keep the water's pH properly

balanced and the fish will die.) The same goes for fish out in the wild, of course. With heightened acidity, water absorbs more aluminum and mercury,²⁰⁰ both of which can be toxic to the fish, not to mention the animals or people who then eat the fish.



William Warby/Flickr

Forests can also be susceptible to acid rain, as it takes nutrients out of the soil and increases the levels of toxic aluminum. In the 1970s and 80s, for example, fifty percent of canopy red spruces died off or were damaged in the High Peaks of the Adirondack Mountains thanks to the acidic clouds that tend to gather in the area.²⁰¹ Buildings and cars can also take the brunt of more acidic rain. According to the EPA, many automakers in the US. now use acid-resistant paint to combat the problem, a fix that costs them (and really therefore costs car buyers) \$61 million a year.²⁰²

In 1990, Congress amended the Clean Air Act to include new regulation of SO₂ and NO_x (called the Acid Rain Program). An analysis of the Acid Rain Program has since determined that as of 2010 the program saves the United States \$122 billion annually. That benefit has come largely by reducing the amount of SO₂ and NO_x in the atmosphere by an estimated 46.2% and 34.2% thanks to the program.²⁰³ That's huge progress so far, but it still means there are many billions of dollars more worth of damage being done to our health each year thanks to these pollutants. As long as people burn fossil fuels, there will inevitably be somewhat prevalent acid rain.

How CRR Would Help: CR Rankings would strongly discourage companies from burning fossil fuels, which is the primary source of the chemicals that cause acid rain.

With the *Carbon Footprint* metric, CRR would encourage companies to drastically reduce their use of fossil fuels. The less coal and oil we burn, the less sulfur dioxide and nitrogen oxides we will produce. And that means much less acid rain. These chemicals would also be considered pollutants under the *Non-Greenhouse Pollution* metric, giving corporations an even bigger incentive to reduce their production, even with the remaining fossil fuels being burned. With CR Rankings, we could build on the tremendous progress we've made in recent decades and get rid of acid rain altogether.

Companies abandoning communities

The Problem: Companies can now move around the globe more easily than ever. That may be good for business, but shipping jobs overseas devastates the cities and towns left behind.

For businesses, the world keeps getting smaller. Shipping halfway around the planet now only takes days. Communicating that far takes seconds. Combine this smaller world with the fact that it's often cheaper to set up shop in one place versus another, and it's little surprise that businesses are now splitting up their operations all around the globe. Offices in Los Angeles and London, factories in India and Bolivia, distributors in Little Rock, Shanghai, and Melbourne.

But companies aren't just more spread out. They're also more often on the move. What's that? The minimum wage is going up by fifty cents where I have my factory? And this other country just lowered their corporate tax by a hair? Well, let's move the factory there. But...now the economic winds have slightly shifted again and the cost of business is slightly cheaper somewhere else? Time to move again. Because the world has become so much smaller, such movement of jobs is becoming quite commonplace.

While such easy job movement may be great for businesses, it's bad for most everyone else. When a factory shutters to head overseas and save a few bucks, it can leave a wake of devastation behind. Hundreds, maybe thousands lose their jobs. There are of course the direct effects of this kind of unemployment—economic hardship, depression, hunger, lack of health care, a higher likelihood of

divorce. And then there are the ripple effects on the local community. Those newly unemployed now have no money to spend around town. Other businesses in the area thus lose customers, perhaps even to the point of having to close their doors, too. Tax revenue dries up, causing deficits and all of the related painful cuts in local government service: school cutbacks, police staff reductions, etc.

One need look no further than the American Rust Belt to see how devastating the easy movement of jobs can be. Over the last half century, General Motors has shipped over 70,000 jobs out of its hometown of Flint, Michigan.²⁰⁴ In the process a once-thriving industrial city has decayed into an American tragedy. Forty-one percent of Flint's residents now live under the poverty line,²⁰⁵ and the sky-high crime rate regularly gives Flint the dubious ranking of most dangerous city in the US.²⁰⁶ Our communities simply can't adapt as quickly as companies can when they flit around the world.



Albemar78 / Flickr

Meanwhile, job movement can also do plenty of harm to the families who keep the jobs by moving with them. Children who move more often tend to do worse in school and have more behavioral problems.²⁰⁷ They also have more issues years later as adults. Studies show the frequent movers as children go on to later in life have more instances of drug abuse, criminality, psychiatric problems, and suicide attempts,²⁰⁸ all while reporting themselves as having fewer quality relationships, worse well-being, and lower life satisfaction.²⁰⁹ The more employees have to move to follow their jobs, the worse it usually is for their kids.

In a more general way, frequent moving can also easily erode our feeling of community. There are many ways to find a sense of community, sure, but the simplest way is to connect and bond with the

people immediately around you. A growing issue in modern society, though, is that we increasingly don't. A survey in the United Kingdom found that 70% didn't even know their neighbors' names, and that only 6% said there was a strong sense of community where they lived.²¹⁰ Much of the blame surely goes to the internet and other modern technology that lets us avoid direct human contact. Excessive moving doesn't help, either, though. (Why would you get to know anyone around you if you're just going to have to move again in a few years?) The average American moves a whopping 11.4 times in a lifetime.²¹¹ The more often companies shift their employees about the globe, the harder it is for anyone to get that essential feeling of community.

How CRR Would Help: With the *Job Location Stability* metric, businesses would earn higher CR Rankings the less often they move their jobs from one place to another. Our communities could thus grow stronger with more stable employment, economies, and neighborhoods.

20% of CRR's Community Ranking would come from the Job Location Stability metric. Specifically it would rank companies by what percentage of their jobs they have relocated at least twenty miles away in the last five years, the last ten years, and the last fifteen years. No business would have to keep its jobs frozen in one place forever, of course, but this metric would help push companies to invest in certain communities and (at least mostly) stay put there. By doing so, communities and their working citizens could enjoy a renewed stability that has otherwise steadily eroded over time. That's better for towns that might otherwise fall apart if half the jobs suddenly leave. That's better for kids who need a more stable upbringing to live a healthier life overall. And that's better for our neighborhoods to develop a stronger sense of community.

Species endangerment and extinction

The Problem: Human activity is permanently killing off species at a rate almost never seen in the four billion years of life on Earth.

Some species go extinct naturally, sure. Millions of species have been born and then died off since the beginning of Earth. Right now, though, humans are responsible for the vast majority of extinctions, and our planet is experiencing approximately 100 to 10,000 times the natural extinction rate.^{212,213} That means for every one species that would naturally go extinct, hundreds if not thousands more are going extinct because of us. Yikes. Humans are, in fact, already the biggest species killer since a massive asteroid struck Earth and killed off the dinosaurs 65 million years ago.²¹⁴ And with the human population still growing exponentially, there's no telling how much more destructive we will become.

This begs the question, what is it that we're doing that's so harmful to all of these species that are dying off? Here are the main causes of these extinctions:

- Habitat destruction – As humans cut down forests, fill in wetlands, blow up mountains, and generally take over land for our own uses, we eliminate the homes for all kinds of living things in the process. Humans might be good at living in all kinds of places, but most fish, frogs, and flowers aren't. When we destroy their homes, they die off. Pretty simple.
- Overexploitation – Obviously we often directly kill living things in the wild for our own good, like lobster to eat and trees to build houses. Kill enough of them, though, and we can kill off entire species. Humans have already driven scores of species to extinction this way, notably the woolly mammoth thousands of years back. We're currently threatening to kill off many more through overexploitation, though, like many species of trees, fish, elephants, and whales.
- Pollution – Just like how so many of the chemicals we humans produce are harmful to us, they're also harmful to all of the other living things on Earth. Whether it's synthetic pesticides sprayed on crops or microscopic particles spewed into the air, these chemicals are building up throughout our planet and causing higher rates of cancer and other diseases among all kinds of species (which also leads to higher rates of extinction).
- Global warming – Global warming is the silent but potentially most lethal species killer of all. With higher temperatures and higher CO₂ levels, global warming is destroying habitats and raising the acidity of the ocean. In 2007, the International Panel on Climate Change estimated that if average global temperatures increase by over 3.5 °C (an almost certain scenario if we continue on our current warming path) then we stand to lose 40-70% of all known species on Earth.²¹⁵



Jack Dykinga/USDA

Of course, one might wonder why we should care. If plenty of species died off before humans came to the scene, why should we care if more die off now? Well, suffice it to say, the world's ecosystems are all quite interdependent. When one species disappears, it hurts all the rest. And that includes us. Take the honey bee. It has by no means gone extinct, but it has steadily headed in that direction over the last several decades as its populations have dwindled worldwide. That might seem shrug-worthy, but the bee pollinates all kinds of crops that we depend on—fruits, vegetables, and nuts, not to mention crops like hay and clover that livestock depend on as well. Honeybee shortages have thus led to record prices for almonds and forced the Chinese to start pollinating their apple trees by hand. And all of that stems just from reduced populations of one species, not to mention how awful it would be with outright extinction of one species, much less with the extinction of thousands of

species. At best, extinctions cost us a lot of money. At worst, they will bring us humans to the doorstep of extinction as well.

How CRR Would Help: By fighting most of the main causes of species extinction—habitat destruction, overexploitation, pollution, and global warming—CRR should greatly slow this mass extinction and potentially save many thousands of species.

Let's take a more specific look at how CRR would deal with many of the main causes of species extinction:

- Habitat destruction – CRR would require that corporations report when they build on or in any other way destroy rainforests, wetlands, and other habitats vital to biodiversity. Such actions would then earn companies lower rankings thanks to the *Additional Factors* metric.
- Overexploitation – All resources that a business takes from the earth would need to be tallied and submitted to the government thanks to CRR. That includes all plants, animals, and any other living species. A company's rankings would be docked for any species it harvests that are listed as endangered or threatened by the IUCN. The more endangered the species and the greater the numbers taken, the more rankings would be docked.
- Pollution – With the *Non-Greenhouse Pollution* metric, CR Rankings would lower the rankings of companies that use more toxic chemicals. With the *Biodegradability & Recyclability* metric, CR Rankings would lower the rankings of companies that produce less biodegradable substances (like plastics). Those two combined would take a huge bite out of the production of substances that harm our world's ecosystems.
- Global warming – As 40% of the Environment ranking, global warming would weigh heavily on any company's CR Rankings. The more CRR would push businesses to lower their carbon footprints, the fewer habitats would be destroyed and the less acidified the oceans would become. That would be a huge boost for endangered species around the world.

Accumulation of plastic in the world's oceans

The Problem: Plastic is building up in our oceans at an alarming rate. Small, non-biodegradable pieces of plastic dehydrate and starve the marine animals that eat them, all while poisoning them with the toxic chemicals the plastic collects.

We humans produce a ton of plastic. Errr, more specifically, we produce about 225 *million* tons of plastic every year.²¹⁶ Eight million of those tons—after going down storm drains, falling off boats, or blowing away from landfills—make their way into our oceans each year.²¹⁷ On land, discarded plastic mostly just sits there. In the ocean, though, it wreaks havoc.

The first issue here is that that plastic never really decomposes. Fish poop, dead kelp, and most other waste in our oceans aren't ever really a problem because they will all be digested by other fish, bacteria, worms, etc, and thus recycled through the system. Plastic will not. Plastics take anywhere from a year to hundreds of years to break down into smaller pieces, depending on the type of plastic. (If Shakespeare had used modern fishing line, it would most likely still be breaking down now.)^{218,219} Even after all that time, though, essentially no organisms will be able to fully digest and break down those smaller pieces of plastic to the molecular level. Therefore, when we dump plastic in the oceans, those small pieces just stay there and keep building up. According to the World Economic Forum, a Swiss non-profit organization, the world's oceans currently have one-fifth as much plastic as they have fish, by weight. Should current trends continue, ocean plastic will start outweighing all the fish by 2050.²²⁰



The remains of an albatross chick found in 2009 on Midway Atoll, a tiny Pacific island over 2,000 miles from the nearest continent.

Chris Jordan/US Fish and Wildlife Service

Meanwhile, all that plastic can be incredibly harmful. To begin with, marine birds, mammals, and fish can easily get tangled in plastics or choke on them when trying to eat them. According to a United Nations report, up to one million seabirds are killed every year by ingesting or becoming entangled in plastic debris.²²¹ When plastic decomposes, it also tends to release harmful chemicals built into the plastic (like bisphenol-A, PS oligomer, and vinyl chloride) plus other bonus toxic chemicals that the plastic bits have absorbed while floating in the ocean (like pesticides). Eat plastic, and you take in all of those chemicals. The tangling, choking, and poisoning are already quite potentially bad for marine animals, but that's not all. Eating plastic also starves and dehydrates animals because, when the gut's full of plastic, that blocks actual food and water from being ingested and properly absorbed into the blood stream. Of the half million albatross chicks that hatch on Midway Island each year, about forty percent now die, most of them from such starvation or dehydration.

Some of those deaths are no doubt natural, but a two-year study by the EPA found that the albatross chicks that died there from starvation or dehydration had on average twice as much plastic waste in their stomachs as the chicks that died from other causes.²²²

If this wasn't all bad enough for all marine life, remember that everything circles back to us. When fish, birds, and even organisms as small as zooplankton are eating plastic and taking in all of their accumulated chemicals, those chemicals will most definitely work their way into what we're eating, too. Poison the oceans and we poison ourselves.

How CRR Would Help: Within the Environment ranking, businesses would be rewarded for using more environmentally friendly plastics, less plastic overall, and fewer toxic chemicals. That would mean fewer non-biodegradable plastic bits floating in our oceans, and those that remain would be less toxic. In other words, CRR would lead to far cleaner and healthier oceans.

With the *Biodegradability & Recyclability* metric, CRR would encourage companies to use substances that more easily biodegrade and/or recycle. With the *Non-Greenhouse Pollution* metric, CRR would also encourage companies to use fewer toxic chemicals. Plastics, of course, generally don't biodegrade well, can only be recycled once, and contain plenty of toxic chemicals. CR Rankings would thus motivate businesses to start using less and less plastic and/or to invent less toxic plastics that biodegrade and recycle more easily. Over time, that should mean much less plastic winding up in our oceans, and less harmful plastic at that.

On top of all of that, remember that the Non-Greenhouse Pollution metric should also encourage companies to use plenty other fewer toxic chemicals (like pesticides and industrial solvents), the kinds that wind up floating around in the ocean, being absorbed by floating bits of plastic, and then released in the unfortunate animal that eats that plastic. So overall, with CRR we should see less plastic winding up in our oceans, and fewer bad chemicals held inside of that plastic.

Landfills

The Problem: Landfills are a significant contributor to climate change and can leak toxic chemicals that harm residents nearby.

About 25% of global warming stems from methane emissions.²²³ While we create far more carbon dioxide than methane, methane is far more potent at trapping heat in the atmosphere, over twenty-five times more so than CO₂.²²⁴ Landfills, meanwhile, are essentially giant methane factories. All that food and paper you throw away is inevitably going to get eaten and broken down somewhere, mostly by bacteria. When that happens inside massive mounds of trash, though, there's almost no oxygen present. We'll skip the elaborate biology lesson, but break that food down with oxygen present and you'll make carbon dioxide. Do it without O₂ and you'll get methane. Lots of it. As

such, about 6% of global methane emissions come from landfills,²²⁵ meaning landfill-produced methane currently accounts for roughly 1.5% of Earth's warming each year.²²⁶ Here in the US that figure is about three times higher thanks to our world-leading production of trash.²²⁷



Adam Levine/Flickr

Landfills are also a great way to create a brew of toxic chemicals. Dump thousands of consumer-owned electronic devices, batteries, light bulbs, and buckets of paint together in one place, add rainwater, and let the chemicals leach out over time. What you get is called *leachate*. It's similar to the garbage juice that might accumulate at the bottom of your trash bag, but leachate is

generally full of lead, cadmium, mercury, ammonia, methane, and many other harmful, often carcinogenic chemicals. Should the protective liners underneath the landfill spring leaks—as the EPA has stated will inevitably happen with any liner, no matter how well made²²⁸—these chemicals will then get out into the groundwater. They can also float out by air. However this toxic chemical migration happens, exactly, it can affect the health of the residents who live nearby, even long after a landfill closes. Studies have shown that women living near landfills, for example, have an over four-fold higher risk of bladder cancer and leukemia,²²⁹ as well as more frequent birth defects in their children.²³⁰

Another great way to project those harmful chemicals out into surrounding communities is with landfill fires. Such fires aren't too common, but when they start they can spread easily given all of the widespread (and highly flammable) methane. While burning, they release all those chemicals from before into the air while creating dangerous new ones as part of the combustion process (including carbon monoxide, hydrogen sulfide, sulfur dioxide, and benzene).²³¹ One recent fire at a St. Louis landfill, one that has been steadily burning there for years since December 2010, also happens to be burning about a thousand feet away from 9,000 tons of nuclear waste.²³² If the fire were to migrate over to the nuclear waste—the subject of intense media questioning of late—it would likely, at the least, begin emitting radon and other radioactive particles into the atmosphere. Worse, it could explode.²³³

Overall, landfills add to global warming and worsen our health. As the world continues to consume more and more stuff, stuff that is often toxic and usually not so biodegradable, our landfill woes are on track to only get worse.

How CRR Would Help: By encouraging the production of less waste with fewer toxic chemicals, CR Rankings would reduce the toxicity and warming effects of landfills.

First, in terms of the toxic chemicals in landfills, the *Non-Greenhouse Pollution* metric would push businesses to use fewer hazardous chemicals in their products. The fewer toxic chemicals being made, the fewer that can wind up in landfills, making the waste that is there less harmful to the people nearby. Pretty simple.

Second, a variety of metrics would help reduce the greenhouse effects of landfill methane. The *Carbon Footprint* metric would help promote creating less waste, since the, say, excess packaging material we so often see used takes a lot of fossil fuels to make. Keeping that waste out of the landfill would mean less paper material for methane-producing bacteria to eat and less other stuff there to block out oxygen from the piles of trash. The *Charitable Giving* metric would motivate any companies with extra food on their hands to donate it instead of throwing away as trash. That would as well bring down the amount of stuff for that landfill bacteria to eat, also bringing down the methane produced. The *Biodegradability & Recyclability* metric would encourage companies to make sure the products, packaging material, and other waste that they create would be either recyclable or easily biodegradable. With more recyclable waste, consumers would send less to landfills. By making the rest more easily biodegradable, more could be separately composted, again reducing the pile that goes to the dump. And the waste that does end up in the landfill would still break down more quickly, at least. The Biodegradability & Recyclability metric also gives companies credit for directly recycling its own waste products, instead of trashing them, again reducing the amount of stuff sent to the landfill. Put together, all of those metrics should consistently slow the growth of our landfills and reduce their toxicity.

Workplace injuries, illnesses, and deaths

The Problem: Every year, millions get sick or die because of their jobs.



Ryan Conroy/US Air Force

An estimated 2.3 million people die every year around the world because of their jobs.²³⁴ To put it in gruesome terms, that's equivalent to multiple 9/11s every day. These deaths primarily stem from diseases, cancers, and injuries thanks to unsafe work environments (e.g. from hazardous substances, improper safety procedures, lack of safety equipment). And

then there are the many, many millions more non-fatal injuries and illnesses that still impair a wide

swath of the population for months, years, or even entire lives. If you're numb to the human toll, maybe you'll at least care about the money we're throwing away on such workplace injuries and deaths—an estimated average of 4% of GDP per country,²³⁵ a.k.a. somewhere north of \$3 trillion worldwide each year.^{236,237} The most tragic part is that many if not most of these illnesses, injuries, and deaths are rather preventable.

How CRR Would Help: With the *Worker Safety & Health* metric, all companies would be ranked by their number of workplace-related illnesses, injuries, and deaths. Businesses would thus be motivated to make their workspaces as safe as possible, and that could mean many millions fewer sicknesses, accidents, and deaths every year.

The Worker Safety & Health metric would, first, rank all businesses by the work-related injuries, illnesses, and deaths of their employees. The more harm done per one hundred employees, the lower the ranking. Second, companies would be ranked by how well their employees feel their safety and health are protected. Put together, the WS&H metric would strongly encourage businesses to take whatever steps they could to make the workplace safer—to reduce the use of harmful chemicals, give better access to health care, give better safety equipment, etc. This pressure on companies should over time bring a steady reduction to the overall number of workplace illnesses, injuries, and deaths, a great boon to our health but also to our overall health care bill.

Secondly, the *Non-Greenhouse Pollution* metric would rank all corporations by how many harmful chemicals they pump out into the world. As businesses use fewer such chemicals in their products and manufacturing processes, CRR would reduce workplace exposure to those chemicals. That would then reduce illnesses and deaths caused from such chemicals. Put together, the Worker Safety & Health and Non-Greenhouse Pollution metrics should go a long ways towards reducing workplace injuries, illnesses, and deaths.

Exploitation of unpaid “internships”

The Problem: Many (if not most) unpaid internships are less about educating and more about exploiting free labor. This financially hurts the young worker and expands the pay gap between the rich and the poor.

In theory, an unpaid internship can be a great thing. The young intern gets invaluable experience and a foot in the door of the industry. In practice, though, unpaid internships—which are supposed to exist solely for the educational benefit of the intern—easily become more about getting grunt work done at no cost. Why pay out minimum wage when you can call that entry-level job an “internship” and pay nothing? The last few years have seen a slew of lawsuits from former interns who say they received no education and really just worked for free.

The obvious problem here is these workers are being exploited. Unpaid internships have other bad ripple effects, too, though. For starters, these jobs can shift the whole pay scale down. If your entry-level workers are now paid nothing, the next level up can now be paid the low amount you would have otherwise paid the rookies, and so on and so on. Get it? It saves the company a ton of money, sure, but it also exacerbates income inequality.



Reynormedia/Flickr

Unpaid internships also favor the children of the wealthy, whose families can help them pay the bills while they're making nothing. Lower-class students and recent graduates usually can't afford to work for free, so they miss out on those job opportunities. These internships therefore contribute even more to greater income inequality and lower social mobility.

How CRR Would Help: By default, internships would factor into the Workers pay metrics the same as any other jobs. Low or no pay for “interns” would mean lower Workers rankings. CR Rankings would thus push businesses to either pay their interns a decent wage or prove that they are true internships—purely educational and not designed to help the company.

Interns would by default count as normal employees under CR Rankings. That means when tabulating the *Distribution of Wealth* and *Pay Relative to Local Standard of Living* metrics, the \$0 given to any unpaid intern would hurt the company's Worker rankings accordingly. (The same would go for any intern paid, but paid poorly, as well.)

Businesses could, of course, deal with this in one of two ways. One is to admit that many of these internships are a sham and to start financially treating the “interns” like they've already been treating them in the workplace: as normal employees. The second is to actually prove that the internship abides by the Department of Labor's six requirements for an unpaid internship:

“1.) The internship, even though it includes actual operation of the facilities of the employer, is similar to training which would be given in an educational environment; 2.) The internship experience is for the benefit of the intern; 3.) The intern does not displace regular employees, but works under close supervision of existing staff; 4.) The employer that provides the training derives no immediate advantage from the activities of the intern; and on occasion its operations may actually be impeded; 5.) The intern is not necessarily entitled to a job at the conclusion of the internship; and 6.) The employer and the intern understand that the intern is not entitled to wages for the time spent in the internship.”

Should the company give proof that those six requirements are consistently being met with all applicable internships, those positions would then not be counted under the Worker metrics. This would enable any company that abides by the true spirit of the internship (i.e. an educational program there for the benefit of the young worker) to not be punished on its behalf.

Toxic chemical ingestion

The Problem: In the modern world, harmful manmade chemicals are all around us. Unsurprisingly, we thus eat, drink, and breathe them in throughout our lives, leading to higher rates of cancer, birth defects, autism, and many other health problems.

The tricky backlash of many of the synthetic chemicals that we create is that they don't tend to break down very well in nature. Thus, the more of them we produce, the more they build up in the air, water, and soil around us and, inevitably, in our bodies as well from breathing, drinking, and eating them. Take a bite of your breakfast and you're also eating organophosphate pesticides from the grains and milk. Take a swig of bottled water and in go phthalates and bisphenol A that have leached out from the plastic. Take a breath in your living room and you've now consumed polybrominated diphenyl ethers from your TV and toxic flame retardants from your carpet.²³⁸ Then there are the chemicals in our cleaning products, soaps, toys, makeup... According to the Harvard T.H. Chan School of Public Health, there are over 10,000 chemicals in our everyday products that have not been approved by the FDA.²³⁹



Veterezy/Unsplash

And it isn't just inside of the home. Try to walk outside to escape such chemicals and now you're all the more exposed to air pollutants from our power plants, cars, and factories. The chemicals we produce are now found quite literally everywhere that we living things can go on Earth. Scientists recently tested crustaceans living in the Mariana Trench, the deepest point in any of our oceans (i.e. about as far as a living thing can be from human civilization), and still found "extremely high levels" of numerous toxic manmade chemicals "in all samples across all species at all depths."²⁴⁰

Now you may be thinking, what's the big deal? I don't get sick from this stuff, right? I feel perfectly fine. Well, the thing is that manmade chemicals and their byproducts generally don't affect you like, say, a cold virus would. There you see an immediate, quite unpleasant, and sneezy result. However, low-level everyday consumption of chemicals adds up over time and can then lead to much worse health problems. Quite a few such chemicals raise your risk of cancer.²⁴¹ Studies have also linked chemicals like phthalates, pesticides, PM2.5s, BPA, and benzene to higher rates of decreased lung function,²⁴² aplastic anemia,²⁴³ chronic bronchitis,²⁴⁴ birth defects,²⁴⁵ fetal death,²⁴⁶ increased blood pressure,²⁴⁷ ADHD,²⁴⁸ Parkinson's disease,²⁴⁹ suicide,²⁵⁰ lower IQ,²⁵¹ autism,²⁵² and premature death²⁵³ (just to name a few). In other words, you may not see the harmful chemicals that you consume each day nor knowingly feel their effects, but it's quite likely that they will contribute to one or more major health problems in your life and perhaps hasten your death.

How CRR Would Help: The *Non-Greenhouse Pollution* metric would lower the CR Rankings of any company that uses chemicals that are known to harm our health. Over time that should steadily decrease the production of toxic chemicals, as well as the vast array of health disorders caused by them.

When it comes to low-level everyday toxic chemical ingestion, it's hard to pinpoint the exact level of danger we face from each individual toxin. What is pretty clear, though, is that less exposure is better. By including all such harmful chemicals in the Non-Greenhouse Pollution metric, CRR would push companies to produce less and less of them. And the fewer harmful chemicals that companies produce, the fewer that wind up inside of us. That's a big win for our health and for the environment. It's also, though, a big win for our wallets, too. A recent study put the cost of such everyday toxic chemical exposure here in the US at a staggering \$340 billion in health costs and lost wages each year.²⁵⁴ (That's over a thousand dollars per person every year!) Without all of those harmful chemicals we'll be all the healthier and richer to boot. Quite the win-win.

IV. But...Why Pick on Businesses?

We've now seen some quite compelling reasons to enact Corporate Responsibility Rankings. But what about the reasons *not* to enact it? It's hard to say for sure, but it's likely that the number one objection to CRR is that it will be bad for businesses.

Pretty much any new business regulation gets backlash for being “anti-business.” However, to some this law may sound even worse. *CRR is going to make companies give up data on everything they do behind closed doors AND make them spend boatloads of money on solar panels and pay raises?! That's an outrageous violation of privacy! And it's going to bankrupt our businesses, to boot! What's more, why are we picking on businesses to start with? We're the ones who buy their cheap stuff. We're the ones who enable them to pollute and pay dirt poor wages. If we want to change these problems, we should be the ones changing, not the hard-working businesses that drive our economy.*

These are important criticisms. If they're right, then CR Rankings could do our economy plenty of harm. However, as we will attempt to prove below, CRR will be quite good for the economy, businesses are exactly whom we should be targeting, and their claims to privacy make no sense. Within the overall “bad-for-business” complaint, let's go through each of these more specific complaints one at a time.

1. Businesses don't deserve this headache

To begin with, we have the basic argument that businesses don't deserve all of this unneeded regulation. *We already tie the hands of our job creators too much. This just adds more bureaucracy, red tape, and headaches.*

However, businesses absolutely deserve to be targeted by a ranking system like CRR. Simply put, they make most of the mess in this world. Businesses—if we combine the commercial, industrial, and agricultural sectors—account for about 65% of all greenhouse gas emissions in the US.^{255,256,257,258} They directly use 80% of the country's antibiotics²⁵⁹ and use around 80-92% of pesticides^{260,261} (while producing all the rest). They make most all of the non-biodegradable plastic that now floats in our oceans, and they run all of the sweatshops. They account for over 88% of global water consumption,²⁶² and here in the US they host over 85% of the wage-paying jobs.^{263,264} If we want to seriously address GCM problems—problems like global warming, antibiotic resistance, toxic chemical consumption, non-biodegradable plastics, unsafe working conditions, water shortages, and income inequality—we simply have to target businesses because they're the ones making the vast majority of the mess that creates these problems.

That's not being anti-business. It's just being reasonable. If you don't like how dirty the kitchen floor gets every day and most of that dirt comes in the form of muddy paw prints, then the solution should be pretty obvious. Find a way to stop the dog from tracking in more mud. Ignore the dog's contribution and you'd be a fool. The same goes for cleaning up GCM problems. Any real solution

has to focus on getting our businesses to stop making such a mess. Focus anywhere else and you won't actually fix the problems.

2. Mandatory = bad for business

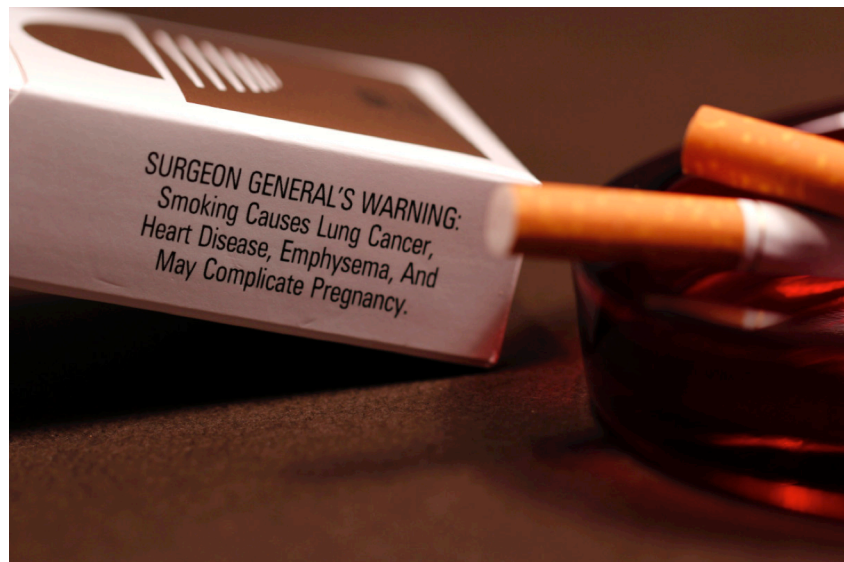
Next up, there are no doubt those who will criticize CR Rankings simply for being mandatory.

Anything mandatory handed down from the government to our businesses is bound to be trouble. You're impinging on the freedom of businesses! How will tying the hands of our job producers make anything better?!

We've already touched on the merits of the mandatory system over its voluntary counterparts in **Our Current Approach Is Doomed To Fail**, but this is a bit of a separate issue. Even if mandatory systems are much more effective than voluntary ones, maybe they're still too cumbersome for businesses. Maybe they'll stop global warming...but also grind our economy to a halt in the process. That, of course, would be a pretty bad tradeoff.

Note that to cooperate with CRR, though, no business *has* to do much of anything. No business has to pay its workers any differently, use electricity any differently, etc. It only has to report the required data and print the labels. There is, in other words, a big difference between *mandatory action* and *mandatory transparency*.

A mandatory action is something specific a business must do, as decided by the government. Building codes dictate the width of hallways and how many outlets there must be on a wall. The EPA forbids manufacturers from using certain chemicals. Overtime pay laws tell businesses how much they must pay their employees past forty hours of work in a week. While mandatory actions do a lot of good, it's understandable why business owners can chafe at them. Mandatory actions don't allow much freedom in how they're accomplished, and put together they can make for quite a headache of extra work.



The Surgeon General's warning on cigarette packs mandates transparency, not action.
Debora Cartagena/Wikimedia Commons

With mandatory transparency, on the other hand, businesses can still mostly do whatever they want. They just then have to show the public what they're doing. Tobacco companies can still make and

sell cigarettes, for example, but they have to put the surgeon general's warning on each pack. Similarly, no food company has to bake some exact amount of fat, sodium, and carbs into its crackers. That company just has to report honestly how much of those nutrients are in its crackers on the Nutrition Facts label. Exact fat and sodium requirements would be mandatory *action*. Nutrition Facts are mandatory *transparency*. One way means totally changing your business. The other means dealing with a slight annoyance. The difference is huge. CR Rankings would similarly only mandate transparency, and would thus be much less of a pain in the behind.

Nutrition Facts are, in fact, perhaps the best existing parallel to CRR. What Nutrition Facts did for food ingredients, CRR would do for the behind-the-scenes impact of companies on the world. So if we're at all worried about the burden of implementing CRR on companies, let's ask ourselves honestly how burdensome Nutrition Facts have been to tally up and print on boxes. Have Nutrition Facts crippled the American food industry? Have our newspapers of the last forty years been packed with the tragic bankruptcies of US cereal, beef, and juice companies? No. The notion is absurd. So too, CR Rankings would likely cause a few growing pains when first instituted, but should give no real drag to the economy like, at worst, mandatory actions sometimes can.

3. CRR would be too expensive for businesses

Third, we have the complaint that CRR would cost too much money. *Most businesses aren't raking in huge profits. The reason they don't give bigger raises to their employees is that they can't afford to do so. They can't afford to give away millions to charity. They can't afford to spend their employee hours tinkering away in the basement on a new, biodegradable soda bottle. Simply put, they can't afford to go fixing the world's problems.*

This is a damning critique of CR Rankings and one that we must absolutely address if we are to justify enacting this ranking system. It's quite a tempting thought, the too expensive argument. If true, CRR stands to both cripple the economy and fail to make any positive change. However, this argument just doesn't hold water, for several reasons.

First, CRR would encourage companies to spend money to be more responsible, sure, but such companies would only do this spending *if they choose to do so*. It's still totally up to them. And those times that they do choose to spend that money will be because *they think it will make them more money back (a.k.a. a profit)*.

It's essentially the same as when companies invest money on any other project. Consider Apple and the iPhone. Did it cost the company plenty of money to create the first iPhone? Absolutely. The price tag was reportedly, in fact, something in the massive range of \$150 million.²⁶⁵ But Apple didn't spend all of this money because the government or anyone else forced them to do so. They did it because they hoped there would be a high demand for their new product. And sure enough there was. Apple now makes tens of billions of dollars every few months off of the iPhone,²⁶⁶ easily surpassing the down payment needed to build the smart phone in the first place.



Chris Jordan/US Fish and Wildlife Service

CR Rankings might not put any business in the same out-of-this-world profit ballpark as the iPhone did for Apple (what else can, really?), but the same idea would apply. Any company considering giving that big raise, making that million-dollar donation to Unicef, or daring to design that new biodegradable plastic bottle would only make such investments if it thought such investments would boost its CR Rankings, win

the company new customers, and thus outweigh the initial costs of those investments with even bigger profits. In other words, businesses would only make such investments *if they thought those investments would overall be profitable*. So moaning on behalf of the poor victims of CR Rankings is as nonsensical as lamenting the suffering of Apple as it created the iPhone. CRR should only cost businesses money that they will expect to make back.

Externalities

Second, it doesn't make much sense to complain of the cost of CRR for businesses because any added expense is one that business arguably should have been paying for in the first place. Remember that mess from before? The carbon dioxide emitted, the water consumed, the low wages paid that all lead to GCM problems? Someone has to pay for the consequences of that mess, so why shouldn't it be the companies that make it?

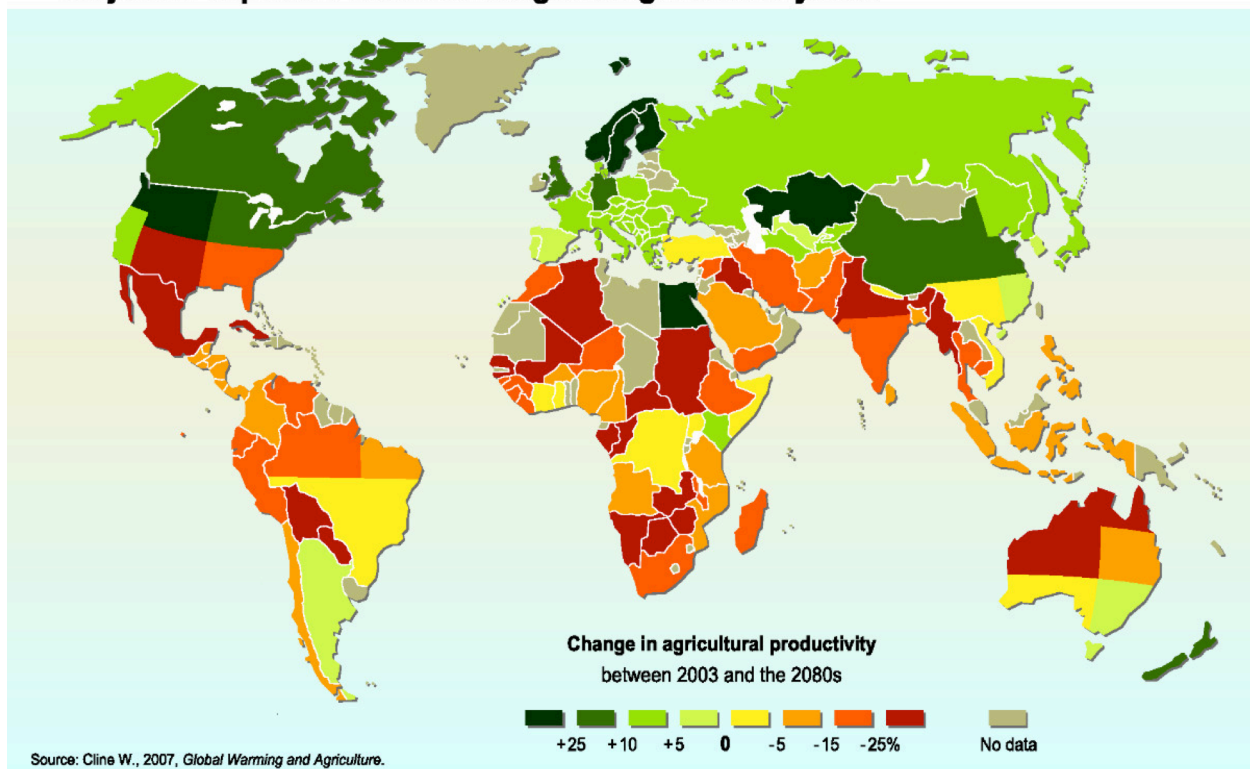
Economists call these *externalities*. Externalities are the hidden costs of an action that the doer of that action doesn't have to pay for. Let's say, for example, that you take a camping trip in the Smoky Mountains for some good, cheap fun. You have to pay for gas, food, and maybe some extra camping supplies, but that's it. Sounds great! But beneath that light bill are some hidden costs. Roads had to be paved to get you there, trails had to be built for you to walk on, and both have to be regularly maintained. On top of that your car emits carbon dioxide and other pollutants that slightly contribute to rising sea levels and increased rates of respiratory illnesses. Aside from a tiny sliver of your taxes, you won't directly pay for any of that. These are your camping trip's externalities.

Businesses, meanwhile, rack up a ton of externalities. Endless job movement tears apart communities. Tax avoidance creates large government deficits. Toxic chemicals create many millions

of health problems. These are expensive problems, yet the businesses that create them rarely end up paying the bill.

For an even bigger externality of business-as-usual, take global warming. The Counsel of Economic Advisors to the White House recently put out its best estimate of \$36 as the current social cost of each ton of carbon dioxide emitted into the atmosphere.²⁶⁷ That means each ton of CO₂ causes about \$36 in cumulative damages to the world, through lost crop production due to drought, building and infrastructure damage due to rising sea levels and more violent storms, etc. Thirty-six dollars might not sound like much until we step back and look at the bigger picture. In the US, about 6.87 billion tons of carbon dioxide equivalent (CDE) were produced in 2014 alone.²⁶⁸ That equates to a social cost of \$247.3 billion. If that number doesn't sound staggering enough, the \$36 government estimate has actually been critiqued by others in the field as being *too optimistically low*. Scientists from Stanford published a study in January 2015 estimating the true social cost of CDE to be more like \$220 per ton,²⁶⁹ which would put the total social cost of US greenhouse gases that year at \$1.51 trillion. Whichever way you go on these estimates, remember that businesses produce almost two-thirds of the greenhouse gases in this country, and are therefore responsible for almost two-thirds of the bill. That's something in the range of \$160 to \$979 billion of damage US businesses do each year via climate change,²⁷⁰ essentially none of which they actually pay for.

Projected impact of climate change on agricultural yields



Crop yields are projected to change quite a bit thanks to climate change, mostly for the worse.

European Environment Agency

And then there is the massive externality stemming from income inequality. When businesses don't pay those at the bottom of society well enough to get by, the government has traditionally had to step in to help. The five biggest programs here in the US to provide health care, food, and small amounts of financial assistance to the poor gave out \$681.1 billion in 2014.²⁷¹ A good amount of that is arguably the cost of some inevitable unemployment, of course (so perhaps the blame shouldn't be on businesses there), but a study by researchers at UC Berkley found that, of the money the government spent on those same five programs from 2009 to 2011, 56% went to working families.²⁷² In other words, that's another \$350 billion dollars of mess directly created because businesses don't pay their lower-end employees well enough to pay for their basic needs.

It's hard to pinpoint an exact sum of these externalities, but we can at least see that here in the US they tally into the many hundreds of billions of dollars each year. And since businesses are the ones racking up the bill, they absolutely deserve to be the ones paying it. If CR Rankings push companies to pay to clean up this mess, then all the better.

4. CRR's data collection is a pain for businesses and a violation of their privacy

Next up, we have the notion that the data that CRR requires businesses to give to the government is too invasive. *This program wants to be Big Brother looking over the shoulder of our businesses 24/7. It's creepy, and it's wrong. Would we let the government know what products you the citizen buy and what your electric bill is? No, that would be ridiculous! Forcing businesses to tell the government this same information is just as ridiculous. Keeping track of all of this data would also be a tedious pain for companies. It will distract them from doing the real work they need to be doing.*

First, let's address the complaint that logging and reporting all of this data would be a big pain. Perhaps here it would be good to review what kind of data the government would be collecting. We invite you to look further into the specifics in **Data Needed**, but this data mostly boils down to:

- 1.) What things businesses are buying
- 2.) What they're selling
- 3.) How much they're paying their employees
and
- 4.) What resources they're collecting from the earth

These are all pretty basic pieces of information. Any responsible company should already be keeping detailed track of this data. (Good luck trying to stay in business for long if you aren't.) The exact specifics of how to log the information, in what format, and in what computer program will no doubt change a bit thanks to CRR, but the overall task shouldn't change much. Businesses will have to keep inventory of what they're doing. Nothing too new there.

As far as reporting the data, it would be done on a quarterly basis, much like taxes. For the vast majority of companies it would be done automatically online. (Anyone can still mail the information in if they really want to do it that way.) The government would design its own free programs and apps for submitting this information, but any outside company would be free to design its own reporting programs too (think TurboTax but for CR Rankings). Plus, other apps, computer programs, and websites could in time be designed to coordinate with your CRR program of choice. Buy something on Amazon with your corporate account and, boom, it's automatically logged in your CRR reporting program. The process would no doubt be a bit bumpy at first, but before long businesses would hardly have to do anything but let such information be collected and sent automatically each quarter.

So all in all, it really shouldn't be very tough to log and report this data. If it ever does end up being unnecessarily hard, though, the CRR reporting process could absolutely change. One of the number one goals of the program would be to make this data process as painless for businesses as possible, with regular reviews of feedback from the business community to make sure that it's going as smoothly as possible.

Now, some still may object to gathering this data on ideological grounds, though. *The government shouldn't be able to collect this info, period. Businesses have a right to privacy.*

Sure, it makes sense to allow a good amount of privacy for businesses. Making strategic decisions and designing new products, for example, should absolutely be kept private. Accordingly, CR Rankings would do nothing to broadcast such private decisions. Your five-year plan for expansion? Tell no one, that's a-ok! The revolutionary new gaming console you're releasing next year? Keep us all in suspense, no worries!

But what about the data CR Rankings *would* collect, like what a company pays its workers and what it's buying and selling? Do companies deserve privacy there, too? Privacy seems like a pretty fair demand on the surface, but look deeper and it pretty quickly falls apart.

First off, hopefully on a gut level it makes sense that people deserve much more privacy than companies. Companies aren't people. Companies don't want to hide their actions because they're of an intimate, vulnerable nature like we do. What Viacom pays its executives isn't the same as what you whisper to your kids when they're going to bed. How many gallons of gas Wal-Mart burns in a year isn't the same as how many TV shows you watch or how many times you have sex in a year. Businesses don't deserve the same right to privacy as people do because they don't have that same sacred inner life.

But there's also a more logical justification for this difference. Those private actions of yours—the whispering, the TV-watching, the sex—can be kept private because they don't do significant harm to anyone else. Note that the times we *do* draw the line and stop citizens from doing something are when they are significantly harming others. Even if you do it at home behind closed doors, you still can't physically abuse your wife, kill your husband, or starve your children. These are times when

society says, no, you've stepped over a line. Here we will use our police, courts, and jails to keep you from doing this harm to others. Note the underlying reason here. When your actions start to do significant harm to someone else, you can no longer claim a right to privacy *because your actions then cease to be private*. They are now *public* actions.

The same goes for businesses. When a company cuts down a forest, pays thousands of employees, or emits millions of tons of carbon dioxide, its actions are significantly affecting others in potentially very harmful ways. Thus, businesses have no right to privacy with such actions. These actions are instead inherently public. Thus, the government is absolutely justified to collect data on such actions for CR Rankings. Any claim to a right to privacy here is like a wife abuser claiming that he should have a right to privately abuse his wife, too. Because harm is being done, the right to privacy ceases to exist.

So, overall, businesses don't really have room to complain about the data that CRR would collect. Every business should already be collecting such information anyway, so keeping track of it shouldn't be very tough. With the internet and specially designed computer programs, reporting that info to the government shouldn't be hard either. And because all of that information revolves around potentially harmful actions, businesses have no right to withhold it.

5. We the citizens (or perhaps the government) should be the main focus for change, not businesses

Finally, the last main reason one might say CRR shouldn't be targeting businesses is that there are better, easier ways to eliminate GCM problems. Namely, we should be focusing our efforts directly through citizens and the government, not businesses. *Fixing our biggest problems needs to start with us. If we all make changes at home like switching to compact fluorescent light bulbs, volunteering more, and simply buying less stuff, we can start to turn around problems like global warming. For whatever we can't do at home, we should be looking to traditional government fixes like raising the minimum wage, boosting welfare programs, and raising taxes on the rich. Businesses shouldn't really be a part of this.*

This is another fairly inevitable critique of CR Rankings. It should especially be expected from a lot of liberals who think that, *well, this rankings system sounds pretty cool and all, but really these home and government fixes are all we need. We just need to push a bit harder, change a few more minds, and get a few more favorable election results.*

It's another tempting thought, but one that ultimately doesn't add up too well. To understand why, let's zoom out further than we have so far and look at the big picture. Hidden beneath our differing views on how to solve GCM problems is often a sharp difference in whom to target. There are essentially three main groups we can target: *citizens*, *government*, and *businesses*. Each time we focus primarily on one, we put the other two into pretty consistent supporting roles. And what we'll find is

that citizen and government-focused approaches are rather weak both because of both their main focuses and the supporting roles they create.

The Citizen-Focused Approach

Citizens (*primary role*): Make the small changes that we can at home. Recycle, use less stuff, buy more energy-efficient machines, donate to charities, and volunteer occasionally.

Government (*supporting role*): Teach and encourage consumers to be better to the environment, pass laws that facilitate their action (like ENERGY STAR labels and tax breaks that encourage donations).

Businesses (*supporting role*): Mimic the government by encouraging citizens to “go green” and then occasionally start programs that get customers to donate and volunteer more.

Grade: D

Meet Doug. Doug manages a seafood restaurant. For the most part Doug is a normal guy. He wears polo shirts and tells corny jokes. He swears in traffic. He sometimes forgets to pay the rent on time, often lets dishes pile up in the sink, and can't help thinking plenty of spiteful thoughts throughout his day.

That being said, though, Doug tries to do a decent amount of good for the world. He buys fair trade socks and organic soap. He recycles. Plenty of the groceries Doug buys are of the normal, General Mills-and-Pepsi variety, sure, but he also loads up about half his cart in the natural foods section. He turns the lights off when he leaves a room. When possible he bikes instead of driving. Every once in a while he volunteers with Habitat for Humanity, and you probably don't have to give that persuasive of a pitch to get him to donate to a charity. If he's got the money, Doug is happy to donate. Doug is always happy to do what small things he can to do good.

Sound familiar? You probably know a Do-Gooder Doug, if not many such people. (The fact that you're reading this argument here makes it highly likely you're a Do-Gooder Doug yourself.) Some may find Doug a bit annoying for being such a goody-two-shoes, but all told we should commend him for doing everything he can to make the world a better place. Put together, his actions make a real, very positive difference.

However, there's an important, often overlooked question that we need to ask here. How much of a combined difference do the Do-Gooder Dougs of the world actually make? After all, we often hear



Seattle Municipal Archives/Flickr

that homespun citizen action isn't just a good thing to do—it's *the* thing to do. Many tout such small actions like recycling and volunteering more as *the* answer to problems like overflowing landfills, homelessness, and global warming. But if we are to actually fix such GCM problems then we need to first take a cold, sobering look at the tools we're trying to use to get there. And although we enthusiastically commend the Dougs of the world, this citizen-focused approach just doesn't do nearly enough.

The Citizen-Focused Approach Comes up Way Short

Think about how the citizen-focused approach has generally fared thus far. We've been recycling at home for over a half-century in the United States, and yet it still doesn't stop us from producing well over a hundred million tons of un-recycled trash each year.²⁷³ We donate plenty to charities, but that hasn't managed to stop the rise of inequality (much less to then start to shrink it). Volunteering is so common that for many it has replaced going to churches, temples, and mosques as the preferred weekly act of penance. But realistically it has yet to come anywhere close to ending poverty, hunger, or homelessness. Such citizen acts are all still helpful things to do, but we've already been doing them for decades and they haven't stopped the rise of our GCM problems. So why do we think tomorrow is suddenly going to be magically different? The good that these actions do is simply much too little for this citizen-focused approach to be our primary weapon to take GCM problems down.

Note, for example, how this approach fares with global warming. We've all heard the tips of what we can do at home to reduce greenhouse gas emissions. Recycle more, use compact fluorescent light bulbs, turn down the thermostat in the winter and up in the summer. These are probably the three most common recommendations. So what would happen if all of us actually did them? What if we *doubled* all recycling, replaced *every* incandescent bulb in America with a CFL, and all followed Energy.gov's recommendations for thermostat jiggering to a T? Achieving all three of those would essentially be a home conservation grand slam, an amazing, too-good-to-be-true breakthrough...and yet they would still only reduce our GHG emissions by approximately 4.85% (as calculated with arguably fairly generous estimates).^{274,275,276,277,278,279,280,281,282} That isn't all that much. To put that hypothetical number in perspective, let's look at another number that is very much real: 0.8%. That's our current yearly rate of population growth in the US.^{283,284} And with those extra people all consuming more energy come more greenhouse gases emitted every year. In other words, those gains made by that recycling, CFL, and thermostat grand slam? They should be wiped out with less than six years of natural population growth.²⁸⁵ Good as these actions sound, they just aren't nearly enough to take down GCM problems like global warming.

Of course, proponents of the citizen-focused approach might say, *well of course you only have a small reduction in GHG there because those three changes are only the beginning! What about better home insulation, biking to work, turning off the lights when you aren't in the room, buying more efficient machines, keeping your car tires better inflated, and so on?*

These are all great things to do, too, but no matter what they're still inherently limited. Remember that businesses create about 65% of the greenhouse gases here, meaning we the citizens only produce the other third or so. So even if by some ridiculous miracle we were to completely eliminate *all* greenhouse gases from our homes and cars (quite the miracle indeed), the majority of our country's GHG production would remain, and global temperatures would continue to dramatically rise. In other words, no matter whether we all become the most do-gooding Do-Gooder Dougs we can be at home, global warming is still set to spiral out of control.

Going Off The Grid

But wait. The citizen-focused approach isn't done quite yet. There are a hardy few out there who would say the do-gooding we just detailed would only fail because we still need to go *even further*. If businesses are the ones creating 65% of a problem like greenhouse gases, then stop contributing to that 65%. Simply stop buying their products.

This brings us to Do-Gooder Doug's wife, Self-Sufficient Susan. Susan works as a junior architect downtown. Through work connections she's accumulated a lot of salvaged wood, wood that she has then repurposed into two chairs, several beautiful sculptures, and all of her kitchen shelving. She also mends clothes instead of throwing them out and has sewn two new dresses. Years ago she started a small garden in the backyard. After expanding each year, that garden pretty much now *is* the backyard, growing dozens of different fruits, vegetables, and herbs. Whatever Susan can't grow she tries to buy at the local farmer's market. And since Doug moved in, they've been trying to save up enough money to put solar panels on the garage.

As with Doug's efforts to better the world, Susan's efforts no doubt do a lot of good, too. But again, the question we need to ask is whether this kind of self-sufficiency is the best route to taking down GCM problems. Is it a viable solution to push everyone to become Self-Sufficient Susans? Many a starry-eyed idealist would say yes. And the upside is that doing so we could actually each bring our carbon footprint down close to zero. (Which is huge!) But to do so we'd realistically have to go far beyond Susan—to get off the power grid, completely stop driving cars, stop buying anything except home-made goods from neighbors, and start making all of our own clothes from home-grown hemp and animal hides.

The issue here isn't whether this solution would be effective. It arguably would. The problem is something that you already know. It's something that you can already feel deep in the pit of your stomach as you're reading this right now. It's that there's no way in hell this is ever going to happen.

There's no need to disrespect this ultra self-sufficient, off-the-grid lifestyle because if that works for you, hey, that's fantastic. But to expect a massive cultural shift wherein we're *all* going to do so is completely bananas. The overwhelming trend of human history, for millions of years and on every inhabited continent, has been towards people buying and using more stuff to be safer, better fed, and more comfortable. Human nature is human nature, regardless of how much that starry-eyed

idealist wants it to be something else. Thus, every time the idealist preaches this ascetic lifestyle, everyone else rolls their eyes and continues on with their lives.

If it's any indication of how unlikely such a massive cultural shift is, note that people have been so preaching that we recycle more, volunteer more, and go live the simple life in the woods for decades, and yet the amount that we actually do such things hasn't really changed. Recycling rates have remained flat, the percent somewhere in the low thirties, since the 1990s.^{286,287} The percentage of Americans that volunteer has stayed similarly stable. If anything, it has slightly dropped since the early 2000s.²⁸⁸ So if we can't preach people into recycling or volunteering more, why do we think we can preach them into much bigger changes?

Therein lies the key weakness of the citizen-focused approach. As it's used now, it's nowhere near enough to actually fix GCM problems. And to actually be enough to fix GCM problems, this approach would need to be taken to laughable extremes, ones that are simply impossible given human nature, no matter how much we preach that we need to push more toward such extremes. And thus the citizen-focused approach strikes out.

Weak Supporting Roles

If that wasn't enough, the citizen-focused approach has still more issues. First, for certain problems there are essentially no practical things you can do at home to help. There's no high-tech green toilet you can buy to reduce income inequality, for example.

And then there's the issue of innovation. In order to combat GCM problems, we will inevitably need a lot of new discoveries to be made: more efficient electronics, less toxic manufacturing processes, and new renewable energy technologies, just to name a few. However, the citizen-focused approach doesn't at all lend well to such discoveries. Maybe you're the kind of brilliant genius who, using your own money and spare time, can design a new, twice-as-efficient method for burning biofuels out in your garage. But my bet is you're not that kind of person (no offense). Pretty much no one is, if only because of the whole spare time and money thing. The citizen-focused approach thus has big holes. It doesn't do enough overall, certain problems are left completely untouched, and it fosters a lack of innovation.

Meanwhile, that's just the primary role for citizens. When we look to citizens as the main agents for big change, we also put the government and our businesses into regular supporting roles. And those supporting roles don't fare too well, either. The government turns into a goading, shaming nanny. It makes TV commercials with a lot of boring stats on how good recycling is and then wags its finger at citizens when they don't take heed and recycle more. Businesses, meanwhile, get to slink back into the background, sadly nod in agreement, and then do almost nothing themselves to help. They may facilitate certain initiatives to help citizens do more—like a grocery store collecting back plastic bags from shoppers to then recycle them—but this mostly just helps them look good and gives them a free pass to then otherwise be as irresponsible as they'd like. Oh, look over here at what we're so

generously doing to collect and recycle plastic bags...so that you don't think about how we're making all of these wasteful, polluting plastic bags in the first place.

The citizen-focused approach is extremely limited. The changes we citizens can realistically make right now just don't make that big of an impact. What's more, they put the government and businesses into weak supporting roles where they don't do much to help, either.

The Government-Focused Approach

Government (*primary*): Pass laws that force the changes that we need to see happen (the minimum wage, Clean Water Act, higher taxes, USDA Organic, etc).

Citizens (*supporting*): Vote for legislators that will pass the laws we prefer, then do whatever else is needed to sway those legislators to vote for certain laws (contact them, attend protests, sign petitions, donate to campaigns, work with unions).

Businesses (*supporting*): Abide by the laws that the government passes (but then otherwise keep doing whatever's cheapest).

Grade: C



Anna Waters/Flickr

Just down the street from Doug and Susan live a young couple named Polly and Paul. Polly and Paul drink a lot of coffee, speak confidently, walk fast, and wear a lot of smart black outfits. They recycle like Doug and Susan and admire the backyard garden, but their focus is more on politics. Polly runs a political advocacy group that pushes labor reform. Paul works as a business consultant but also volunteers with political campaigns on the side. On weekends they stuff mailers for Polly's non-profit. Cable news and the New York Times are regular members of the family, although they never seem too welcome. (The more they're around, the more Polly and Paul grimace, groan, and shout.)

Political Paul and Polly ardently believe in a *government-focused approach* to fixing the world's problems. A government-focused approach is one in which the government is the main driver of change. Pretty much all classic labor, environment, and tax laws fall into this category. Each seeks to drive change through government action. The minimum wage forces companies to raise pay below a specific level, thus reducing poverty. The Clean Air Act sets specific limits on pollutants that can be emitted to keep us healthy. The Kyoto Protocol sets government-formed targets for greenhouse gas reductions. In each case, our governments are the ones deciding what exactly will change and then

enforcing it. (You don't, of course, have to be super into politics to believe in the government-focused approach. Across the street Voting Vince and Val rarely think about big global problems, but they trust that voting for the right officials every year or two will mostly set things straight.)

Now, the Political Pauls of the world (and to a lesser degree the Voting Vals) tend to think that, if the government-focused approach hasn't fixed certain problems yet, it still will. Any delay occurs because a.) the other political side is morally bankrupt and is taking us in the wrong direction and b.) we just need to push harder to pass the traditional legislation we've long been fighting for. This means to fix our problems you should get out and vote. Voice your opinions. Donate to campaigns you believe in. Help register new voters. Work directly with a campaign. The more we can do to push our side over the finish line, the sooner we can get the laws passed that we've known for decades will fix our problems.

Let's for now ignore the dubious assumption that the other side is always wrong in politics. What about the we-just-need-to-push-harder part? Can the government-focused approach actually knock out global warming if we just do a better job pushing for more laws? Unfortunately no. Up against GCM problems, our traditional legislative approaches fall pretty flat. They always have and they always will.

Bad Motivation

If you recall from **Our Current Approach Is Doomed to Fail**, we talked in great depth about how minimum bar laws and voluntary transparency programs—the government's two main approaches to fixing most anything—do a pretty good job with baseline problems but thoroughly fail to fix GCM problems. To fix any motivation problem, you must give those who are behaving badly the strong, consistent motivation to completely weed out that bad behavior. The MB laws and VT programs that we create just don't really do so, though. Because the minimum wage doesn't give businesses that needed motivation to pay most of its employees better, the law doesn't do much to keep income inequality from rising. Because the Clean Air Act doesn't motivate companies to keep reducing its toxic pollutants below a permitted maximum, the law won't stop Americans from breathing in enough pollution to acquire major health problems. And because the Kyoto Protocol hardly motivates anyone to whittle away at their carbon footprints at all, the agreement has done almost nothing to stop global warming.

But there's more. The impotence of the laws we pass isn't the only huge downfall of the government-focused approach. With this approach also come strong headwinds that push legislators away from passing and strengthening these laws in the first place.

If you watch politics much you'll know how the game works. What are most any politician's top three priorities? Jobs, jobs, and more jobs. In order to keep the voters happy, every politician's home district needs plentiful jobs. In order to have plentiful jobs, you need to keep the companies that provide those local jobs happy. And in order to keep those local companies happy, you need to keep the cost of business down. That means politicians face a constant pressure to keep the minimum

wage low, corporate tax rates low, environmental restrictions lax, and electricity options cheap. Do otherwise, by, say, building a series of solar power plants and passing a law that requires more overtime pay, and you raise that cost of business a little bit. That risks scaring away local companies and making it harder to attract new ones. And with fewer companies come fewer jobs, more pissed off voters, and thus, for the backwards ending to this sad little game, a pink slip for the do-gooder politician. Hence, because politicians are scared to pass them, stricter regulatory laws and cleaner power plants always face a steep uphill battle.

So far, the government-focused approach isn't looking so hot. The laws it passes are rather weak, and that's if they can ever get passed in the first place. Market forces consistently push politicians in the complete opposite direction.

Powerless Voters and Selfish Businesses

How about the supporting roles for citizens and businesses? Do they fare any better this time? Sadly, no. The business's role, when being regulated by whatever new laws, is to take the punishment that the government deals out then continue to be as irresponsible as it can get away with. If the government says you can't emit more than x amount of mercury, then change just barely enough to pass the regulation. If it says you have to pay a certain percent in taxes, then pay just barely enough. Better yet, look for tax loopholes in the law so you can legally pay even less.

Again, we covered this quite in depth in **Our Current Approach Is Doomed to Fail**, but essentially note that businesses are geared to do battle with, water down, and avoid the government's laws, all of which drastically undermines the goals of better responsibility. In other words, businesses are motivated to do the exact opposite of what the government's laws set out to do. That doesn't make for a good supporting partner in change.

Meanwhile, the citizen's main role in the government-focused approach is mostly to vote. But we each only get one political vote a year. Plus, if we're talking about the elections that actually matter, it's more like one vote every four years. Add on top of that that most of us live in uncompetitive states and voting districts, and our votes matter all the less because it's incredibly unlikely that each citizen's one individual vote will sway any final outcome. That gives us citizens very little power to create positive change when the focus is on government action.

Overall, the government-focused approach is not a very good one if our goal is to address GCM problems. The laws it passes are inherently flawed, and the forces in the system push against passing those laws in the first place. The supporting roles for business and government are even weaker. This system encourages businesses to go against everything the government passes and leaves the citizen powerless to do much of anything but watch with frustrated dismay. It's no wonder Polly and Paul react with so many groans and shouts to the government news they see playing out on TV.

The Business-Focused Approach (Current)

Businesses (*primary*): Sometimes do small things to help workers, environment, and communities (but only whatever is affordable at the time and which, ideally, will also get the company good press).

Citizens (*supporting*): Occasionally try to buy from more responsible companies to support the ones who are doing good things, but most always get confused in this quest, give up, and do nothing.

Government (*supporting*): Try to shame companies into making more responsible choices with angry speeches and the occasional congressional inquiry but ultimately do very little.

Grade: F

If the citizen and government-focused approaches to change are bad, then the business-focused approach is far worse.

The current business-focused approach to GCM problems is essentially, hey, let's get out of the way of our businesses, hope for the best, and see if they use their brilliance to fix these problems. This is the approach conservatives seem to favor the most. *Let the innovators innovate!* That kind of thing.



Walmart Corporate/Flickr

However, the way things stand now, calling this an actual “approach” to solving GCM problems is laughable. Remember that the market currently pushes businesses to be as irresponsible as they can get away with—to pollute the air, underpay their workers, and avoid their taxes as much as possible. In other words, *they're motivated to do the exact opposite of fixing these problems*. So why would this approach ever succeed in fixing GCM problems? It's a bit like trying to keep hungry dogs from eating a stash of bacon...by putting those same hungry dogs in charge of guarding it. This is so stupid a plan that it almost isn't worth mentioning. Obviously the dogs “guarding” the bacon would quickly turn to competing to see which one can gobble it all down the fastest. But the same goes for corporations. As long as their motivation is to be as irresponsible as possible, trusting them to police their own irresponsibility is just as nuts.

There are, of course, plenty of organizations working to help businesses be more responsible (the Dow Jones Sustainability Index, for example). And a lot of companies make a big show of joining these programs and trying to act more responsibly. These businesses check all of the right boxes. They line up new “green” priorities. They start some new after school arts program or canned food drive. And after spending small scraps of money on charitable causes, they spend similar amounts of money documenting these efforts for heartwarming commercials that convince you just how good

these companies really are. But after the dust settles, the amount of bad they do for the world is clear and well documented, yet the amount of actual good they do is quite tiny in comparison.

For instance, the average household contribution to charity in the US is \$2,974²⁸⁹ or about 5.7% of total income.^{290,291} Corporations, meanwhile, gave just 0.98% of their profits in 2015.^{292,293} And that isn't just a much lower percentage than what we the citizens gave. That's of their *profits* (i.e. the extra money left over after paying all of its employees, production costs, etc). The percent of total income would be much lower. If corporations were a person, they would rank somewhere around the abysmal Ebenezer Scrooge level in their support of charities.

Keep in mind that we don't say this to demonize businesses, but instead to show how poorly the current business-focused approach to fixing GCM problems works. The current system pushes businesses to be as irresponsible (and do as little good) as they can get away with. Thus, as the system stands it's lunacy to expect businesses to lead the charge in fixing problems of irresponsibility.

As for the supporting roles this time around? Unfortunately, citizens and the government are quite powerless here. The citizen is left to try to buy from more responsible companies, but how does anyone know which companies are the more responsible ones? For every label like USDA Organic that genuinely shows a product was more responsibly made, there are several others making vague claims to illegitimately mooch off of that responsible vibe. Products tell you they're "green," "natural," or "sustainable" with no evidence to support these claims. And then the vast majority of products give no indication of how they're made at all. So the citizen is left quite clueless and thus powerless to support any positive change. The government, meanwhile, here mostly devolves into the lead shamer, the preacher whom no one really listens to. It invites companies like Apple to a congressional hearing, as the Senate did in 2013, to chew them out for avoiding paying their taxes. Then it watches helplessly as companies like Apple continue right on not paying those taxes.

In the current business-focused approach, the primary group has no incentive to make any legitimate changes for the better. So it doesn't. The two supporting groups (citizens and the government) have almost no power to make them do any better. Overall, the business-focused "approach" is really no approach to fixing GCM problems at all. It is the almost complete lack of an approach.

The *Real* Business-Focused Approach: CR Rankings

What happens, though, when we bring Corporate Responsibility Rankings onto the scene? This would still be a business-focused approach, one that looks to our businesses to drive change. This time, though, because higher CR Rankings would lead to more sales, those businesses would actually be given the needed motivation to drive such change. It's like taking those dogs off of the bacon stash and having them guard their one-day-old puppies instead. Because the incentives would now do a 180° and line up in the right direction, those dogs would go from awfully suited to the task to

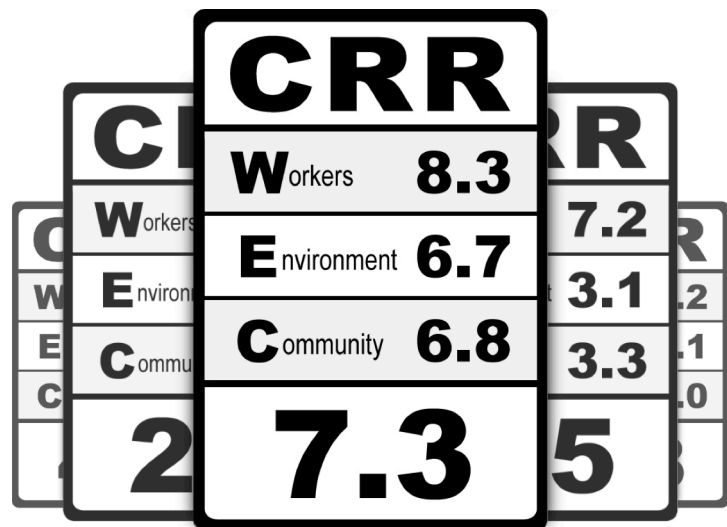
perfectly suited to it. It's the same for businesses after we enact CR Rankings. Their innovative talents would now be geared towards being more responsible, not less.

Here's how our three groups would look this time:

Businesses (*primary*): Constantly innovate and make bit-by-bit improvements to better treat workers, environment, and communities.

Citizens (*supporting*): Use their immense purchasing power to push companies in productive directions with each purchase made every day.

Government (*supporting*): Act as referee by gathering data, calculating and distributing rankings, refining the system as needed, and resolving any disputes.



Grade: **A**

We've already well covered the power of CR Rankings to motivate businesses to do good. Suffice it to say, though, that this power would be immense. CRR would unleash a never-ending wave of innovations geared toward finally eliminating GCM problems like excessive income inequality and global warming.

Perhaps the key to why this business-focused approach would beat out the others is that it takes advantage of business's two natural strengths: *innovation* and *competition*. Businesses have always experimented with new changes and then doggedly fought to adopt the best changes first. Now they would just use both of these strengths towards making the world a better place. Especially note here that these are both novel strengths *that the citizen and government-focused approaches lack*. When we rely on citizens to buy more energy-efficient refrigerators, those citizens have to rely on what's available in stores. They don't, that is, regularly take apart their fridges and tinker with more efficient designs themselves. We also don't compete with each other to see whose house can turn down the thermostat the most in the winter, each going lower and lower till we're down in the fifty-degree range. The government is similarly weak here. It has no one to compete with and mostly only innovates new military technology. Businesses would regularly do such fridge tinkering, though, and use natural competition to edge home heating systems to become more and more efficient every year. With this regular innovation and competition, the business-focused approach would over time blow the other approaches away in how much change it can accomplish.

But as significant as the business's primary role in this approach is, the supporting roles of citizens and the government would be almost as significantly improved.

The Perfect Supporting Roles

First, let's look at citizens in a world with CR Rankings. When the government is the focus, citizens play the rather powerless supporting role of voting once every few years in mostly noncompetitive elections. CR Rankings, on the other hand, would give you the power to vote every time you make a purchase. That's several times you can easily vote for a better world *every day*. And as opposed to the citizen-focused approach, we could make huge gains in knocking out GCM problems while living the way we actually want to live—without, that is, having to go survive off of squirrel meat in a remote, electricity-free cabin. And remember all of those more efficient, environmentally-friendly products we're supposed to buy in the citizen-focused approach? With CRR, businesses would be much more motivated to make such energy-efficient TVs, cars, and toilets (and phase out less-efficient ones). We the citizens could thus do a much better job of home conservation thanks to CRR than we ever can now. Susan could much more easily be self-sufficient, and Doug could do so much more good. With CR Rankings, in other words, citizens would have their most powerful and naturally fitting role by far.

As for the government, it too would finally find its most natural and effective role. Instead of futilely badgering the public to recycle more (citizen-focused approach) or crafting too few laws too slowly that businesses then do everything they can to avoid anyway (government-focused approach), the government would essentially here play the role of referee. It would collect the data, enforce that rankings be printed, and refine the system as needed. Being the referee might sound awfully unsexy, but it's a crucial role that the government would knock out of the park. Think of tasks like collecting taxes, maintaining law and order, and running smaller programs like sanitation grades. The government has the massive size and unquestioned authority to smoothly referee these systems for hundreds of millions of people. It would similarly have the wide reach and power to collect the data needed for CR Rankings and mandate that the rankings be printed in a way that no NGO or private business could ever dream of doing. That's essential to a system like CRR, and it plays perfectly to the government's strengths. With CR Rankings, the government would ditch the awkward roles of the shaming parent and the slow, ineffective change-maker and finally get back to the role it does best: the referee.

Of course, sometimes we would still need the government to be that change-maker. Power plants are a great example. The government would still need to decide what kinds to build where. But in such situations the government would still be far more powerful and effective with CR Rankings around.

Remember how the number one priority of politicians is jobs? Currently that pushes them to do whatever will be cheapest for local businesses so as not to scare them away. That includes authorizing dirtier, cheaper power plants so as to keep the energy bill low for those local businesses. (It's therefore no wonder the carbon-heavy coal and natural gas produce two-thirds of our electricity

in the US.²⁹⁴) But with CR Rankings, businesses would get lower carbon footprint rankings when locating near such dirtier plants but would get higher rankings when locating near renewables like solar and wind. Businesses would thus have good reason to locate near greener power plants. Now to get all of those local jobs, politicians would for the first time be pushed *in favor of*, not against, building more such greener plants. The same would go for closing corporate tax loopholes, passing stricter labor and environment laws, etc. CRR would give the government much more power to work towards positive change. For the Political Polly and Pauls of the world, that means less yelling at CNN and more getting things done.

So all told, put those three roles together and you now have three groups each doing what it's best suited to do, all in harmony together. Citizens would vote with their purchases to constantly push businesses to be more responsible. Businesses would then let loose their unique abilities to innovate and compete to produce the most responsible products and practices possible. All the while, the government would act as the referee, making sure everything runs smoothly, also now having the most possible power to authorize cleaner power plants and whatever other laws still needed to wipe out GCM problems. Together they would form a smooth, efficient machine for making the world a better place.

So to come back to the initial complaint, no, we would not be best served with a citizen or government-focused approach to change. Citizens, the government, and our businesses would all by far have the most power to effect change with the business-focused approach of CR Rankings.

So...Why Pick on Businesses?

So to sum up, businesses aren't being unfairly picked on. They make most of the mess that causes GCM problems, so they need to be pushed to be more responsible or else we'll never fix these problems. With CRR as law it would be mandatory for companies to participate, but all that that would require them to do is report the data and print the labels—a task that should be about as uncrippling as selling food in the US and having to print Nutrition Facts. CR Rankings would also not be crippling expensive for companies because the only changes companies would make would be those they choose to make (i.e. those changes they deem profitable). Plus, any extent to which companies would pay more to be more responsible just means cleaning the mess they're already making, a mess they're currently not paying to clean up. And finally, by thus focusing on businesses, we would simultaneously (and paradoxically) give much *more* power to citizens and the government to push for positive societal change, all while putting all three groups in their ideal roles to fix our biggest problems.

Businesses should absolutely be the focus in our quest to knock out GCM problems, and CR Rankings would do so in the most effective and business-friendly way possible.

V. But...Isn't It Impossible?

With all that's been said so far about Corporate Responsibility Rankings—about how the program would work, about the immense good that it would do, and about how necessary it is to enact it given the alternatives—there's most likely one last sticking point for those out there who are considering it. *But...isn't it impossible? Isn't it impossible to get this law through a perpetually dysfunctional Congress? Isn't it impossible to even get it to the floor of Congress without powerful special interests crushing it first? Why should we even try? Shouldn't we just stick to more realistic options instead?*

These are fair concerns. On the surface CR Rankings can perhaps sound a bit pie-in-the-sky. But if we dig deeper, we'll see that CR Rankings isn't just a realistic option to combat GCM problems like global warming and income inequality. It should easily be seen as the *most realistic* option.

CRR is Very Possible

To begin, there is great popular support for tackling the issues that CRR would address. Two-thirds of Americans are dissatisfied with the distribution of wealth and income in the country²⁹⁵ and 69% say the government should be doing something to close the gap between the rich and the poor.²⁹⁶ A record-high 65% of Americans (and growing) now believe that humans cause global warming, with 64% of Americans worried a fair amount to a great deal about the problem.²⁹⁷ Factor in a bevy of other popular causes (higher donations to charity, lower pollution, less job movement, better worker safety, and a smaller federal deficit) and CR Rankings would touch issues that a vast majority of voters support.

Those voters are also quite likely to support the way that CRR would go about addressing these issues. A recent survey of employees across twenty-four countries found that most of them “strongly agree” that companies should “pay more attention to the environment” (61%) and “do more to contribute to society” (52%).²⁹⁸ What's more, a majority of online shoppers worldwide recently said they would be willing to pay more to buy from more responsible companies (55%).²⁹⁹ In other words, majorities of people want action on the issues CRR would address, want companies to be more responsible, and want to buy from more responsible companies. That spells the potential for broad voter support.

Of course, when a lot of people question whether CRR is politically possible, there tends to be something more they're looking for than just broad support. Specifically they're wondering about conservatives. Could they ever go for it? While we truly believe CR Rankings can and should appeal to everyone, there's an undeniable logic to this suspicion. Conservatives generally don't like business regulations. They also tend to fight legislation that decreases wealth inequality, and American conservatives have become famous for denying that global warming exists at all, much less wanting to do anything to try to stop it. At first glance a program like CR Rankings appears to be one that conservatives won't like at all.

In actuality, though, there are many reasons to think a large number of conservatives would support CR Rankings. First off, many conservatives *are* concerned about issues like income inequality and global warming. A 2014 poll by Pew Research found that a strong majority of Republicans thought the wealth gap between the rich and poor had grown in the last ten years (61%).³⁰⁰ What's more, almost half (45%) thought the government should be doing something to address that growing gap.³⁰¹ Polls also show that the number of US Republicans concerned about global warming is growing fast, up from 31% in 2015 to 40% in 2016, a nine percent jump in just one year.³⁰²

Getting away from the stats, CR Rankings should also just make pretty good sense with conservative values. Think about what typically bothers Republicans about liberal initiatives. It isn't that conservatives don't want to do anything to protect the environment and help the poor. (Not most of them, at least.) It's that they're reluctant to protect the environment and help the poor *at the expense of the economy*. They don't want to impose strict CO₂ limits if such limits will hinder businesses, force them to lay off workers, and encourage them to pick up and go somewhere else where such rules don't exist. It's also why they resist a higher minimum wage, stricter limits on toxic chemicals, and closing corporate tax loopholes. And this is quite a fair concern.

But CR Rankings would be different. CRR is a market-based solution. Businesses would have to report the data and print the labels, sure, but beyond that they could do whatever they damn well pleased. Any new innovations to be more responsible—to more fairly structure the company's pay tiers, to start donating excess materials to charity, to create an energy-saving passive heating system for the office—would be thought up and implemented by our businesses (not our bureaucrats) whenever and in whatever way they chose. CRR would just motivate businesses to do good. How they choose to do so is totally up to them. And the best part is that they would do this good for the world while being rewarded financially for doing so. If we're going to fix the GCM problems that plague us, this is easily the most business-friendly way we could do so.

Conservatives should also support CRR because it's fiscally responsible. The program stands to drastically reduce the federal deficit. How? CRR would encourage companies to a.) pay more in taxes, b.) pay their employees better, which should significantly reduce the cost of government aid to the poor, and c.) use fewer toxic chemicals, reduce workplace injuries, and make sure employees have ample time to exercise, all of which should all help reduce the nation's massive health care bill (which includes the tax-supported Medicare and Medicaid programs). CR Rankings would further save us money by pushing us to deal with problems now that would be more expensive to fix later. Perhaps the biggest of such savings would come from climate change. The Council of Economic Advisors to the White House estimates that the overall cost of stopping global warming increases by about 40% each decade that we do nothing.³⁰³ By incentivizing our brightest minds to fix the problem of climate change now, not later, CR Rankings could save our country and the world huge sums of money, potentially trillions of dollars. For the compassionate conservative, those who worry about fiscal responsibility but also care about helping the poor and the environment, CR Rankings should make a lot of sense.

All told, CR Rankings should be quite politically possible. The issues it would address are widely popular, and it should even stand to attract a good amount of conservative support.

Our Current Approach is What's Politically Impossible

Corporate Responsibility Rankings shouldn't just be seen as politically possible, though. They should be seen as by far the *most* politically possible way to deal with GCM problems.

Before, we talked about the five common flaws that make other approaches to GCM problems weak. Two of those flaws—that they tend to be *absolute* and *specific*—also make our traditional approaches politically ineffective as well.

Let's start with absolute. If you recall from **Our Current Approach is Doomed to Fail**, an absolute law is one that compares companies to one set standard. The minimum wage is set at \$7.25 an hour, for example. It will stay at that exact hourly rate until Congress and the president change it by passing a new law. A relative standard, on the other hand, compares companies to each other. A company with a 9.2 Distribution of Wealth CR Ranking gets that high ranking because it distributes its pay more equally than most other companies.



Protesters march in NYC in 2015 for a higher minimum wage, one of easily thousands of protests for a higher minimum wage in the US over the years.

The All-Nite Images/Wikimedia Commons

The problem with an absolute standard is that it sits still in one place. In order to make sure things continually get *better*, though, and not just stay the same, you have to constantly change that absolute standard. And changing absolute standards takes an incredible amount of time and energy. In the best-case scenario, it's controlled by a vast bureaucracy like the EPA that takes years to debate and pass any changes. Even worse, the rest of the time changing any regulation takes an act of law, one passed by both houses of Congress and signed by the president. Since the US minimum wage was first created in 1938, Congress has raised it twenty-two times with such acts of law. That's a lot of work just to manage the lowest amount employees can be paid. And yet those passed laws are just the tip of the iceberg. Searching for "minimum wage" on Congress.gov (a site that catalogues all proposed bills since 1973) yields 5,283 introduced bills, 417 of which became law.³⁰⁴ And behind those many hundreds of proposed laws were scores of rallies, books, protests, speeches, and op-ed articles. Untold advocacy groups were founded. Many millions of dollars were raised and spent to push Congress to act. If that doesn't sound like an exhausting enough way to change one little number, note that all of those forty-three years of work *didn't even increase the minimum wage enough to keep up with inflation*. During that span its inflation-adjusted real value actually *decreased* from \$8.51 to \$7.25 (in 2015 dollars).³⁰⁵ That's the political reality if you want to make change with absolute standards. They can be so slow and stubborn to change that we have to move legislative mountains just to try to keep up with a changing world, much less to outpace the world and push it to become better.

With a relative system like CRR, though, all you have to do is pass it *once*. From there it does the job on its own. Because companies would be compared to each other with CR Rankings, they'd have moving targets that would constantly push them to do better and better as these targets would rise. This quarter you may have gotten a Carbon Footprint ranking of 5, but as your competitors switch to cleaner fuels and increase heat efficiency with better insulation, you'd have to fight to keep up just to retain that 5. In other words, relative standards change on their own, elegantly flowing with the market. No constant updates would be needed from Congress for CRR to be effective.

Put another way, the difference between a relative standard and an absolute one is like the difference between a car that just drives on its own and one you have to get out and push any time you want it to move. Which one would you prefer? Because it's relative, CRR is a vastly more politically realistic law to pass than absolute ones (i.e. almost all of the ones we currently pursue) because it wouldn't require constant updates.

The second of the flaws of motivation that hinders a law's political progress is its being *specific*. A specific law is one that more or less regulates one specific thing. For instance, CAFE standards regulate the miles per gallon of cars sold in the US. That's it. A comprehensive law like CRR, on the other hand, regulates many things at once. If the headache of *absolute* laws is that they have to be continually updated, the headache of *specific* laws is that you have to pass a ton of them.

Just look at CRR versus its competing options. CRR is only one law. Just in order to *touch* all of the same issues that CR Rankings do with our usual specific laws, you'd have to sign historic new climate treaties, raise the minimum wage, set hundreds of new chemical restrictions, pass corporate

tax law reform, increase overtime protections, pass a carbon tax, set aggressive new alternative energy targets, severely restrict the production of non-biodegradable substances, overhaul tax law in such a way that dramatically increases corporate donations to charity, raise taxes on the rich, create new tax credits for the working poor, push CAFE standards to much higher levels each year from here on out, pass new laws limiting the excessive transference of jobs to other states and countries, pass aggressive new water restrictions for agriculture and industry, pass new restrictions on upper-level pay for executives, and pass sweeping new worker protections with regards to pay, discrimination, assault, scheduling flexibility, chemical safety, and more. That's dozens if not hundreds of laws, just to come *anywhere close* to what CRR can do.

So which sounds more impossible now? Passing one law or hundreds? And that's just the specific part. The better comparison is between passing one law that's good from there on out, and passing hundreds of laws that each require new version after new version after new version... Because CR Rankings are relative and comprehensive, getting the system enacted should be an exponentially easier task politically than to continue our current nightmare of pursuing laws that are absolute and specific.

But won't big corporations and their money destroy CRR?

If there's a fear more pervasive in politics than the boogeyman that is the other party, it's the boogeyman that is special interest money. *Money rigs elections. Money puts some politicians in office and knocks others out. Most importantly, money infects the laws themselves. It keeps important legislation from passing and waters down the rest. CR Rankings won't ever pass because the businesses it would hurt will shell out millions of dollars to swat it away. And even if by some miracle CRR were to pass, those same businesses would hollow out the law first with changes made behind closed doors, changes that would render the law ineffective. It's that simple. So why even bother?*

This is another common and understandable concern. But it's also yet another concern that misreads CRR's chances.

Even though there's a lot of evidence that money in politics is much less effective at drowning out the popular will than we want to believe it is, let's for now assume that money is power. Even so, there's a good reason to believe that power won't crush CRR the same way it crushes so many other regulations. That reason is that CRR would create a zero-sum game.

Zero-Sum Game

Note that most new business regulations create clear losers but not so clear of winners. New coal-mining safety regulations and ordinances that forbid mountaintop removal, for example, make a clear loser of the coal industry. Such initiatives undoubtedly make business harder and more expensive for coal companies. Other energy companies, those that focus on natural gas or oil or greener alternatives, would potentially gain from any policy that weakens coal, but that win is a bit murky. Coal has many competitors. Its loss could mean that oil gets more business as a result, but

maybe wind and nuclear do instead, or maybe natural gas, or maybe solar. From a policy standpoint this makes such anti-coal initiatives open to a mostly one-sided attack. Because coal companies are the clear losers, they're going to fight hard to stop such legislation. Because the other energy companies aren't so clear of winners, though, they probably won't fight very hard (if at all) on behalf of the legislation. So if we think of the net force as the sum of all sides pushing in each direction, the net force here is pretty clearly pushing towards weakening or defeating the legislation because the coal industry's push is much stronger than the rest. Thus, it shouldn't be too surprising that such policy initiatives have a tough time getting passed.

CR Rankings, though, would have both clear losers *and clear winners*. Basic math tells us that the more responsible 50% of businesses out there will have higher rankings than the bottom 50%. Whatever the exact amount, CR Rankings should boost sales for those in the top 50% about the same amount as it will lessen sales for the bottom 50%. Therefore, the top half would be clear winners and the bottom half clear losers. Any relative system works the same way. Look at the free market or, say, football. If you count up all of the wins and losses in a football season, you'll find they exactly equal each other. In game theory this is what's referred to as a *zero-sum game*. The winners perfectly balance out the losers. That might not sound so positive, but if we're worried about the corrosive influence of money in politics, it's a great thing. The losers should want to stop CRR or water it down, sure, but the winners should want just as badly for it to pass and to pass fully intact. So what happens then? The most likely scenario is a net force of zero. The two sides and all of their money nullify each other, and CRR is left more or less unaffected by all the special interest money, shouting, and back-room manipulating. That gives CR Rankings a substantially better chance of becoming law than a lot of its progressive counterparts.

Businesses Should Favor CR Rankings

Beyond the zero-sum balance, there are reasons to think the balance should actually tilt in favor of businesses supporting CRR more than opposing it.

First remember that unlike most business regulations, CRR would give businesses almost complete freedom in what to do to be more responsible. It would also financially reward them for doing so. These two factors make CRR much more business-friendly than its policy alternatives, alternatives like raising the minimum wage and instituting strict carbon emissions limits, which are inflexible and likely hurt a company's bottom line. As a result, pro-business special interests should lean towards supporting CRR over the alternatives.

There's another great reason to suspect that more businesses should support CRR than oppose it, as counterintuitive as it first sounds. It's that most cheaters want stronger regulations so they don't have to cheat.

Let's explain. In many ways the irresponsible behavior of companies resembles the steroid use of professional athletes. In recent decades, incredibly stiff competition has pushed scores of baseball players, cyclists, football players, and gymnasts alike to take illegal, performance enhancing drugs



Protesters object to widespread PED use at the 2006 Tour de France.
Wladyslaw/Wikimedia Commons

(PEDs) for that extra something needed to win. The part that may not be so obvious about it, though, is that not all athletes cheat like this because they're deeply selfish and immoral. They do it because they have to. The idea is essentially that once a few bad apples start cheating with PEDs, the rest have a choice to dope as well or, by virtue of being outmatched by the stronger dopers, unfairly lose. Hence, a few crooked doping

athletes turns into a doping majority. While Lance Armstrong has mostly been mum on his involvement with the elaborate doping scheme that helped him win seven straight Tour de France titles, he has since said that the race would have been “impossible to win without doping.”³⁰⁶ Given that the vast majority of cyclists were using some form of PEDs at the time (84% of riders in the 1997 Tour de France, for example, according to cyclisme-dopage.com)³⁰⁷ it seems pretty clear that he's right.

In much the same way, stiff competition pushes some companies to make irresponsible choices—to avoid paying taxes, keep wages low, pollute more—all because it's cheaper and therefore gives them a competitive advantage. And after the first selfish few start down this path, other competing businesses are then left with the same kind of bleak choice as so many professional athletes. Adopt these shady practices, too, or lose.

The easy conclusion to draw here is that all of these cheaters are a bunch of selfish jerks. The much more realistic conclusion, though, is that, sure, there are some rotten cyclists and CEOs out there (as with any profession), but most of them are reasonably good people just trying to do their best to compete. It's just because the world doesn't do a better job punishing the cheaters that they're forced to cheat, too.

In terms of policing sports and business, this is an important distinction. Traditional wisdom tells us that any cheaters will resist stronger regulations. But that only makes sense if they're all the immoral types who will play dirty to win no matter what. If most of the cheaters only cheat to level the playing field, it's likely that they would prefer better regulation so that they wouldn't have to cheat at all. In that vein, many Major League Baseball players have recently called for harsher penalties for those caught doping. Then-Atlanta Braves outfielder Jeff Francoeur recently estimated that 90% of players in the league want stiffer penalties for players caught using PEDs.³⁰⁸ It stands to reason that most professional sports players feel that way, whether they feel safe to say it publicly or not. It also

stands to reason that many if not most businesses do too, that they would prefer to have a system that better cracks down on bad behavior so they don't have to do bad things to win. It stands to reason, in other words, that a majority of companies would support CR Rankings. They could finally be competitive without having to do bad things to get there.

What Corporate Responsibility Rankings Need is You

CR Rankings are very possible. They should have broad support not just across the population in general, but also among a lot of conservatives and businesses. Special interest money should not target CR Rankings for destruction the way it does for so many other laws, and if anything CRR should stand to get more special interest support than its alternatives.

That all being said, sure, there will be those who will oppose this system. And some of those people will have money and power. But there will always be people who will attack any attempt for greater economic justice and environmental protection, just as there always have been. That doesn't mean that we can't win. We humans have passed all kinds of laws in the name of fairness that didn't seem politically likely at first. Public schools, the abolition of slavery, voting rights for women, the minimum wage, free health care for the poor. If all of that's possible, shouldn't one little product label be possible too?

It's easy for each of us as one tiny speck in an endless ocean of seven billion people to feel powerless. It's easy to feel like we have no say. It's easy to look at a proposal like Corporate Responsibility Rankings and say well, wouldn't it be nice... But pay much attention to politics and believe it or not you'll find that there is hope. Because politicians are human, because what they ultimately care about is themselves and staying in office, there is a little known something that will sway most any of them into voting for a law. It isn't massive amounts of money. And it isn't the tenets of a rigid ideology, either. It is the will of the people. As naïve and Pollyannaish as that may sound, it is undeniably true. Politicians just want to keep their jobs, so if the people all support something, they will support it too for fear of being voted out. The same quality that makes many politicians seem so icky—their never-ending ability to flip-flop and change beliefs along with the latest polls—should be the source of genuine hope.

If one-by-one we pass on the word about CR Rankings until we conquer public opinion, politicians will fall in line. It only helps that any law that protects our workers, environment, and communities *and* helps our businesses thrive is a political slam-dunk. Add in the fact that the masses support it and any politician would be a fool to oppose it. The only missing piece, then...is your support.

So help make this happen by getting on board. Share the videos. Like us on Facebook. Talk about it with your friends. Volunteer.

We are the ones who decide what is politically possible. We are the ones who forge our own destiny. All it takes is to shake off the shackles of cynicism and fight for what makes sense, to fight for what is right. So join us in this fight. Let's make Corporate Responsibility Rankings a reality.

Endnotes

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- ⁴ "Index to Pesticide Chemical Names, Part 180 Tolerance Information, and Food and Feed Commodities (by Commodity)." US Environmental Protection Agency Office of Pesticide Programs. 12 Dec. 2012, www2.epa.gov/sites/production/files/2015-01/documents/tolerances-commodity.pdf.
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- ²⁷⁸ *Greenhouse Gas Inventory*. Environmental Protection Agency.
- ²⁷⁹ "Table 1.2." *SAS Output*.
- ²⁸⁰ "Heating & Cooling." *Energy.gov*, Department of Energy, energy.gov/public-services/homes/heating-cooling. Accessed 20 Aug. 2017.
- ²⁸¹ "Thermostats." *Energy.gov*, Department of Energy, energy.gov/energysaver/thermostats.
- ²⁸² Notes on how the 4.85% figure was calculated:

Doubling Recycling - Using 4.08 trillion kilowatt hours as the total electricity produced in the US in 2016²⁶⁵ and an estimated 1.5 quadrillion BTUs of energy saved from recycling per year in the US,²⁶⁶ that means the energy savings from recycling is equivalent to 10.77% of all electricity generated in America (after converting BTUs to kilowatt hours and finding the appropriate percentage saved). Doubling recycling would thus give the same reduction in percentage of electricity, and since electricity creates about 30% of GHG annually,²⁶⁹ that means doubling all recycling would bring a 3.23% reduction of GHG production.

CFLs - Lighting uses 10% of all electricity in the residential sector,²⁶⁸ while 37.4% of all electricity used in 2015 was used in homes,²⁷⁰ meaning 10% of 37.4% gives 3.74% of total electricity used on home lighting. Given that 30% of all GHG produced in US comes from electricity use,²⁶⁹ 30% of 3.74% yields 1.122% of those gases come from residential lighting. With estimated 70% savings in energy use from replacing all incandescent bulbs with CFLs,²⁶⁷ that means 70% of 1.122% gives a 0.79% GHG reduction from switching all lights in the country to CFLs (which is generous, given that many CFL bulbs are already in use, while this calculation assumes none already are).

Thermostat Adjustments - Residential use of electricity in 2015 was 37.4% of the total,²⁷⁰ and with 30% of GHG

produced by electricity,²⁶⁹ that means 37.4% of 30% yields 11.22% of GHG produced by residential electricity. Add to that the 6% of all GHG produced directly by non-electricity home energy use,²⁶⁹ and we have 17.22% of total GHG coming from residential energy use. With 48% of home energy costs going to heating and cooling,²⁷¹ that brings us to 8.27% of total GHG coming from heating and cooling homes. We then use the 10% estimated energy savings from the recommendations on adjusting thermostats from Energy.gov,²⁷² multiply that by 8.27%, and we get 0.83% as the total GHG reductions from abiding by home thermostat recommendations on Energy.gov. Note that this calculation assumes no one is already abiding these thermostat recommendations, which is a generous assumption. The more people that already abide by these recommendations, the more this estimate should drop below 0.83%.

All told, 3.23% + 0.79% + 0.83% = 4.85% as the reduction in yearly GHG in the US if we were to double domestic recycling rates, replace all home lights with CFL bulbs, and get everyone to abide by thermostat recommendations for energy savings.

²⁸³ *Population Growth (Annual %)*. The World Bank, data.worldbank.org/indicator/SP.POP.GROW. Accessed 20 Aug. 2017.

²⁸⁴ This calculation uses a ten-year average of US yearly population growth from 2007-2016 of 0.7968%²⁷⁴ (which is then rounded up to 0.8%).

²⁸⁵ To gain another 4.85% in population (and thus experience roughly the same growth in energy use) would take 5.94 years in a standard exponential growth model (when $1.0485 = e^{0.007968t}$, t then equals 5.94).

²⁸⁶ “National Recycling Rates, 1960 to 2005.” *Waste & Recycling: Data, Maps, & Graphs*, Zero Waste America, www.zerowasteamerica.org/statistics.htm. Accessed 20 Aug. 2017.

²⁸⁷ *Advancing Sustainable Materials Management: Facts and Figures*. Environmental Protection Agency, www.epa.gov/smm/advancing-sustainable-materials-management-facts-and-figures. Accessed 20 Aug. 2017

²⁸⁸ Bernasek, Anna. *Volunteering in America Is On the Decline*. Newsweek, 23 Sept. 2014, www.newsweek.com/2014/10/03/volunteering-america-decline-272675.html.

²⁸⁹ *Charitable Giving Statistics*. National Philanthropic Trust, www.nptrust.org/philanthropic-resources/charitable-giving-statistics/. Accessed 8 Oct. 2016.

²⁹⁰ Posey, Kirby G. “Household Income: 2015.” Sept. 2016, p. 2, www.census.gov/content/dam/Census/library/publications/2016/demo/acsbr15-02.pdf.

²⁹¹ \$2,974, the average household contribution to charity, is 5.7% of \$55,775, the median US household income in 2015.²⁸¹

²⁹² *Giving Statistics*. Charity Navigator.

²⁹³ Sparshott. “Corporate Profits.”

²⁹⁴ *What Is U.S. Electricity Generation*. US Energy Information Administration.

²⁹⁵ Riffkin, Rebecca. *In U.S., 67% Dissatisfied With Income, Wealth Distribution*. Gallup, 20 Jan. 2014, www.gallup.com/poll/166904/dissatisfied-income-wealth-distribution.aspx.

²⁹⁶ *Most See Inequality Growing, but Partisans Differ over Solutions*. Pew Research Center, 23 Jan. 2014, www.people-press.org/2014/01/23/most-see-inequality-growing-but-partisans-differ-over-solutions/.

²⁹⁷ Saad, Lydia, and Jeffrey M. Jones. *U.S. Concern About Global Warming at Eight-Year High*. Gallup, 16 Mar. 2016, www.gallup.com/poll/190010/concern-global-warming-eight-year-high.aspx.

²⁹⁸ “Employees Say CSR Is Important.” *The Holmes Report*, 30 June 2013, www.holmesreport.com/latest/article/employees-say-csr-is-important.

²⁹⁹ *Global Consumers Are Willing to Put Their Money Where Their Heart Is When It Comes to Goods and Services from Companies Committed to Social Responsibility*. Nielsen, 17 June 2014, www.nielsen.com/us/en/press-room/2014/global-consumers-are-willing-to-put-their-money-where-their-heart-is.html.

³⁰⁰ *Most See Inequality Growing*. Pew Research.

³⁰¹ Ibid.

³⁰² Saad. *U.S. Concern*.

³⁰³ “The Cost of Delaying Action to Stem Climate Change.” Executive Office of the President of the United States, July 2014, www.whitehouse.gov/sites/default/files/docs/the_cost_of_delaying_action_to_stem_climate_change.pdf. Accessed 4 Sept. 2016.

³⁰⁴ Search completed for “minimum wage” on Congress.gov, checking for proposed legislation versus passed bills on August 21, 2017.

³⁰⁵ Kurtz. “Minimum Wage.”

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